

MADHYA PRADESH ELECTRICITY REGULATORY COMMISSION

5TH Floor Metro Plaza, Bittan Market, Bhopal - 462 016



AGGREGATE REVENUE REQUIREMENT AND RETAIL SUPPLY TARIFF ORDER FOR FY 2011-12

**93/2010 (East Discom)
91/2010 (Central Discom)
97/2010(West Discom)**

PRESENT:

**Rakesh Sahni, Chairman
K. K. Garg, Member
C. S. Sharma, Member**

IN THE MATTER OF:

Determination of Aggregate Revenue Requirement (ARR) and Retail Supply Tariff for FY 2011-12 based on the ARR & Tariff Applications made by the Distribution Licensees namely Madhya Pradesh Poorv Kshetra Vidyut Vitaran Company Limited (East Discom), Madhya Pradesh Paschim Kshetra Vidyut Vitaran Company Limited (West Discom) and Madhya Pradesh Madhya Kshetra Vidyut Vitaran Company Limited (Central Discom).

Table of Contents

A1: ORDER	6
A2: DETAILED REASONS AND GROUNDS ATTACHED WITH RETAIL SUPPLY TARIFF ORDER ISSUED BY MPERC ON 23RD MAY, 2011 IN RESPECT OF PETITION NUMBERS 93/2010, 91/2010 AND 97/2010	16
A3: AGGREGATE REVENUE REQUIREMENT FOR FY 2011-12 OF MADHYA PRADESH POORVA, PASCHIM & MADHYA KSHETRA VIDYUT VITARAN COMPANIES LIMITED (EAST, WEST & CENTRAL DISCOMS)	17
Summary of Sales Forecast as proposed by the Licensees	17
<i>Commission's analysis of Sales</i>	18
Energy Balance and Power Purchase as Proposed by the Licensees	19
<i>Assessment of Energy Availability by Discoms</i>	21
<i>Assessment of Power Purchase Cost (Fixed and Variable Cost) by the Discoms</i>	23
<i>For existing stations</i>	23
<i>Details of Costs for future capacities</i>	26
<i>Assessment of Other Elements of Power Purchase Cost by the Discoms</i>	26
<i>Commission's Analysis of Energy Balance and Power Purchase</i>	29
• <i>Distribution Losses</i>	29
• <i>External (PGCIL) Losses</i>	29
<i>Power Purchase Costs</i>	40
Network Cost	47
<i>Licensees' submissions</i>	47
Capitalization	48
<i>Commission's Analysis</i>	52
Operations and Maintenance Costs	53
<i>Licensees' submission</i>	53
<i>Commissions Analysis on O&M Expenses</i>	57
Depreciation	60
<i>Licensees' submissions</i>	60
<i>Commission's analysis of Depreciation</i>	62
Interest and Finance Charges	64
<i>Licensees' submissions</i>	64
<i>Commission's analysis of Interest and Finance Charges</i>	68
Interest on Working Capital	70
<i>Licensees' submissions</i>	70
<i>Commission's analysis of Interest on Working Capital</i>	73
Interest on Consumer Security Deposit	74
<i>Licensees' submissions & Commission's Analysis</i>	74
Return on Equity	76
<i>Licensees' submissions</i>	76
<i>Commission's analysis of Return on Equity</i>	78
Bad and doubtful debts	79

<i>Licensees' submissions</i>	79
Commission's analysis on Bad and Doubtful debts	79
Other miscellaneous expenditure	80
Other Income	80
<i>Licensees' submission</i>	80
Segregation of approved ARR between Wheeling and Retail Sale activities	82
Annual Revenue Requirement (ARR) admitted by the Commission for FY 2011-12	83
Revenue from revised tariffs	84
Gap / surplus at new tariffs:	85
A4: PUBLIC OBJECTIONS & COMMENTS ON LICENSEES' PETITIONS	86
A5: RETAIL TARIFF DESIGN	116
Legal Position	116
Commission's Approach to Tariff Determination	116
<i>Uniform vs. Differential Retail Tariffs</i>	116
<i>Linkage to Average Cost of Supply</i>	116
A6: COMMISSION'S DIRECTIVES	119
Annexure-1 (List of Objectors)	143
Annexure-2 (Tariff Schedules for Low Tension Consumers)	149
Annexure-3 (Tariff Schedules for High Tension Consumers)	175

List of Tables

Table 1: Snapshot of the petitions as per Regulations (Rs In Crore)	7
Table 2: Snapshot of the petitions as per additional submission (Rs In Crore)	8
Table 3: Revenue Hike due to Proposed Tariff (Rs In Crore)	8
Table 4: Proposed Recovery of Revenue Gap as per Regulations (Rs In Crore).....	8
Table 5 :Proposed Recovery of Revenue Gap as per Additional Submission(Rs In Crore)	9
Table 6: Public Hearing	10
Table 7: Loss Reduction Trajectory as per Regulations	10
Table 8: Loss Reduction Trajectory filed as per Additional Submission	10
Table 9 : Meterisation status as per periodic reports	11
Table 10 : Progress of investments made (Rs in Crore)	12
Table 11: ARR Summary as approved by the Commission (Rs in Crore)	14
Table 12 : Gap/Surplus at New Tariffs (Rs in Crore)	14
Table 13 : Sales projected by the Discoms for FY 2011-12 (Numbers in MU)	18
Table 14 : Unmetered Domestic and Agriculture sale as filed and admitted In MUs	19
Table 15 : Sales as admitted In MUs	19
Table 16 : Energy Balance for FY 2011-12 as Proposed by Discoms	20
Table 17: Energy Availability ex-bus for Discoms for FY 2011-12 (MU)	21
Table 18 : Applicable MPERC tariff Orders	23
Table 19 : Fixed cost & Variable Cost as filed for the State for FY 2011-12.....	25
Table 20: Cost for Future Capacities	26
Table 21 : Inter-State Transmission Charges as filed (Rs In Crore)	26
Table 22 : New Capacities (in MW).....	27
Table 23 : PGCIL Charges Payable by MP Tradeco (Rs In Crore).....	27
Table 24 : Intra-State Transmission Charges Filed by Discoms for FY 2011-12 (Rs In Crore).....	27
Table 25 : Total Power Cost as Filed (Rs In Crore)	28
Table 26 : Loss Targets (in %) as per Regulations	29
Table 27 : Gross Energy Requirement for FY 2011-12.....	30
Table 28 : Station Wise Capacity Allocation (%) to Discoms.....	30
Table 29 : New Generation Capacities in FY 2011-12.....	32
Table 30 : Station wise Capacity Allocation to Discoms (in MW).....	33
Table 31 : Station Wise Availability in MUs Discoms.....	34
Table 32 : Month Wise Requirement and Availability of Discoms.....	35
Table 33 : Merit Order.....	36
Table 34 : Station Wise Availability after Considering MOD (MU).....	37
Table 35 : Intra Discom Trading in MUs	38
Table 36 : Requirement, Availability and Shortfall (In MUs)	39
Table 37 : Monthly Pooled Cost for Intra Discom Trading	39
Table 38 : Minimum Purchase Obligation.....	41
Table 39 : Allocation of Fixed Cost among Discoms (Rs In Crore).....	42
Table 40 : Station Wise Admitted Variable Cost (Rs In Crore)	43
Table 41 : Power Requirement admitted from Tradeco. Allocation	45
Table 42 : PGCIL Charges Allowed to Discoms (Rs In Crore).....	45
Table 43 : MPPTCL Charges Allowed by the Commission for FY 2011-12 (Rs In Crore).....	46
Table 44 : SLDC charges (Rs In Crore)	46
Table 45 : Total Power Purchase Cost Admitted (Rs In Crore).....	46
Table 46 : Investment plan (Rs in Crore)	47
Table 47 : Yearwise bifurcation of CWIP (Rs in Crore)	48
Table 48 : Investment plan (Rs In Crore)	49
Table 49 : Capitalization plan (Rs In Crore).....	49
Table 50 : Financing plan	50
Table 51 : Investment plan (Rs In Crore)	50
Table 52 : Financing plan	51

Table 53 : Capitalization plan (Rs In Crore).....	51
Table 54 : Assets Capitalization during the year (2008-10) (Rs In Crore)	52
Table 55 : Assets Capitalization during the Year (2010-12) (Rs In Crore)	52
Table 56 : Comparison of O & M expenses for FY 12 (Rs In Crore).....	54
Table 57 : Terminal Benefit Liability	55
Table 58 : Comparison of O & M Expenses for FY-12 (Rs In Crore).....	55
Table 59 : Service Liability as filed (Rs In Crore).....	56
Table 60 : Breakup of Past Liability as filed (Rs In Crore)	56
Table 61 : Service Liabilities for future services as filed (Rs In Crore)	56
Table 62 : Comparison of O & M Expenses for FY 12 (Rs In Crore).....	57
Table 63 : Repair and Maintenance (Rs In Crore).....	58
Table 64 : Employee Expenses as Per Regulation (Rs In Crore).....	58
Table 65 : A&G Expenses as per Regulations (Rs In Crore).....	58
Table 66 : O&M Expenses allowed for FY 2011-12 (Rs In Crore).....	59
Table 67 : Depreciation as per Regulation (Rs In Crore)	60
Table 68 : Depreciation (Rs In Crore)	61
Table 69 : Depreciation (Rs In Crore)	61
Table 70 : Comparison of Depreciation for FY 11-12 (Rs. in Crore).....	62
Table 71 : Depreciation (Rs In Crore)	63
Table 72 : Interest Cost as per Regulation (Rs In Crore).....	64
Table 73 : Interest Cost as per Additional Submission (Rs In Crore).....	65
Table 74 : Interest on capital loans as per Regulation (Rs In Crore)	66
Table 75 : Interest on capital loans as per additional submission (Rs In Crore).....	66
Table 76 : Interest on capital loans as per Regulation (Rs In Crore)	67
Table 77 : Comparison of Interest on Term Loan for FY 12.....	67
Table 78 : Total Interest and Finance Allowed for FY 2011-12(Rs In Crore).....	69
Table 79 : Interest on Working Capital as Per Regulation (Rs In Crore)	70
Table 80 : Interest on Working Capital as Per Additional Submission (Rs In Crore)	71
Table 81 : Interest on Working Capital (Rs In Crore)	71
Table 82 : As per Projection	72
Table 83 : Interest on Working Capital as Per Regulation (Rs In Crore)	72
Table 84 : Comparison of Interest on Working Capital as filed for FY 12 (Rs in Crore).....	73
Table 85 : Interest on Working Capital admitted by the Commission (Rs In Crore).....	74
Table 86 : Interest on Consumer Deposit (CSD) (Rs In Crore)	75
Table 87 : Return on Equity (Rs In Crore)	76
Table 88 : Return on Equity (Rs In Crore)	76
Table 89 : Return on Equity as per Regulations (Rs In Crore)	77
Table 90 : Comparison of ROE for FY 12 (Rs.in Crore).....	78
Table 91 : Return on Equity (Rs In Crore)	78
Table 92 : Comparison of Bad and Doubtful Debts for FY 12 (Rs. In Crore).....	79
Table 93 : Other Income (Rs In Crore).....	80
Table 94 : Total Aggregate Revenue Requirement as admitted (Rs In Crore)	81
Table 95 : Total ARR (Wheeling and Retail) as admitted (Rs In Crore)	83
Table 96 : Revenue from Revised Tariffs in FY 2011-12 (Rs In Crore)	84
Table 97 : Final ARR and Revenue from Revised Tariff (Rs In Crore)	85
Table 98 : No. of Objections received	86
Table 99 : Public Hearings held:	86
Table 100 : Comparison of tariff v/s average cost of supply	117
Table 101 : Loss Trajectory for Central Discom	121
Table 102 : Implementation Schedule of Feeder Separation Scheme as filed:	122

A1: ORDER

(Passed on this 23rd Day of May, 2011)

- 1.1 This Order relates to the petition numbers 93/2010, 91/2010 and 97/2010 filed respectively by Madhya Pradesh Poorv Kshetra Vidyut Vitaran Company Limited, Jabalpur, Madhya Pradesh Madhya Kshetra Vidyut Vitaran Company Limited, Bhopal and Madhya Pradesh Paschim Kshetra Vidyut Vitaran Company Limited, Indore (hereinafter individually referred to as East Discom, Central Discom and West Discom respectively and collectively referred to as Discoms or Licensees) before the Madhya Pradesh Electricity Regulatory Commission (hereinafter referred to as MPERC or the Commission). These petitions have been filed as per the requirements of the MPERC (Terms and Conditions for determination of tariff for supply and wheeling of electricity and methods and principles for fixation of charges) Regulations, 2009 (herein after referred to as Regulations)
- 1.2 In accordance with the Regulations, the Distribution Licensees of the State were required to file their respective Aggregate Revenue Requirements (ARR) and Tariff proposals for the financial year 2011-12 by 31st October, 2010. The Discoms sought extension for filing the petition up to 30th Nov,2010 for gathering details of power purchase, which was allowed by the Commission. The Discoms requested further time extension upto 13th Dec,2010, which was also allowed. The East and Central Discoms requested further time extension upto 21st Dec,2010 on the ground that the proposals were to be submitted to their Board of Directors for their suggestions and the petition would be filed after incorporating their suggestions. The West Discom also requested further extension in time for submission stating that requisite details of power purchase from MP Tradeco. were awaited. The Commission allowed the time extension requested. The petitions were filed on 20th Dec,2010 by the Central Discom (no. 91/2010), on 21st Dec,2010 by East Discom (no. 93/2010) and on 22nd Dec,2010 by West Discom (no 97/2010).
- 1.3 The motion hearing on the petitions was held on 25-01-2011. The Commission observed that the petitions did not conform to the norms prescribed in the Regulations. During the course of the motion hearing on 25-01-11, the Commission directed the Discoms that the petitions were required to be filed as per the provisions of the Regulations and if the petitioners so desired they could file additional submissions along with their petitions seeking deviations from the norms duly justifying and substantiating requested deviation with appropriate data and information. The revised petitions were directed to be filed by 1st Feb, 2011. The petitioners accordingly filed their revised petitions on 1st February, 2011 claiming the expenses on various items under the head separately "As per Regulations" and "As per actual in additional submission".

- 1.4 A preliminary scrutiny of the petitions was made and the petitions were admitted on 28th February, 2011 vide Order issued by the Commission.
- 1.5 The public notices comprising the gist of the tariff applications and tariff proposals were published by the Central Discom on 16th March,2011, East Discom and West Discom on 18th / 19th March ,2011 in the newspapers. The stakeholders were requested to submit their comments /suggestions / objections by 6th April, 2011 for Central Discom and 11th April, 2011 for East and West Discom.
- 1.6 As the earlier tariff order dated 18th May, 2010 was valid up to 31.03.2011, the Commission decided that the retail tariffs and charges which were allowed to be recovered by the petitioners in their licensed area of supply vide Commission's Tariff Order dated 18th May, 2010 would continue to apply and be in force till tariff order is issued by the Commission for FY 2011-12. This Order was issued on 15th March, 2011.
- 1.7 In view of the above, during the year 2011-12, the existing tariffs are applicable as determined by the Commission in its Tariff Order of 18th May 2010 till this tariff order comes into effect. The new tariff determined through this order shall be applicable from 1st June 2011 up to 31st March, 2012. The Commission has determined the Aggregate Revenue Requirement for the FY 2011-12 in the present order. The projected revenue receipts have been considered in such a way that the total revenue requirement for FY 2011-12 would be recovered for the first two months of FY 2011-12 based on the existing tariff and for the remaining ten months period i.e. from 1st June, 2011 up to 31st March, 2012 based on tariff as per this order.
- 1.8 The Gist of the Petitions Submitted by the Licensees is given below:

Table 1: Snapshot of the petitions as per Regulations (Rs In Crore)

Particulars	East	West	Central
Revenue from sale of power	3494.43	4823.41	3787.67
Non- Tariff Revenue	32.01	106.14	62.29
Aggregate Revenue Requirement	4910.90	6027.26	4641.49
Revenue gap on income and expenditure for FY 2011-12	1384.48	1097.71	791.53

Table 2: Snapshot of the petitions as per additional submission (Rs In Crore)

Particulars	East	West	Central
Revenue from sale of power	3494.43	4823.41	3787.67
Non- Tariff Revenue	32.01	116.85	62.29
Aggregate Revenue Requirement	5374.39	6966.06	4997.35
Revenue gap on income and expenditure for FY 2011-12	1847.95	2025.80	1147.39

- 1.9 The petitions submitted by the Licensees were found incomplete in respect of certain data and information e.g. full details of depreciation calculations indicating addition of category wise assets and other elements of ARR including some data required to calculate revenue forecast were not submitted. The Discoms were directed to submit the relevant data and information. The response received was found inadequate. The Commission however carried forward the exercise of finalisation of the ARR/ tariff based on the available data.
- 1.10 The Discoms in their petitions have projected a revenue gap of Rs. 1384.46 Crore for East Discom, Rs. 1097.71 Crore for West Discom and Rs. 791.53 Crore for Central Discom for FY2011-12 in their filing under the head “ As per Regulations” and 1847.95 Crore, 2025.80 Crore and 1147.39 Crore respectively under the head “ As per actual under additional submission” . The Discoms have proposed that part of this revenue gap be bridged by proposed tariff hike and balance amount be retained as Regulatory Asset to be amortized in the coming five year period. Details of projected increase in revenue due to proposed tariff hike and amounts proposed to be retained as Regulatory Assets under the head “ As per Regulations” are shown below:

Table 3: Revenue Hike due to Proposed Tariff (Rs In Crore)

Particulars	East	West	Central
Total Revenue at Current Tariff	3526.44	4940.26	3849.96
Total Revenue at Proposed Tariff	4620.06	6403.22	4641.49
Revenue hike due to proposed Tariff	1093.62	1473.67	791.47

Table 4: Proposed Recovery of Revenue Gap as per Regulations (Rs In Crore)

Discom	Total Revenue Gap (Rs. Crore)	Revenue increase due to tariff revision proposed by the Licensee (Rs. Crore)	Regulatory Asset (Rs. Crore)
East	1384.46	1093.62	290.84
West	1079.71	1473.67	-393.96
Central	791.53	791.47	0.06
State	3273.70	3358.76	-85.06

Table 5 :Proposed Recovery of Revenue Gap as per Additional Submission(Rs In Crore)

Discom	Total Revenue Gap (Rs. Crore)	Revenue increase due to tariff revision proposed by the Licensee (Rs. Crore)	Regulatory Asset (Rs. Crore)
East	1847.95	1093.62	754.33
West	2025.80	1473.67	552.13
Central	1147.39	791.47	355.92
State	5021.14	3358.76	1662.38

Uniform Retail Tariff across Discoms

- 1.11 On the issue of a uniform retail tariff in the State for financial year 2011-12, the Commission vide letter dated 2nd May, 2011 sought the views of the Government of Madhya Pradesh. The Secretary, Energy Department, Government of Madhya Pradesh vide his communication No. 3969-13-11/02 dated 03/05/2011 conveyed views of GoMP to the Commission that the tariff for various consumer categories in the State must remain similar at least in the foreseeable future, so that interest of all the consumers and Utilities in the State are protected and no consumer is put to a disadvantage due to geographical location of his electricity connection.
- 1.12 In order to balance the revenue gaps and surpluses across the three Distribution Licensees in FY 2011-12, while also achieving the State Govt.'s intent of maintaining uniform retail tariffs across the State, the Commission again advised the State Govt. for re-allocation of existing and new generating capacities among the Discoms and MP Tradeco. This was communicated to the GoMP vide Commission's letter no. 1506 of 12th May, 2011. The State Government vide its notification No. 4353-F-3-24-2009-XIII - dated 16th May, 2011 revised its earlier notification of 11th May, 2010 reallocating generating capacities.

State Advisory Committee

- 1.13 The Commission had convened a meeting of the State Advisory Committee (SAC) on 19th April,2011 for the purpose of discussing these petitions as also the suggestions/comments received from the public. Suggestions of the Members of the Committee were sought on the issues related to the subject petitions. The Members have provided several valuable suggestions which have been considered by the Commission in this Order at appropriate places.

Public Hearing

- 1.14 The public hearings on the tariff petitions filed by the Discoms were held by the Commission at Bhopal. These hearings were conducted on the following dates:

Table 6: Public Hearing

Sr. No.	Name of the Distribution Company	Date of Hearing	Venue of hearing
1	Objectors of M.P. Poorv Kshetra Vidyut Vitaran Company Ltd., Jabalpur, M.P. Madhya Kshetra Vidyut Vitaran Company Ltd., Bhopal and NGOs	April 25, 2011	Auditorium, Academy of Administration, 1100 quarters, Bhopal
2	Objectors of M.P. Paschim Kshetra Vidyut Vitaran Co. Ltd., Indore	April 26, 2011	

1.15 The comments/objections/suggestions received during the hearings from the Objectors and NGOs have been duly considered while finalizing this Order.

Distribution Losses

1.16 The Commission while notifying the MYT Regulation for distribution tariff has given revised loss trajectory after due consultation with the stakeholders including the Discoms for the period from FY10-11 to FY 12-13 keeping in view the interests of the consumers as also that of Discoms. The loss reduction trajectory specified in the Regulations for the FY 11-12 is given in following table:

Table 7: Loss Reduction Trajectory as per Regulations

Name of Discom	2010-11	2011-12	2012-13
East Discom	30%	27%	24%
West Discom	26%	24%	22%
Central Discom	33%	29%	26%

As against the above prescribed loss trajectory for FY 2011-12, the Discoms have filed their ARR based on the following loss levels: –

Table 8: Loss Reduction Trajectory filed as per Additional Submission

East Discom	West Discom	Central Discom
29.35 %	24%	29%

1.17 While all the three Discoms have filed the loss levels in accordance with the provisions of the Regulations in their filing under the head “As per Regulations”, it is seen that the Distribution Licensees except East Discom have followed the provisions of the Regulations in ARR filing while filing the projected distribution losses for FY 11-12 under the head of “Additional submission”.

The Commission considered the submission made by the East Discom for claiming

loss levels in excess of the normative levels on account of merger of RE Societies in their area and did not find it justified and acceptable. Accordingly, power purchase cost in their case is also being admitted corresponding to normative loss level only.

- 1.18 The Commission is aware of the fact that actual losses of the Discoms are more than normative levels and had already given consideration to it while specifying the Regulations giving relaxed loss levels for the control period. The Commission is however of the considered opinion that it cannot pass on the burden of excess loss levels to the consumers through tariff and Discoms need to demonstrate marked reduction in loss levels. It has become imperative and crucial for the well being of the Sector that a time bound concerted drive is launched by the distribution licensees to reduce the losses which still continue to remain high compared to many other States. The Commission expects that the Discoms would ensure a marked improvement in the ensuing period.

Energy Accounting and Meterisation

- 1.19 The Commission in the Tariff Order for FY 10-11 had emphasized the importance of energy accounting and meterisation. Need for proper Energy Accounting and Energy Audit at various levels such as sub-stations, distribution feeders and distribution transformers as well as at consumer end so as to provide reliable data about the actual level of distribution losses – technical and others was brought forth to prepare appropriate loss reduction strategies and schemes. However the Commission feels that meterisation has still not been given due attention and importance by the Distribution Companies. The progress with regard to meterisation of un-metered domestic connections in rural areas has been dismal. Large number of such connections remain un-metered. The status as per periodic reports submitted with regard to status of meterisation of un-metered connections up to Dec,2010, is as given below:

Table 9 : Meterisation status as per periodic reports

Discom	Domestic Urban			Domestic Rural			Agricultural DTR		
	Total no. of connections	No. of un metered connections	% un metered	Total no. of connections	No. of un metered connections	% un metered	Total no. of Pre-dominant Agricultural DTRs	No. of DTRs provided with meters	% of DTRs provided with meters
East	899020	4020	0.45	1527542	823545	50.79	30433	531	1.74
West	997660	-	-	1344895	309015	22.87	63639	8562	13.45
Central	990997	26738	2.69	1181097	428589	35.04	51741	7363	14.23
State Total	2887677	30758	1.06	4053534	1561149	37.21	145813	16456	11.29

1.20 In case of East Discom, the percentage of un-metered rural domestic consumers is continually on rise. Similarly, progress of providing meters on agricultural predominant DTRs is highly unsatisfactory in case of Central and East Discoms. The West Discom as against the directive of last Tariff Order for providing meters on at least 25% agricultural predominant DTRs, has provided meters so far on more than 10% DTRs. The Commission in its last Tariff Order has recognized that there were issues with 100% meterisation especially in the area of individual meterisation of a very large number of agriculture consumers. The Commission has been repeatedly directing all the Discoms to step up meterisation of agricultural predominant distribution transformers. The Commission in the recent past has directed that all urban domestic consumers be got metered by September 2011 and 100% rural domestic consumers as well as DTRs catering to agricultural load be got metered by March 2012. The Commission is of the firm view that all consumers should be metered individually or in group in case of agriculture consumers. The present regime of billing on benchmark consumption to either domestic or agriculture consumers has no incentive for energy saving by consumers and needs to be discontinued at the earliest. The Commission intends to discontinue providing benchmark consumption for urban domestic consumers in subsequent tariff orders. The Commission also intends to allow for agricultural consumer's billing either on the basis of individual meter or DTR meter only henceforth. Similarly, benchmark consumption for rural domestic consumers is also intended to be discontinued in near future. The Commission has prescribed targets for meterisation and would monitor progress closely.

Capex implementation/ capitalization

1.21 The Progress of investment done in the previous years based on the audited balance sheets is as given below:

Table 10 : Progress of investments made (Rs in Crore)

Year	Discom	Investment plan as filed in the tariff petition	Investments done			
			Addition to GFA	Addition to CWIP	Total addition (GFA + CWIP)	% total addition w.r.t. investment plan
			As per Balance Sheet			
2008-09	East	1081.53	302.98	27.34	330.32	31%
	West	565.66	60.82	86.34	147.16	26%
	Central	522.10	300.40	-44.40	256.00	49%
	Total	2169.29	664.20	69.28	733.48	34%
2009-10	East	622.00	252.37	126.14	378.51	61%
	West	397.00	75.39	177.93	253.32	64%
	Central	524.02	173.24	129.66	302.90	58%
	Total	1543.02	501.00	433.73	934.73	61%

1.22 It is seen that the actual achievements vis-à-vis investment plan in the aforesaid two years varied between 26% to 64%. On an overall basis, the actual investment has been 34% in 2008-09, which has increased to 61% in 2009-10 when compared with the investment plan. The progress is required to be further improved. Given the nature of work of distribution, the Commission also feels that there would be a large number of works which have been completed and put to use but are still being carried under CWIP and are not being capitalized. The Commission while issuing the tariff order for FY 2009-10 had advised the State Government to set up a monitoring mechanism for CAPEX. The Commission feels that monitoring of capex progress needs to be done more rigorously both at the Company level as well as at the State level.

Non compliance of Regulations

1.23 Regulations prescribe norms for various items of ARR like trajectory of distribution losses, O&M expenses and depreciation etc. These Regulations were notified after following due process of considering the suggestions/comments of all the stakeholders including the Licensees. On review of the first submission of the petitions by the Licensees it is observed that they had taken deviations in major cost items. The claims made with regard to loss level trajectory, depreciation claims, O&M claims etc. by the Licensees were not found in accordance with the prescribed norms. The Commission taking cognizance of this fact had to direct the petitioners to revise their petitions. The Commission has taken a serious note of it and directs the Discoms to ensure filing in accordance with Regulations failing which it may reject the proposal of the Licensees in future if it is not filed in accordance with the norms prescribed in the Regulations. The Licensees, if they feel that there are valid reasons for seeking relaxation from the prescribed norms, may make additional submission along with suitable justifications.

Aggregate Revenue Requirement of Discoms

1.24 The Commission has estimated the overall revenue requirement and in order to bridge the revenue gap has revised the retail supply tariffs for various categories. The Aggregate Revenue Requirement and the revenues accruing from the revised tariffs for FY 2011-12 for the three Discoms are contained in the detailed Order.

1.25 The gist of the Aggregate Revenue Requirement for the year FY 2011-12 as determined by the Commission in the present order in respect of the three Distribution Licensees of the State is given below:

Table 11: ARR Summary as approved by the Commission (Rs in Crore)

PARTICULARS	East	West	Central	Total
Power Purchase	2306.15	3661.69	2498.19	8466.03
PGCIL charges	102.04	138.90	88.35	329.29
Transco Charges (MP TRANSCO)	369.26	445.37	397.80	1212.43
SLDC Charges	2.04	2.22	2.30	6.56
O&M cost	600.73	556.71	550.72	1708.16
Depreciation	61.37	61.08	62.74	185.19
Interest on Project Loans	55.40	20.88	62.30	138.58
Return on Equity	108.23	98.35	107.63	314.21
Interest on Working Capital	0.00	0.00	0.00	0.00
Bad Debts	0.00	0.00	0.00	0.00
Interest on CSD	25.44	36.83	27.73	90.00
MPERC Fees	0.36	0.45	0.38	1.19
Less Other Income - Retail & Wheeling	105.00	120.00	75.00	300.00
Total ARR for FY 2011-12	3526.02	4902.48	3723.14	12151.64
Add Sardar Sarovar Order diff.	22.37	30.43	24.95	77.75
Add MP Genco FY 07-08 True up	62.59	89.98	62.32	214.89
Total ARR	3610.98	5022.89	3810.41	12444.28
Revenue at existing tariff	3401.57	4732.51	3590.50	11724.58
Revenue Gap	209.41	290.38	219.91	719.70

1.26 The Commission has determined the ARR and the tariffs for FY 2011-12 for the three Distribution Licensees of the State on the basis of the loss trajectory as prescribed in the Regulations.

1.27 The Commission has passed the true up Order of MP Genco allowing recovery of true up costs of Rs.214.88 Crore. The Commission has also issued tariff order for NVDA Sardar Sarovar project and has considered an impact of Rs.77.75 Crore in the order.

1.28 The table below indicates the approved ARR, revenue and revenue gap at current tariff and revenue from the new tariff being prescribed in this order.

Table 12 : Gap/Surplus at New Tariffs (Rs in Crore)

Particular	East	West	Central	State
FY 2011-12 ARR as approved	3,610.98	5,022.89	3,810.41	12,444.28
Revenue at Current Tariffs	3,401.57	4,732.51	3,590.50	11,724.58
Gap at Current Tariffs	209.41	290.38	219.91	719.70
Revenue at New Tariffs	3,610.41	5,024.05	3,809.48	12,443.94
Uncovered Gap/Surplus	0.57	-1.16	0.93	0.34

- 1.29 The Commission directs that the Distribution Licensees shall regularly and periodically (preferably on a quarterly basis) review the status of sales and estimates of revenue and in case any serious imbalance arises, they must approach the Commission for further appropriate directions.
- 1.30 The Commission while issuing the tariff order for FY 2010-11 had sought the details of supply hours to various areas and had accordingly directed the Distribution Licensees of the State to maintain the minimum assured daily supply hours as given below:
- (a) Commissionary Headquarters - 22 Hours
 - (b) District Head Quarters - 19 Hours
 - (c) Tehsil Headquarters - 14 Hours
 - (d) Rural Areas - 12 Hours (Out of which Minimum for 06 (Six) Hours Three Phase supply is to be maintained.)
- 1.31 The Commission again directs the Licensees' to maintain minimum supply hours in accordance with above. The Commission may consider reduction in the fixed charges proportionately if the minimum supply hours as specified are not maintained by the Discoms.

Implementation of the Order

- 1.32 The Distribution Licensees must take immediate steps to implement the Order after giving seven (7) days public notice in the newspapers, in accordance with clause 1.30 of MPERC (Details to be furnished and fee payable by licensee or generating company for determination of tariff and manner of making application) Regulations, 2004. The tariff determined by this Order shall be applicable from 1st June, 2011 to 31st March, 2012, unless amended or modified by an Order of this Commission. The previous Tariff Order dated 18th May 2010 shall remain valid till the date of implementation of this Order.
- 1.33 The Commission has thus accepted the petitions of the Distribution Licensees of the State with modifications and conditions, and has determined the retail supply tariffs and charges recoverable by the Licensees in their licensed area of supply during the FY 2011-12. The Commission directs that this Order be implemented along with directions given and conditions mentioned in the detailed Order and schedules attached to this order. It is further ordered that the Licensees are permitted to issue bills to consumers in accordance with the provisions of this Tariff Order and applicable Regulations.

Sd/-
(C. S. Sharma)
Member (Economics)

Sd/-
(K. K. Garg)
Member (Engineering)

Sd/-
(Rakesh Sahni)
Chairman

A2: DETAILED REASONS AND GROUNDS ATTACHED WITH RETAIL SUPPLY TARIFF ORDER ISSUED BY MPERC ON 23RD MAY, 2011 IN RESPECT OF PETITION NUMBER 93/2010, 91/2010 AND 97/2010

Shri P.K. Singh (Additional Chief Engineer) represented the East Discom

Shri A.R. Verma G.M. and S.E. (Com.) represented the Central Discom

Shri Gajra Mehta (Chief Engineer) represented the West Discom

Following is the detailed order with grounds and reasons of determining the ARR, the tariff and the charges recoverable during FY 2011-12 by the three Distribution Licensees. The detailed Order discusses about the functional and financial performance of the three Distribution Licensees and includes a section dealing with the status report on the compliance of Commission's Directives as well as the responses of the Licensees thereto and Commission's observations on the suggestions and comments received from the stakeholders on the ARR and the tariff proposals.

A3: AGGREGATE REVENUE REQUIREMENT FOR FY 2011-12 OF MADHYA PRADESH POORVA, PASCHIM & MADHYA KSHETRA VIDYUT VITARAN COMPANIES LIMITED (EAST, WEST & CENTRAL DISCOMS)

Summary of Sales Forecast as proposed by the Licensees

3.1 The total sale of the Discoms, as projected by them during FY 2011-12 is 28849 MUs viz. East Discom 8385 MUs, West Discom 11481 MUs & Central Discom 8983 MUs.

East Discom

3.2 The Licensee has submitted that category wise CAGR of past 4 years sales, connected loads and number of consumers were worked out and based on historical data of growth trends the sales have been projected in different categories. Projected increase in number of consumers/sale on account of RGGVY scheme, separation feeder scheme etc. and merger of RE Co-operative Societies etc. have also been taken into account for additional sales. Revised benchmarks for billing to un-metered category of LT connections have also been proposed. Sale in LT category are projected as 5614 MUs (or 67 % of total sales) and in HT category as 2771 MUs (or 33% of total sales).

West Discom

3.3 The Licensee has submitted that category wise CAGR of past 4 years sales have been taken into account. Other factors like increase in sale due to projected increase in number of consumers under RGGVY scheme, etc and the expected addition of potential consumers due to the other schemes have also been taken into account. Revised benchmarks for billing to un-metered category of LT connections have also been proposed. West Discom's sales in LT category are projected as 7516 MUs (or 65% of total sales) and in HT category as 3965 MUs (or 35% of total sales).

Central Discom

3.4 The Licensee has submitted that historical data of past 3 years sales have been taken into account for projecting the sale for FY 11-12. Other factors like increase in sale due to projected increase in number of consumers under RGGVY, RAPDRP, Feeder separation etc. schemes have also been taken into account for projecting additional sale. Revised benchmarks for billing to un-metered category of LT connections have also been proposed. The Central Discom's sales in LT category are projected as 6458 MUs (or 72 % of total sales) and in HT category as 2525.46 MUs (or 28% of total sales).

Table 13 : Sales projected by the Discoms for FY 2011-12 (Numbers in MU)

SALES(MU)	Consumer Categories	EAST	WEST	CENTRAL
LV-1	Domestic Consumers	2823	2735	2643
LV-2	Non Domestic	408	688	526
LV-3	Public Water Works	146		137
LV-3.2	Street Light	98	173	87
LV-4.1	Industrial-Non-seasonal	211		
LV-4.2	Seasonal	28	415	213
LV-5.1	Agriculture	1899		2837
LV-5.2	Other agriculture related use	2	3504	14
	Total LT Sale (in MU)	5614	7516	6458
HV-1	Railway Traction	529	443	713
HV-2	Coal Mines	514	-	34
HV-3.1	Industrial	1108		1282
HV-3.2	Non-industrial	174	3074	269
HV-4	Seasonal	5	8	1
HV-5.1	Irrigation	4		76
HV-5.2	Other than Agricultural use	10		3
HV-5.3	Water Works	57	223	-
HV-6	Bulk Residential	370	9	147
HV-7	RECS	0	206	0
	HT Total	2771	3965	2525
	Total LT + HT	8385	11481	8983

Commission's analysis of Sales

3.5 It has been observed that the Discoms have made ambitious projections of sales for FY 11-12 in metered as well as unmetered category of connections. An overall rise in the sales have been projected to the extent of 16% in East Discom, 21% in West Discom and 11% in Central Discom as compared to the sales filed in the tariff petitions of FY 10-11. The Commission has considered the sales filed by the Discoms and is supportive of Discom's endeavour to increase their sales. However, it has been observed that sale filed in the un-metered categories of domestic as well as agricultural connections is not in accordance with the prescribed benchmarks. The benchmarks provided for billing of these two categories of the connections are based on the number of connections and the load. While the Commission has considered the projected no. of consumers as well as the load filed by the Discoms in these two un-metered categories of consumers, the consumption projected for these categories have been revised in accordance with the existing benchmarks. The proposal for revision of benchmarks filed by the Discoms has not been found acceptable in absence of proper justification as well as lack of requisite data. The sale considered for un-metered categories of domestic and agricultural connections is as given below:

Table 14 : Unmetered Domestic and Agriculture sale as filed and admitted In MUs

Discom	Domestic un-metered		Agricultural un-metered	
	As filed	As admitted	As filed	As admitted
East	577.12	300.67	774.81	716.51
West	107.16	125.80	2591.14	2363.42
Central	238.64	86.07	1743.04	1329.48
State total	922.92	512.54	5109.00	4409.41

3.6 The Commission has admitted the overall sale considering abovementioned modification in un-metered categories of domestic as well as agricultural connections. Accordingly Commission allows projected sales as 8050.74 MUs for East Discom, 11271.95 MUs for West Discom and 8416.88 MUs for Central Discom.

Table 15 : Sales as admitted In MUs

Consumer Categories	2011-12			
	East	West	Central	Total
LT				
LV-1: Domestic Consumers	2546	2754	2490	7790
LV-2: Non Domestic	408	688	526	1622
LV-3: Public Water Works and Street Light	244	173	224	641
LV-4: Industrial	239	415	213	867
LV-5.1: Irrigation Pumps for Agriculture	1842	3261	2423	7526
LV-5.2 Agriculture related use in Rural Areas	2	16	14	32
LT Units Sold (MU)	5282	7307	5890	18479
HT				
HV-1: Railway Traction	529	443	713	1685
HV-2: Coal Mines	514	0	34	548
HV-3.1: Industrial	1108	2686	1282	5076
HV-3.2: Non-Industrial	174	388	269	831
HV-4: Seasonal	5	8	1	14
HV-5.1: Irrigation	61	218	76	355
HV-5.2 other	10	5	3	18
HV-6: Bulk Residential Users	371	9	147	527
HV-7: Bulk Supply to Exemptees	0	206	0	206
HT Units Sold (MU)	2772	3964	2525	9261
Total LT + HT Units Sold (MU)	8053	11270	8416	27739

Energy Balance and Power Purchase as Proposed by the Licensees

3.7 The Distribution Licensees claim that they have considered available information from the key sector participants for computation of power purchase cost for the purpose of arriving at revenue requirement. The Distribution Licensees have requested the commission to take

due cognizance of this fact while computing allowable power purchase cost of the Licensees. The Commission has been further requested to give opportunity to the Licensees to submit updated information, if such information becomes available to the Distribution Licensees from MP Genco, MP Transco or MPTradeco.

3.8 The Licensees have considered the percentage allocation of capacity (weighted average of **31.88%** to the East Discom, **37.04%** to the West Discom and **31.08%** to the Central Discom) as per the Government's letter dated 24th Dec, 2010 for the year 2011-12. In addition to the above, the East Discom has also considered the 200 MW power share allocation to them from Central Generating stations for Bundelkhand region. The East, West & Central Discoms have calculated the details related to the following items as per the above allocation:

- Monthly energy available from all sources
- Annual fixed charge and energy charge payable to generators
- Estimated payment to generators on account of incentives, income tax, duties, etc.
- Estimated inter-state transmission charges to be paid.

3.9 The total requirement of energy for total sale of 28849 MUs as filed by the three Discoms is 42271 MUs. The Discom-wise break-up is shown in table below:

Table 16 : Energy Balance for FY 2011-12 as Proposed by Discoms

Particulars	East	West	Central
Total Units sold to LT category (MU)	5,614	7,517	6,431
Total Units sold to HT category (MU)	2,772	3,965	2,552
Total Units Sold by Discom (MU)	8,385	11,481	8,983
Distribution loss (%)	29.35%	24.00%	29.00%
Units Input at Distribution Interface (MU)	11,869	15,107	12,652
Transmission loss (%)	4.09%	4.09%	4.09%
Input at G-T interface (MU)	12,375	15,751	13,192
External Loss (MU)	339	291	323
Total Units Purchased (MU)	12,714	16,042	13,515

3.10 The normative loss of the East Discom as per the existing Regulation is 27%. However, the East Discom has submitted that after the notification of Regulations, a major change of material importance had occurred whereby the electricity distribution business of the four Rural Electricity Co-operative Societies (hereinafter referred as "RECS") has been taken over by the licensee company and the consumers of those societies are now the consumers of the company. Since the areas of these societies were the high loss segments, the distribution loss of the company has increased by 2.35%. Therefore the licensee has claimed that the normative loss level for FY-12 be revised and considered as 29.35% in place of 27%.

Assessment of Energy Availability by Discoms

- 3.11 The Licensees have claimed that assessment of availability of energy from various sources is based on discussions with Tradeco. Availability of energy from MP Genco is based on monthly forecast of generation by MP Genco for FY2011-12. Projections of generation during FY 2011-12 are based on the 2010-11 projections adjusted for increased availability (full year operation) from the new stations commissioned in FY 2010-11. The Licensees have claimed that the projection of availability for the future years has been done based on energy projections given by WRLDC.
- 3.12 Licensees have claimed that they have also considered availability from new stations expected to be commissioned in FY 2011-12.
- 3.13 The availability of MP Genco stations have been taken as per current availability for FY 11 (till August) and future plan as per the scheduled maintenance. Projections for future years i.e. for FY12 have been considered as per the capacity addition plan of MP Genco and considering the operational trend. Furthermore, the total Dispatch has been considered at 90% of the availability based on projections of MP Genco for FY12.
- 3.14 The assumptions used by the licensees for forecasting the availability from the future capacities is as below:
- (a) PLF considered for Coal based stations is 85%
 - (b) PLF considered for Gas based stations is 68% (as current gas availability is very poor)
 - (c) Auxiliary consumption considered for Coal based stations is 8.5%
 - (d) Auxiliary consumption considered for Gas based stations is 3%.
 - (e) The availability has been forecasted based on the month of operation in a particular year and the past trend of energy availability from the plants;
 - (f) 15% slippage has been considered for new capacity addition
 - (g) For Hydel stations design energy has been considered;
- 3.15 The Licensees state that the annual availability from each of the sources is as shown in the table below. The monthly availability for FY 2011-12 has been provided by the licensees in Format F1-a of the filings.

Table 17: Energy Availability ex-bus for Discoms for FY 2011-12 (MU)

Generating Station	Availability
NTPC-Korba	3,572
NTPC-Vindychal I	3,037
NTPC-Vindychal II	2,259
NTPC-Vindychal III	1,729
NTPC-Kawas	940

Generating Station	Availability
NTPC-Gandhar	778
KAPP	477
TAPS	1,058
NTPC – Farakka	-
NTPC – Talcher	-
NTPC – Kahalgaon stage I	-
NHDC - Indira Sagar	2,302
NVDA Sardar Sarovar	1,518
NHDC Omkareshwar HPS	1,018
Lanco Amarkantak	-
ATPS - Chachai-PH 1&2	1,034
STPS - Sarani-PH 1, 2 & 3	5,557
SGTPS - Bir'pur - PH 1 & 2	4,307
CHPS-Gandhi Sagar	171
CHPS-RP Sagar & Jawahar Sagar	160
Pench TPS	240
Banasgar Tons HPS-Tons	1,017
Banasgar Tons HPS-Silpara	100
Banasgar Tons HPS-Devloned	82
Banasgar Tons HPS-Bansagar IV	63
Birsingpur HPS	45
Bargi HPS	533
Rajghat HPS	48
Marhi Khera HPS	75
RSEB (Chambal,Satpura)	-
UPPCL (Rihand,Matatila,Rajghat)	60
MSEB(Pench)	-
GridCo (Hirakud)	-
NTPC - Sipat Stage II	1469
NTPC - Kahalgaon stage II	586
DVC (MTPS)	475
SGTPS - Bir'pur – Extn (500 MW)	3,052
ATPS - Chachai-Extn (210 MW)	1279
NTPC Sipat - Stage I	844
NTPC Mauda – Nagpur	-
DVC (Chandrapur TPS Extn.)	895
DVC (Durgapur Steel)	-
Case-I (Essar Power)	289
PTC - Torrent Surat (Gas)	579
Bina Power	-
Maheswar Hydrel	396
NCE – Wind generation	42
Captive	78
Total	42,164

3.16 The licensees have submitted that the above energy availability is based on:

- Capacity Allocation of Central Generating Stations to the State of Madhya Pradesh as per Western Region Power Committee's (WRPC) Letter on dated 8th Oct' 2010
- Future capacity which is proposed to come has been allocated to Tradeco and the Discom wise availability has been calculated for the current existing capacities.
- Capacity Allocation of individual station to the three Discoms of Madhya Pradesh based on the GoMP Gazette notification.

Assessment of Power Purchase Cost (Fixed and Variable Cost) by the Discoms

For existing stations

3.17 The licensees state that Fixed Costs of MP Genco stations for FY 2011-12 to FY 2012-13 have been kept in accordance with the tariff order issued by the MPERC from time-to-time. The following table provides a summary of order numbers through which tariffs were issued by the MPERC.

Table 18 : Applicable MPERC tariff Orders

	Petition/ Order number	Date/ Year
Sardar Sarovar	MPERC 03/2007	18 th January 2008
ATPS - Chachai-PH 1&2	MPERC MYT 54/2009	3 rd March 2010
STPS - Sarani-PH 1, 2 & 3	MPERC MYT 54/2009	3 rd March 2010
SGTPS - Bir'pur - PH 1 & 2	MPERC MYT 54/2009	3 rd March 2010
CHPS-Gandhi Sagar	MPERC MYT 54/2009	3 rd March 2010
CHPS-RP Sagar & Jawahar Sagar	MPERC MYT 54/2009	3 rd March 2010
Pench THPS	MPERC MYT 54/2009	3 rd March 2010
Banasgar Tons HPS-Tons	MPERC MYT 54/2009	3 rd March 2010
Banasgar Tons HPS-Silpara	MPERC MYT 54/2009	3 rd March 2010
Banasgar Tons HPS-Devlone	MPERC MYT 54/2009	3 rd March 2010
Banasgar Tons HPS-Bansagar IV	MPERC MYT 54/2009	3 rd March 2010
Birsingpur HPS	MPERC MYT 54/2009	3 rd March 2010
Bargi HPS	MPERC MYT 54/2009	3 rd March 2010
Rajghat HPS	MPERC MYT 54/2009	3 rd March 2010
Marhi Khera HPS	MPERC MYT 54/2009	3 rd March 2010
Others 1 (Wind & CPP)	-	-
SGTPS - Bir'pur - Extn	MPERC MYT 54/2009	3 rd March 2010
ATPS - Chachai-Extn	MPERC 25/2010	July 2010

3.18 The Licensees in their petitions have submitted that the fixed costs of Central Generation Stations and NHDC Indira Sagar & Omkareshwer HPS for which capacity allocation percentage to each individual Discom has been defined by GoMP letter dated 24th Dec,

2010, fixed costs as approved by Central Electricity Regulatory Commission Orders for each individual station for FY 2008-09 have been adopted for FY 10 to FY 13 also.

3.19 Variable costs (including FPA) for MP Genco & Central Generating Stations have been adopted as per the October 2010 bills and have been annually escalated at the rate specified by the CERC in its notification dated 27th March 2009.

3.20 For the new stations which will become available to the State during the current year from the Central & State Sector, the following methodology has been adopted:

- a) For Sipat-I , Fixed and Variable Cost as indicated in the Retail Supply Tariff Order dated 29th July 2009 has been adopted. Also, the variable cost has been escalated at the rate of 6.35% as per the MPERC tariff order for FY11.
- b) For DVC Chandrapur, single part tariff of DVC Mejia has been adopted since there were no means to assume this cost for this particular station.
- c) For Essar Power, single part tariff @ Rs. 2.45 has been adopted as per the PPA signed by MP Power trading company Ltd.
- d) For MP Genco rate for Birisinghpur Extension and Amarkantak Phase III, fixed and variable cost is taken as indicated in the Retail Supply Tariff Order dated 29th July 2009. Also, the variable cost has been escalated at the rate of 6.35% as per MPERC tariff order for FY11.
- e) For Torrent (Gas), fixed tariff @ Rs. 1.08 and variable charge @ Rs. 2.23 as per CERC order dated 11.01.2010 has been considered.

3.21 Fixed and variable costs of each of the stations that have been considered for determining the power purchase cost with the following assumptions:

- a) East, West and Central Discoms' share of fixed cost has been considered for its ARR purpose.
- b) Fuel Price Adjustment (FPA) has been projected in the same manner as that of variable cost per unit and is included in the variable component of the generation cost.
- c) The fixed and the variable costs of the new stations have been pooled together to get an average bulk supply rate at which MP Tradeco will supply power to each individual Discom.

3.22 The table below provides the details of the costs viz. fixed costs and variable costs for all the existing plants. Different rates of variable cost of Kawas and Gandhar Stations have been filed by Discoms.

Table 19 : Fixed cost & Variable Cost as filed for the State for FY 2011-12

POWER STATIONS	For FY 2011-12 for the State	
	Total Fixed Cost (Rs Crs.)	Total Variable Charge (Rs / kWh)
NTPC-Korba	97	0.92
NTPC-Vindiyachal I	108	1.80
NTPC-Vindiyachal II	129	1.76
NTPC-Vindiyachal III	152	1.76
NTPC-Kawas	54	5.28
NTPC-Gandhar	65	2.93
KAPP	0	2.17
TAPS	0	3.22
NTPC – Farakka	-	-
NTPC – Talcher	-	-
NTPC – Kahalgaon	-	-
NTPC - Sipat Stage II	119	1.15
NTPC - Kahalgaon 2	53	2.11
Bilateral Power Purchase		
RSEB (Chambal,Satpura)	0	4.24
UPPCL (Rihand,Matatila,Rajghat)	0	0.00
MSEB(Pench)		-
GridCo (Hirakud)		
DVC (MTPS)	0	2.90
Other Sources		
NHDC - Indira Sagar	495	0.04
Sardar Sarovar	194	0.07
Omkareshwar HPS	263	0.50
Others 1 (Wind & CPP)		3.55
MP Genco – Thermal		
ATPS - Chachai-PH 1&2	61	1.18
STPS - Sarani-PH 1, 2 & 3	322	1.36
SGTPS - Bir'pur - PH 1 & 2	379	1.14
SGTPS - Bir'pur Extn (500 MW)	369	1.01
ATPS - Chachai-PH 3	167	0.92
MPGenco – Hydrel		
CHPS-Gandhi Sagar	4	3.83
CHPS-RP Sagar & Jawahar Sagar	0	1.51
Pench THPS	11	0.28
Banasgar Tons HPS-Tons (I to III)	142	1.01
Banasgar Tons HPS-Silpara	0	0
Banasgar Tons HPS-Devlone	0	0
Banasgar Tons HPS-Bansagar IV	14	0.89
Birsingpur HPS	6	0.59
Bargi HPS	10	0.35
Rajghat HPS	5	1.39
Marhi Khera HPS	27	3.75

Details of Costs for future capacities

3.23 For all the future capacities which are proposed to be commissioned in future the rates as per the table below have been considered.

Table 20: Cost for Future Capacities

	Fixed Costs (Rs. Cr.)	Energy Charges Rs./kWh Escalated for Future years	Basis
NTPC Sipat - Stage I	107	0.63	As per Costs of Sipat-II
DVC (Chandrapur TPS Extn.)	296	2.36	Considered same as Mejia
Case-I (Essar Power)	-	2.45	As per PPA
PTC - Torrent Surat (Gas)	-	3.31	CERC order Jan'10
Maheswar Hydel	239		As per Guidelines

Assessment of Other Elements of Power Purchase Cost by the Discoms

Inter State Transmission Charges associated with existing capacities:

3.24 The inter-state transmission charges (PGCIL cost) have been projected as per the actual bills of FY11/ as per relevant Orders. For calculation of FY 12 and FY 13 the cost of additional interstate transmission cost on account of new capacities coming up during the year has also been considered.

3.25 The Licensees have also allocated the total PGCIL cost based on the allocation percentage which has been derived based on the weighted average capacity and allocation percentage of each Discom from Eastern Region and Western Region Stations and Sardar Sarovar Project which is also connected to PGCIL network. The Licensees have claimed the following projected PGCIL costs for FY 2011-12.

Table 21 : Inter-State Transmission Charges as filed (Rs In Crore)

Discom	FY 2011-12 (Regulation)	FY 2011-12(Additional Submission)
MP Madhya KVVCL	130	129
MP Paschim KVVCL	123	122
MP Poorv KVVCL	134	134
Total	387	385

Inter State Transmission Charges associated with new and upcoming capacities:

3.26 Transmission Charges for the new and upcoming capacities are projected on the estimated basis. Following are the expected capacity additions in the central sector:

Table 22 : New Capacities (in MW)

Station	FY 2011-12
NTPC Sipat - Stage I	283
DVC (Chandrapur TPS Extn.)	200
Case-I (Essar Power)	150
Korba Stage III	60
PTC – Torrent	100
Maheshwar hydel	400
Total Capacity (MW)	1193

3.27 Based on the capacity additions in the central sector, PGCIL Charges payable by MP Tradeco is as follows, which has been included in the bulk supply rate at which MP Tradeco will sell power to Discoms if required by the Discoms.

Table 23 : PGCIL Charges Payable by MP Tradeco (Rs In Crore)

PGCIL Charges payable by MP Tradeco	FY 2011-12
PGCIL Charges for new & upcoming central sector stations	47.73

Intra - State Transmission Charges

3.28 The Licensees have submitted that for the purpose of calculation of intra-State transmission Charges, the charges have been taken as per Orders of the Commission. Filing details are given below:

Table 24 : Intra-State Transmission Charges Filed by Discoms for FY 2011-12 (Rs In Crore)

Annual MPPTCL Charges as payable by the Discoms	FY 2011-12 (Regulation)	FY 2011-12 (Additional Submission)
MP Poorv KVVCL	370	370
MP Madhya KVVCL	288	404
MP Paschim KVVCL	298	418
Total	956	1192

Average Cost of Power including MP Transco Charges

3.29 The Licensees have further submitted that the total power purchase cost and Rs. Per unit has been estimated based on the principles stated in their petitions for the FY11-12, which is as under

3.30 The total power purchase cost as filed by the Licensees is given in the table below:

Table 25 : Total Power Cost as Filed (Rs In Crore)

Comparison of Power purchase cost(in Crs)		EAST		WEST		CENTRAL	
Details of power purchase cost		As per Regulation	As per Additional Submission	As per Regulation	As per Additional Submission	As per Regulation	As per Additional Submission
A	Ex-bus Units Purchased (MU)	12,301	12,714	16,042	16,042	13,515	13,515
B	Fixed Cost (Rs. Crs.)	1,020	1,020	1,219	1,219	997	997
C	Variable Cost (Rs. Crs.)	1,543	1,687	2,621	2,626	2,104	2,106
D	MP Tradeco Trading Margin (@ 4p/unit in additional)	0	51	-	64	-	54
E=B+C+D	Total Power Purchase Cost - Ex Bus (Rs. Crs.)	2,564	2,758	3,840	3,909	3,100	3,157
E/A	Rate of Power Purchase (Rs. / kWh)	2.08	2.17	2.39	2.44	2.29	2.34
H	External Losses (MU)	325	339	291	291	323	323
I	Inter State Transmission Cost (Rs. Crs.)	130	134	123	122	130	129
J=(A-H)	Units Purchased at State Periphery (MU)	11,977	12,375	15,751	15,751	13,192	13,192
K=(I-E)	Total Power Purchase Cost at State Boundary (Rs. Crs.)	2,694	2,891	3,963	4,031	3,230	3,285
J/K	Rate of Power Purchase at State Boundary (Rs. / kWh)	2.25	2.34	2.52	2.56	2.45	2.49
L	Intra State Transmission Cost - MPTransco (Rs. Crs.)	264	370	298	418	288	404
M=(K+L)	Total Power Purchase Cost at Discom Interface (Rs. Crs.)	2,958	3,261	4,262	4,449	3,518	3,689
N	Transmission Loss (MU)	490	506	644	644	540	540
O=(K-N)	Units Purchased at Discom Boundary (MU)	11,487	11,869	15,107	15,107	12,652	12,652
O/M	Rate of Power Purchase at Discom Boundary (Rs. / kWh)	2.58	2.75	2.82	2.94	2.78	2.92

Commission's Analysis of Energy Balance and Power Purchase

- **Distribution Losses**

3.31 The Commission has notified the Regulations on terms and conditions for determination of tariff for supply and wheeling of electricity and methods and principles of fixation of charges for the tariff period from FY 2010-11 to FY 2012-13 in December, 2009. The distribution loss level trajectory as specified in the Regulations is given in the table below:

Table 26 : Loss Targets (in %) as per Regulations

Loss Targets	2010-11	2011-12	2012-13
East Discom	30%	27%	24%
West Discom	26%	24%	22%
Central Discom	33%	29%	26%

3.32 Accordingly the Commission has considered the distribution losses for the FY 2011-12 as indicated in the table above. The Commission notes that the submission by the Licensees has been in accordance with the provision of the Regulations except in case of East Discom. The East Discom has not followed the provisions of the Regulations in ARR filing while filing the projected distribution losses for FY 11-12 under the head of “Additional submission” and has claimed loss levels of 29.35% as against the normative level of 27%. The Commission has considered the submission made by the East Discom for claiming loss levels in excess of the normative levels on account of merger of RE Societies in their area and not found it justified. The claim in this regard therefore has not been admitted.

- **External (PGCIL) Losses**

3.33 The Inter-State transmission losses have been computed separately for Eastern Region and Western Region stations. For Western Region past data (52 weeks, till week ending 20th Feb., 11) as available on the PGCIL website has been taken and an average loss level of 4.79% has been used. Similarly, for Eastern Region transmission line losses an average loss level (38 weeks of FY 2010-11) of 2.38% has been considered.

3.34 The Commission has considered provisional intra-State transmission losses at 3.74% for FY 2011-12 based on the MIS reports of Transco. for FY 10-11.

3.35 The energy balance for all the three Discoms for FY 2011-12 is presented in the following table:

Table 27 : Gross Energy Requirement for FY 2011-12

Particular	Central Discom	West Discom	East Discom	State
Total Sales (MU)- A	8,417	11,272	8,051	27,740
Distribution loss (%)	29.00%	24.00%	27.00%	26.45%
Distribution loss (MU) - B	3,438	3,560	2,978	9,975
Input at T-D interface (MU) -- C=(A-B)	11,855	14,832	11,028	37,715
Transmission loss (%)	3.74%	3.74%	3.74%	3.74%
Transmission loss (MU)- D	461	576	428	1,465
Input at G-T interface (MU) – E= C+D	12,315	15,408	11,457	39,180
PGCIL Losses %				
WR- PGCIL Losses %	4.79%	4.79%	4.79%	4.79%
ER- PGCIL Losses %	2.38%	2.38%	2.38%	2.38%
PGCIL Losses (MU) -- F	402	399	429	1,230
Power Purchase Requirement (MU)— G=E+F	12,718	15,807	11,886	40,410

3.36 The Government of Madhya Pradesh vide its Energy Deptt. Govt. of MP Notification No. 4353-F-3-24-2009-XIII dated 16th May 2011, has revised the existing generating capacity allocation to the three Distribution Licensees, The GoMP has also made the capacity allocation of the stations expected to be commissioned during FY 2011-12 to the MP Tradeco.

3.37 The table below presents the allocation of generating capacities to the East, West & Central Discoms as per Energy Deptt. Govt. of MP letter No. 9013/13/2010 dated 24th December 2010 for 200 MW to Bundelkhand region only and GoMP Notification No. 4353-F-3-24-2009-XIII dated 16th May 2011 for others.

Table 28 : Station Wise Capacity Allocation (%) to Discoms

Generating Stations	Installed Capacity	Allocation to State	Specific Allocation to Bundelkhand Region	Allocation to state(excluding specific allocation)	Discom wise Allocation			
					MW	MW	MW	
CGS					% excluding specific allocation			
					Central	West	East	
1	WR - KSTPS	2100	490	52.63	437.76	34%	24%	42%
2	WR - VSTPS-I	1260	446	32.26	413.27	41%	30%	29%
3	WR - VSTPS-II	1000	321	25.47	295.82	40%	30%	30%
4	WR - Kawas GPP	656	140	0.00	140.00	20%	48%	32%

5	WR - Gandhar GPP	657	117	0.00	117.00	20%	48%	32%
6	WR - Kakrapar APS	440	111	11.21	100.19	33%	44%	22%
7	WR - Tarapur APS	1080	234	27.50	206.28	34%	45%	21%
8	WR - VSTPS – III	1000	250	25.47	224.33	40%	40%	20%
9	WR - Sipat -II	1000	193	25.47	167.33	45%	20%	35%
10	ER - Farakka STPS	1600	0	0.00	0.00	20%	55%	25%
11	ER - Kahalgaon STPS	840	0	0.00	0.00	20%	55%	25%
12	ER - Kahalgaon STPS-II	1500	74	0.00	74.00	20%	55%	25%
13	ER - Talcher STPS	1000	0	0.00	0.00	20%	55%	25%
14	DVC (MTPS)	200	200	0.00	200.00	15%	55%	30%
15	Amarkantak com	240	240	0.00	240.00	41%	28%	31%
16	Amarkantak Ext	210	210	0.00	210.00	41%	28%	31%
17	Satpura TPS PH I & II & III	1143	1018	0.00	1017.51	41%	28%	31%
18	SGTPS Ext	500	500	0.00	500.00	41%	28%	31%
19	SGTPS	840	840	0.00	840.00	41%	28%	31%
20	Gandhi Sagar	115	58	0.00	57.50	50%	30%	20%
21	Ranapratap Aagar & Jawahar Sagar	271	136	0.00	135.50	50%	30%	20%
22	Pench	160	107	0.00	106.67	40%	40%	20%
23	Rajghat	45	23	0.00	22.50	40%	40%	20%
24	Bargi	100	100	0.00	100.00	20%	50%	30%
25	Birsinghpur	20	20	0.00	20.00	20%	50%	30%
26	Bansagar - I	315	315	0.00	315.00	30%	40%	30%
27	Ban Sagar II	30	30	0.00	30.00	30%	40%	30%
28	Ban Sagar III	60	60	0.00	60.00	30%	40%	30%
29	Ban Sagar IV	20	20	0.00	20.00	30%	40%	30%
30	Marikheda	60	60	0.00	60.00	20%	50%	30%
31	Indira Sagar	1000	1000	0.00	1000.00	25%	55%	20%
32	NCE- Wind Generation	0	0	0.00	0.00	30%	41%	29%
33	Captive	0	0	0.00	0.00	30%	41%	29%
34	Sardar Sarovar	1450	827	0.00	826.50	20%	50%	30%
35	Omkareshwar	520	520	0.00	520.00	20%	50%	30%
	Grand Total	21432	8657	200.01	8457.16			

3.38 Generation capacities which are expected to come-up during FY 2011-12 include the following plants :-

Table 29 : New Generation Capacities in FY 2011-12

Particulars	Allocation to Tradeco (MW)
NTPC Sipat - Stage I	188.67
DVC (Chandrapur TPS Extn.)	200.00
Case-I (Essar Power)(private)	75.00
PTC - Torrent Surat (Gas)(private)	104.32
Maheswar Hydel	400.00
NTPC Korba stage III	60.00

3.39 As informed DVC (CTPS), Sipat -1, Essar Power, Torrent, Maheswar Hydel and Korba III Power projects have not achieved their COD, hence they are not considered in this order for working out the firm availability and have been kept with MP Tradeco.

3.40 **Bilateral and Other Stations:** The Commission has considered availability from all the bilateral stations (Rana Pratap sagar, Jawahar Sagar, Gandhi Sagar, Pench and Rajghat) for M.P. share only based on filing by Licensees. The Commission has determined the rates for Gandhi Sagar, Pench and Rajghat in the MP Genco Order dated 3rd March, 2010 and these rates have been considered for M.P. share only. However, in absence of any data for Jawahar Sagar and RP Sagar, the Commission has provisionally considered the availability as per filing by licensees as well as generation tariff as applicable for Gandhi Sagar to determine the cost of power purchase from Jawahar Sagar and RP Sagar stations. Similarly in case of Joint sector Hydel stations such as Indira Sagar, Omkareshwar and Sardar Sarovar, the availability has been worked out on the basis of filing by Licensees.

3.41 **Central Generating Stations:** The annual energy availability for FY 2011-12 from existing Central Generating Stations has been considered after analyzing the availability taken as filed by Discom.

3.42 **MP Genco Stations:** The annual energy availability for FY 2011-12 from existing MP Generating Stations (thermal power stations) has been considered after analysing the availability taken as filed by discom.

3.43 **Others:** Availability of energy from NCE-Wind Generation, Captive generators has been taken as filed.

3.44 The station wise power allocation in MW to the three Distribution Companies of the State is given in the following table:

Table 30 : Station wise Capacity Allocation to Discoms (in MW)

Name of the Station	Installed Capacity	Allocation to State	MW	Allocation to Discoms (MW)		
	MW	%		East	West	Central
WR - KSTPS	2100.00	23.35%	490.39	236.49	105.06	148.84
WR - VSTPS-I	1260.00	35.36%	445.53	152.11	123.98	169.44
WR - VSTPS-II	1000.00	32.13%	321.29	114.22	88.75	118.33
WR - KAWAS GPP	656.20	21.33%	140.00	44.80	67.20	28.00
WR - GANDHAR GPP	657.39	17.80%	117.00	37.44	56.16	23.40
WR - KAKRAPAR APS	440.00	25.32%	111.40	33.45	44.53	33.41
WR - TARAPUR APS	1080.00	21.65%	233.78	70.10	93.55	70.14
WR - VSTPS - III	1000.00	24.98%	249.80	70.34	89.73	89.73
WR - SIPAT -II	1000.00	19.28%	192.80	84.04	33.47	75.30
ER - FARAKKA STPS	1600.00	0.00%	0.00	0.00	0.00	0.00
ER - KAHALGAON STPS	840.00	0.00%	0.00	0.00	0.00	0.00
ER - KAHALGAON STPS-II	1500.00	4.93%	74.00	18.50	40.70	14.80
ER - TALCHER STPS	1000.00	0.00%	0.00	0.00	0.00	0.00
DVC (MTPS)	500.00	40.00%	200.00	60.00	110.00	30.00
THERMAL						
AMARKANTAK COMPLEX	240.00	100.00%	240.00	74.40	67.20	98.40
AMARKANTAK EXTN.	210.00	100.00%	210.00	65.10	58.80	86.10
SATPURATPS PH I & II & III	1142.50	89.06%	1017.51	315.43	284.90	417.18
SGTSP Ext	500.00	100.00%	500.00	155.00	140.00	205.00
SGTSP	840.00	100.00%	840.00	260.40	235.20	344.40
HYDEL						
INTERSTATE						
GANDHI SAGAR	115.00	50.00%	57.50	11.50	17.25	28.75
RANAPRATAP SAGAR & JAWAHAR SAGAR	271.00	50.00%	135.50	27.10	40.65	67.75
PENCH	160.00	66.67%	106.67	21.33	42.67	42.67
RAJGHAT	45.00	50.00%	22.50	4.50	9.00	9.00
FULL MP ALLOCATION						
BARGI	100.00	100.00%	100.00	30.00	50.00	20.00
BIRISINGHPUR	20.00	100.00%	20.00	6.00	10.00	4.00
BANSAGAR - I	315.00	100.00%	315.00	94.50	126.00	94.50
BAN SAGAR II	30.00	100.00%	30.00	9.00	12.00	9.00
BAN SAGAR III	60.00	100.00%	60.00	18.00	24.00	18.00
BAN SAGAR IV	20.00	100.00%	20.00	6.00	8.00	6.00
MARIKHEDA	60.00	100.00%	60.00	18.00	30.00	12.00
INDIRA SAGAR	1000.00	100.00%	1000.00	200.00	550.00	250.00
NCE- WIND GENERATION	0.00	0.00%	0.00	0.00	0.00	0.00
CAPTIVE	0.00	0.00%	0.00	0.00	0.00	0.00
SARDAR SAROVAR	1450.00	57.00%	826.50	247.95	413.25	165.30
OMKARESHWAR	520.00	100.00%	520.00	156.00	260.00	104.00
TOTAL	21732.09	39.84%	8657.17	2641.69	3232.05	2783.43

3.45 The station wise Ex-Bus availability and the availability at the State Periphery after considering the PGCIL system losses for WR and ER stations for FY 2011-12 is shown in table below:

Table 31 : Station Wise Availability in MUs Discoms

Name of the Station	Availability (Ex-Bus)				Availability (Ex-State Periphery)			
	State	East	West	Central	State	East	West	Central
CGS								
WR – KSTPS	3,572	1,723	765	1,084	3,402	1,640	729	1,032
WR - VSTPS-I	3,037	1,037	845	1,155	2,892	987	805	1,100
WR - VSTPS-II	2,259	803	624	832	2,151	765	594	792
WR - KAWAS GPP	940	301	451	188	895	286	430	179
WR - GANDHAR GPP	778	249	374	156	741	237	356	148
WR - KAKRAPAR APS	477	143	191	143	454	136	181	136
WR - TARAPUR APS	1,058	317	423	317	1,008	302	403	302
WR - VSTPS - III	1,729	487	621	621	1,646	463	591	591
WR - SIPAT –II	1,469	640	255	574	1,398	609	243	546
ER - FARAKKA STPS	0	0	0	0	0	0	0	0
ER - KAHALGAON STPS	0	0	0	0	0	0	0	0
ER - KAHALGAON STPS-II	586	147	322	117	544	136	299	109
ER - TALCHER STPS	0	0	0	0	0	0	0	0
DVC (MTPS)	475	142	261	71	441	132	242	66
THERMAL – STATE								
AMRKANTAK COM.	1,034	320	289	424	1,034	320	289	424
AMRKANTAK EXT.	1,279	396	358	524	1,279	396	358	524
SATAPURA TPS PH I & II & III	5,557	1,723	1,556	2,278	5,557	1,723	1,556	2,278
SGTPS EXT.	3,052	946	855	1,251	3,052	946	855	1,251
SGTPS	4,307	1,335	1,206	1,766	4,307	1,335	1,206	1,766
HYDEL								
INTERSTATE								
GANDHI SAGAR	171	34	51	86	171	34	51	86
RANAPRATAP SAGAR & JAWAHAR SAGAR	160	32	48	80	160	32	48	80
PENCH	240	48	96	96	240	48	96	96
RAJGHAT	48	10	19	19	48	10	19	19
FULL MP ALLOCATION								
BARGI	533	160	267	107	533	160	267	107
BIRISINGHPUR	45	14	23	9	45	14	23	9
BANSAGAR – I	1,017	305	407	305	1,017	305	407	305
BAN SAGAR II	100	30	40	30	100	30	40	30
BAN SAGAR III	82	25	33	25	82	25	33	25
BAN SAGAR IV	63	19	25	19	63	19	25	19
MARIKHEDA	75	23	38	15	75	23	38	15
JOINT SECTOR AND OTHERS								

INDIRA SAGAR	2,302	460	1,266	576	2,192	438	1,206	548
NCE- WIND GENERATION	42	13	17	13	42	13	17	13
CAPTIVE	78	23	31	23	78	23	31	23
SARDAR SAROVAR	1,518	455	759	304	1,446	434	723	289
OMKARESHWAR	1,018	305	509	204	969	291	485	194
TOTAL	39,101	12,665	13,025	13,411	38,060	12,314	12,644	13,103

3.46 The month-wise Discom-wise energy requirement as filed by the petitioners has been prorated by the Commission to cover all energy requirement as revised by the Commission. Energy requirement based on the above vis-à-vis the availability as worked out by the Commission is given in the table below:

Table 32 : Month Wise Requirement and Availability of Discoms

Month	Discom Requirement Ex- Bus			Energy Availability Ex Bus		
	East	West	Central	East	West	Central
April-11	945	1,307	1,024	1,025	996	1,091
May-11	907	1,324	995	1,012	951	1,084
June-11	904	1,279	967	925	875	985
July-11	884	1,123	952	876	854	906
August-11	888	1,087	957	963	1,026	1,002
September-11	871	1,193	984	1,037	1,111	1,085
October-11	1,028	1,296	1,017	1,186	1,272	1,252
November-11	1,047	1,466	1,092	1,149	1,273	1,226
December-11	1,083	1,591	1,214	1,165	1,244	1,238
January-12	1,115	1,432	1,276	1,153	1,204	1,226
February-12	1,074	1,443	1,169	1,066	1,100	1,133
March-12	1,121	1,319	1,037	1,108	1,120	1,181
Total	11,867	15,859	12,684	12,665	13,025	13,411

3.47 The Commission has applied merit order dispatch principle month-wise on the basis of the variable costs of the generating stations. The table below depicts the merit order among the stations and their variable energy rates.

Table 33 : Merit Order

GENERATING STATIONS	VARIABLE CHARGES (PAISE/ UNIT)	RANKING
WR - KAKRAPAR APS	231.51	1*
CAPTIVE	245.00	2*
WR - TARAPUR APS	291.04	3*
NCE- WIND GENERATION	400.00	4*
ER - FARAKKA STPS	0.00	5
ER - KAHALGAON STPS	0.00	6
ER - TALCHER STPS	0.00	7
GANDHI SAGAR	0.00	8
RANAPRATAP SAGAR & JAWAHAR SAGAR	0.00	9
PENCH	0.00	10
RAJGHAT	0.00	11
BARGI	0.00	12
BIRSINGHPUR	0.00	13
BANSAGAR - I	0.00	14
BAN SAGAR II	0.00	15
BAN SAGAR III	0.00	16
BAN SAGAR IV	0.00	17
MARIKHEDA	0.00	18
INDIRA SAGAR	0.00	19
SARDAR SAROVAR	0.00	20
OMKARESHWAR	0.00	21
WR - KSTPS	94.75	22
AMARKANTAK EXT	105.03	23
WR - SIPAT -II	109.70	24
DVC (MTPS)	117.50	25
SGTPS EXT	125.04	26
AMARKANTAK COM	131.15	27
SGTPS	143.88	28
SATPURA TPS PH I & II &III	157.41	29
WR - VSTPS-II	174.66	30
WR - VSTPS - III	176.81	31
WR - VSTPS-I	177.46	32
ER - KAHALGAON STPS-II	214.29	33
WR - GANDHAR GPP	236.26	34
WR - KAWAS GPP	242.67	35

* “must run” stations

3.48 The total Station wise availability after application of the merit order dispatch principle on monthly availability is given in the following table:

Table 34 : Station Wise Availability after Considering MOD (MU)

Name of the Station	State	East	West	Central
WR - KSTPS	3,572	1,723	765	1,084
WR - VSTPS-I	2,886	735	1,436	716
WR - VSTPS-II	2,259	809	666	785
WR - KAWAS GPP	672	68	554	50
WR - GANDHAR GPP	633	91	487	55
WR - KAKRAPAR APS	477	143	191	143
WR - TARAPUR APS	1,058	317	423	317
WR - VSTPS - III	1,721	444	713	563
WR - SIPAT -II	1,469	640	255	574
ER - FARAKKA STPS	0	0	0	0
ER - KAHALGAON STPS	0	0	0	0
ER - KAHALGAON STPS-II	501	63	389	49
ER - TALCHER STPS	0	0	0	0
DVC (MTPS)	475	142	261	71
AMARKANTAK COM	1,034	320	289	424
AMARKANTAK EXT	1,279	396	358	524
SATPURA TPS PH I & II &III	5,557	1,723	1,556	2,278
SGTPS EXT	3,052	946	855	1,251
SGTPS	4,307	1,335	1,206	1,766
GANDHI SAGAR	171	34	51	86
RANAPRATAP SAGAR & JAWAHAR SAGAR	160	32	48	80
PENCH	240	48	96	96
RAJGHAT	48	10	19	19
BARGI	533	160	267	107
BIRISINGHPUR	45	14	23	9
BANSAGAR - I	1,017	305	407	305
BAN SAGAR II	100	30	40	30
BAN SAGAR III	82	25	33	25
BAN SAGAR IV	63	19	25	19
MARIKHEDA	75	23	38	15
INDIRA SAGAR	2,302	460	1,266	576
NCE- WIND GENERATION	42	13	17	13
CAPTIVE	78	23	31	23
SARDAR SAROVAR	1,518	455	759	304
OMKARESHWAR	1,018	305	509	204
TOTAL	38,444	11,851	14,033	12,560

3.49 The above availability is inclusive of the Intra-Discom sale and purchases as indicated in the table below:

Table 35 : Intra Discom Trading in MUs

Month	Intra-Discom Purchases			Intra-Discom Sales		
	East	West	Central	East	West	Central
April-11	-	148.0	-	80.4	-	67.6
May-11	-	194.2	-	105.0	-	89.2
June-11	(0.0)	38.2	(0.0)	20.0	-	18.2
July-11	-	-	-	-	-	-
August-11	-	80.7	-	50.8	-	29.9
September-11	-	163.9	2.1	101.4	-	64.6
October-11	5.4	132.1	-	25.3	-	112.2
November-11	0.5	197.0	-	78.5	-	119.0
December-11	-	105.7	0.9	82.3	-	24.3
January-12	-	31.1	7.1	38.2	-	-
February-12	-	-	-	-	-	-
March-12	23.8	130.7	-	10.4	-	144.1
Total	29.7	1,221.6	10.1	592.3	-	669.1

3.50 It is apparent from the results of merit order application and as indicated in the aforementioned tables that there would be a gap between energy availability and requirements of Discoms estimated on the basis of the normative loss levels. The month-wise requirement of the Discoms would be met through the direct allocations of their share and from the intra-Discom trading of the energy remaining surplus after meeting the requirement of seller Discom. Since the month-wise requirement of the Licensees is more than the availability in some months, therefore, there is requirement for short-term power purchases either through MP Tradeco. or from external sources. The costs of these purchases have been included in the total power purchase cost as finalised by the Commission in the following paragraphs.

3.51 As mentioned in the above paragraph, the Discom wise Ex- Bus power purchase required, availability after MOD, purchase from Tradeco and short term sources are as below:

Table 36 : Requirement, Availability and Shortfall (In MUs)

Particular	State	East	West	Central
Total Required Ex-Bus	40,410	11,867	15,859	12,684
Total available Ex-Bus After MOD	38,444	11,851	14,033	12,560
Difference	1,966	15	1,827	124
Purchase from Tradeco	1,693	13	1,571	109
Balance required	273	3	255	15
Short Term power Purchase	273	3	255	15

3.52 It is also relevant to mention here that 200 MW power allocated for Bundelkhand area to East Discom from Central Generating Stations has been scheduled for meeting power requirement of East Discom to meet the objective of providing this power to Bundelkhand region only. The power which is allocated to the East Discom excluding above special allocation for Bundelkhand area and which is in excess of their total requirement has only been considered for intra Discom sale.

3.53 The merit order has also revealed that in some months the availability remained partly unutilized by the Discoms even after considering the intra-Discom trade. The Commission suggests that the Discoms should use this surplus energy for banking with other States so that the shortfall, if any, in the requirement in the Rabi season could be met from such banked power itself i.e. without any cost implications. The Commission expects that the Discoms would avail the opportunity of inter-State trading of surplus power only after fully meeting demand of their consumers.

3.54 On the Policy directive of GoMP vide letter No. 3969/13/11/02 dated May 3rd, 2011 the Commission has decided to follow a uniform tariff in the State during FY 2011-12, the excess energy in a month with a Licensee will be first given to other Distribution Licensees of Madhya Pradesh who are having a shortfall in the same month. The Commission directs that the sale rate of the surplus energy to other Discoms within the State should be at the Monthly Pooled Cost of Power as given below:

Table 37 : Monthly Pooled Cost for Intra Discom Trading

Sr. No.	Month	Rs./kWh
1	April	2.11
2	May	2.12
3	June	2.12
4	July	2.11
5	August	2.04
6	September	1.94
7	October	1.83
8	November	2.03
9	December	2.07
10	January	2.08
11	February	2.09
12	March	2.12

Power Purchase Costs

3.55 The power purchase cost has two elements i.e. fixed cost and the variable cost. The working for these costs is discussed in the following paragraphs.

Central Generating Stations (Thermal)

3.56 For NTPC's Stations in Western Region (Korba, VSTPS-1, VSTPS-II, VSTPS-III, Kawas, Gandhar and Sipat-II) the Commission has noted that at present no station has an approved cost for the financial year FY 2011-12. For the purpose of fixed cost determination of individual station, the Commission has considered latest available tariff order issued by CERC for individual station.

3.57 Fixed cost of thermal power stations have been computed as per recovery of fixed cost Regulations in CERC (Terms and Conditions of Tariff) Regulations, 2008.

3.58 However, to determine the energy cost for each station for FY 2011-12, the Commission has considered variable cost as stated in actual bills raised by NTPC to MP Tradeco till January 2011, for individual station. Further the variable cost has been inflated at a rate of 6.35% for calculating the energy charges for each station for FY 2011-12.

3.59 Other charges including FPA charges have been taken as per the latest bills available with the Commission till January, 2011. The same have been considered for FY 2011-12.

3.60 For determination of allowable costs from the plants in the Eastern Region the principle followed for power plants in the Western Region is adopted. The principle applied for calculating the energy charges and other charges is same as for Western Region stations.

Central & State Generating Stations (Hydel)

3.61 For computation of Fixed charges of Hydel Stations the Commission has considered latest available tariff order issued by CERC for individual station. Further the fixed costs have been computed as per recovery of fixed charges Regulations in CERC (Terms and Conditions of Tariff) Regulations 2008 and Madhya Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Generation Tariff) (Revision –I) Regulations, 2009.

Indira Sagar (NHDC)

3.62 For FY 2011-12 charges for Indira Sagar hydel power plant are admitted as per the CERC Tariff Order, dated 20th October, 2009.

Sardar-Sarovar

3.63 The Commission has allowed annual fixed charges as per the provisional tariff order passed on 7th February 2011.

Omkareshwar:

3.64 Commission has allowed annual fixed charges for Omkareshwar as per the provisional tariff order passed by CERC on 30th October, 2007.

Renewable Sources

3.65 The minimum purchase requirement by the Disoms for Solar and Non-Solar energy from different sources as per relevant Regulations is shown in the following table:

Table 38 : Minimum Purchase Obligation

Renewable Source	Minimum Purchase Requirements
Solar	0.40%
Non-Solar	2.10%
Total	2.5%

3.66 **Captive Generation and other sources:** The Discoms have filed a total availability of 120.51 MUs from captive power plants and wind generation during FY 2011-12. This availability has been divided amongst the three Discoms in the ratio of 3:4:3 for Central, West and East Discoms respectively and a rate for wind generation of Rs. 4.00/kWh . (Considering that part of energy would come from pre May, 2010 plants having tariff of Rs.3.30/3.36 per kwh and partly from post May, 2010 plants having tariff of Rs.4.35 per kwh) and for captive power plant Rs. 2.45/kWh has been used to arrive at the costs for FY 2011-12. The rate of Rs.3.55 per unit as filed by the Discoms for purchase of power from captive power plants has not been considered in this Order as it has not been substantiated with relevant data/justifications. At this juncture the Commission considers that the power in excess of captive consumption shall relate mainly to the variable charge of the CPP and therefore the rate has been enhanced from the earlier rate of Rs.2.27 per unit in view of increase in input costs. The rate provided in this Order for purchase of power from captive power plants is the maximum ceiling rate for **firm power during normal time**. Purchase of power from captive power plants should be done as per procedure prescribed in MPERC (Power purchase and other matters with respect to conventional fuel based Captive Power Plants) Regulations (revision – 1) 2009 dated 31st January, 2009.

3.67 **Generating Station through Tradeco.** For the new stations which will become available to the State during the current year from the Central & State Sector, the following methodology has been adopted:

- i. For Sipat-I thermal station, Fixed and Variable Cost have been taken as filed.
- ii. For DVC Chandrapur, tariff of DVC Mejia has been adopted since there is no CERC tariff Order for DVC Chandrapur.
- iii. For Essar Power, single part tariff @ Rs. 2.45 has been adopted as provisional rate as per the PPA signed by MP Power trading company Ltd.
- iv. PTC Torrent rates have been taken as per the Order of the CERC.
- v. For Maheshwar Hydel, as no tariff Order is available, rate as per filing has been taken.
- vi. Korba West III- The rates have been taken as per filing.

Fixed Cost

3.68 The Fixed Cost of the MP Genco Stations has been taken from MYT Tariff order of FY 2011-12. These fixed costs have been adjusted based on availability considered from the Generating Stations in this order and as per Recovery of Annual Capacity (fixed) charges provided in the Madhya Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Generation Tariff) (Revision –I) Regulations, 2009.

3.69 The allocation of the fixed cost among the three Distribution Companies is given in the following table:

Table 39 : Allocation of Fixed Cost among Discoms (Rs In Crore)

Name of the Station	Fixed Cost (Rs.Crore)			
	Total	East	West	Central
WR – KSTPS	95.13	45.88	20.38	28.87
WR – VSTPS-I	98.85	33.75	27.51	37.60
WR – VSTPS-II	121.49	43.19	33.56	44.75
WR - KAWAS GPP	48.28	15.45	23.17	9.66
WR - GANDHAR GPP	58.34	18.67	28.00	11.67
WR - KAKRAPAR APS	0.00	0.00	0.00	0.00
WR - TARAPUR APS	0.00	0.00	0.00	0.00
WR – VSTPS - III	146.26	41.18	52.54	52.54
WR - SIPAT -II	118.77	51.77	20.62	46.38
ER - FARAKKA STPS	0.00	0.00	0.00	0.00
ER - KAHALGAON STPS	0.00	0.00	0.00	0.00
ER - KAHALGAON STPS-II	31.80	7.95	17.49	6.36
ER - TALCHER STPS	0.00	0.00	0.00	0.00
DVC (MTPS)	97.24	29.17	53.48	14.59
THERMAL				
AMARKANTAK COM	60.43	18.73	16.92	24.78
AMARKANTAK EXT	151.51	46.97	42.42	62.12
SATPURA TPS PH I & II &III	281.55	87.28	78.83	115.44
SGTPS EXT	318.54	98.75	89.19	130.60
SGTPS	277.01	85.87	77.56	113.57
Hydel				
INTERSTATE				
GANDHI SAGAR	3.82	0.76	1.14	1.91
RANAPRATAP SAGAR & JAWAHAR SAGAR	3.57	0.71	1.07	1.79
PENCH	13.09	2.62	5.24	5.24
RAJGHAT	6.21	1.24	2.49	2.49
FULL MP ALLOCATION				
BARGI	18.56	5.57	9.28	3.71

BIRSINGHPUR	5.37	1.61	2.68	1.07
BANSAGAR – I	132.12	39.64	52.85	39.64
BAN SAGAR II	9.83	2.95	3.93	2.95
BAN SAGAR III	13.13	3.94	5.25	3.94
BAN SAGAR IV	11.40	3.42	4.56	3.42
MARIKHEDA	27.28	8.18	13.64	5.46
INDIRA SAGAR	551.65	110.33	303.41	137.91
NCE- WIND GENERATION	0.00	0.00	0.00	0.00
CAPTIVE	0.00	0.00	0.00	0.00
SARDAR SAROVAR	240.61	72.18	120.30	48.12
OMKARESHWAR	288.58	86.57	144.29	57.72
TOTAL	3230.43	964.34	1251.82	1014.27

Variable Cost

3.70 Based on the above discussions, the Variable Energy Charges as per relevant Orders mentioned in foregoing paragraphs, have been taken on the availability considered for purchase after applying the principle of merit order dispatch at Ex-Bus and are shown below:

Table 40 : Station Wise Admitted Variable Cost (Rs In Crore)

Name of the Station	East	West	Central	Total
WR – KSTPS	163.23	72.52	102.73	338.49
WR - VSTPS-I	130.41	254.77	127.03	512.20
WR - VSTPS-II	141.22	116.28	137.12	394.62
WR – KAWAS GPP	16.39	134.53	12.22	163.14
WR - GANDHAR GPP	21.42	115.10	13.10	149.62
WR - KAKRAPAR APS	33.15	44.13	33.11	110.39
WR - TARAPUR APS	92.35	123.25	92.40	308.01
WR - VSTPS – III	78.57	126.06	99.59	304.22
WR - SIPAT –II	70.22	27.96	62.92	161.09
ER - FARAKKA STPS	0.00	0.00	0.00	0.00
ER - KAHALGAON STPS	0.00	0.00	0.00	0.00
ER - KAHALGAON STPS-II	13.51	83.43	10.44	107.37
ER - TALCHER STPS	0.00	0.00	0.00	0.00
DVC (MTPS)	16.73	30.67	8.37	55.77
THERMAL				
AMARKANTAK COM	42.02	37.96	55.58	135.56
AMARKANTAK EXT	41.64	37.61	55.07	134.33
SATPURA TPS PHI & II &III	271.16	244.91	358.62	874.69
SGTPS EXT	118.31	106.86	156.48	381.65

SGTPS	192.09	173.50	254.05	619.65
HYDEL				
INTERSTATE				
GANDHI SAGAR	0.00	0.00	0.00	0.00
RANAPRATAP SAGAR & JAWAHAR SAGAR	0.00	0.00	0.00	0.00
PENCH	0.00	0.00	0.00	0.00
RAJGHAT	0.00	0.00	0.00	0.00
FULL MP ALLOCATION				
BARGI	0.00	0.00	0.00	0.00
BIRSINGHPUR	0.00	0.00	0.00	0.00
BANSAGAR – I	0.00	0.00	0.00	0.00
BAN SAGAR II	0.00	0.00	0.00	0.00
BAN SAGAR III	0.00	0.00	0.00	0.00
BAN SAGAR IV	0.00	0.00	0.00	0.00
MARIKHEDA	0.00	0.00	0.00	0.00
INDIRA SAGAR	0.00	0.00	0.00	0.00
NCE- WIND GENERATION	5.06	6.75	5.06	16.87
CAPTIVE	5.76	7.68	5.76	19.19
SARDAR SAROVAR	0.00	0.00	0.00	0.00
OMKARESHWAR	0.00	0.00	0.00	0.00
TOTAL	1,453.26	1,743.97	1,589.65	4,786.88

3.71 After allowing long term purchases as per merit order dispatch, 1966 MUs remains to be arranged in various months. Of this balance requirement, 1693 MUs can be met, at a weighted average rate of 216.66 Paise per unit, from generating stations allocated to Tradeco. This leaves a balance requirement of 273 MUs during months of June and July, 2011.

3.72 Remaining requirement (**Short Term**) of 273 MUs would be purchased by the Licensees for which a provisional rate of Rs.3.00 per unit has been considered. The rate of Rs.4.00 per unit as filed by the Discoms for purchase of short term power has not been considered as prudent as it has not been substantiated with relevant data/justifications. At this juncture the Commission considers that based on current market trends there is no merit at present to consider this rate beyond Rs.3.00 per unit as these rates vary widely depending on the season and time of purchase as well as prevailing demand-supply scenario. The rate provided in this Order for purchase of short term power is only provisional. Purchase of power on short term should be done only through the route of competitive bidding or through power exchanges on market clearing price which shall be subject to prudent check at the time of true up of this Order.

3.73 **MP Trading Margin:** The Discoms have claimed Tradeco margin @ 4 paise per unit. The Tradeco margin is yet to be determined by the Commission for which a separate petition has been filed by the Tradeco and hence has not been considered in this Order.

Tradeco and Short Term

3.74 The power purchase cost of Tradeco and Short Term sources on the basis of provisional rates are as follows:

Table 41 : Power Requirement admitted from Tradeco. Allocation

Particulars	East (MUs)	West (MUs)	Central (MUs)	State (MUs)	Paise/ Unit	East (Rs Crs.)	West (Rs Crs.)	Central (Rs Crs.)	State (Rs Crs.)
Un-met Requirement	15	1827	124	1966					
From Tradeco	13	1571	109	1693	216.66	2.76	340.47	23.65	366.88
Balance Requirement	3	255	15	273	300.00	0.78	76.64	4.42	81.84

Inter-State and Inter-Regional Transmission Charges

3.75 The PGCIL charges to be paid by MP Discoms consist of charges to be paid for transmission system of Western Region and Eastern Region.

3.76 The Commission has projected inter-state transmission charges as per the actual bills of FY 2010-11 for the tariff period FY 2011-12. These charges have then been allocated to respective Discoms, based on their firm capacity as per the GoMP notification inclusive of specific allocation for Bundelkhand region. The Commission has considered the capacities of generating stations available through Tradeco., which are allocated to State (MP Tradeco) while allocating the PGCIL charges to the Discoms. The table below gives a detail of the charges allocated to East, West & Central Discoms.

Table 42 : PGCIL Charges Allowed to Discoms (Rs In Crore)

Discom	Share in MW	PGCIL Charges
Central	1321	88.35
Western	2076	138.90
Eastern	1525	102.04
Total	4922	329.29

Intra-state Transmission Charges

3.77 The Commission had determined the annual transmission charges payable by each Discom to MPPTCL vide Transmission Tariff Order for FY 2009-10 to FY 2011-12. Accordingly intra – State transmission charges for FY2011-12 in the power purchase cost of the Discoms have been admitted as given in the table below:

Table 43 : MPPTCL Charges Allowed by the Commission for FY 2011-12 (Rs In Crore)

Particular	Central	Western	Eastern	Total
Capacity (MW)	3125	3237	2867	9299
Amount (Rs Crore)	287.99	298.31	264.22	850.52
Expenses of terminal benefit and Pension for FY 2011-12	109.81	147.06	105.04	361.91
Total Transco Charges (Rs Crore)	397.80	445.37	369.26	1212.43

3.78 With regard to the issue of expenses against terminal benefits for MPSEB/ successor entities employees who are to retire in FY 11-12 as well as pension payments to pensioners, the Commission has allowed the terminal benefits and pension expenses for FY 11-12 on provisional basis on “pay as you go” principle payable to MP Transco. to the extent of **Rs.361.90** Crore based on the claims as filed by the Transco. in their petition for determination of MYT for FY 09-10 to FY 11-12. Since the Commission is yet to take a final view in the matter, these charges would be subject to the provisions of the final Regulation as and when notified by the Commission.

SLDC Charges

3.79 The Commission has considered the SLDC charges of Rs. 6.56 crore for FY 2011-12 as per SLDC tariff order for FY 2010-11, This has been shown as separate item in the ARR. The Discom wise SLDC charges allocation as per order is as follows:

Table 44 : SLDC charges (Rs In Crore)

Particular	Central	Western	Eastern	Total
Amount (Rs Crore)	2.30	2.22	2.04	6.56

3.80 The total power purchase cost as admitted by the Commission is summarized in the following table:

Table 45 : Total Power Purchase Cost Admitted (Rs In Crore)

Particulars	East	West	Central	Total
Fixed Charges	964.34	1251.82	1014.27	3230.43
Variable Charges	1453.26	1743.97	1589.65	4786.88
Intra Discom Trading	-114.99	248.79	-133.80	0.00
Un-met Energy Charges				
Tradeco	2.76	340.47	23.65	366.88
Balance – short term	0.78	76.64	4.42	81.84
Power Purchase Cost	2306.15	3661.69	2498.19	8466.03
PGCIL Charges	102.04	138.90	88.35	329.29
MPPTCL Charges*	369.26	445.37	397.80	1212.43
SLDC Charges	2.04	2.22	2.30	6.56
Grand Total	2779.49	4248.18	2986.64	10014.31

**The above MPPTCL charges are inclusive of expenses of terminal benefit and Pension for FY 2011-12 of Rs 361.90 crore.*

Network Cost

Capital Expenditure Plans/ Capitalization of Assets

Licensees' submissions

EAST DISCOM

Investments

3.81 The Licensee has stated that it has developed an extensive investment plan under various schemes like Feeder Segregation, ADB, RAPDRP, STN and TSP. The capital investment plan is prepared to achieve following major objectives:

- Loss reduction.
- System strengthening.
- Regular supply to rural households through Feeder Segregation.
- Reliability of services.
- Rural Electrification.

Table 46 : Investment plan (Rs in Crore)

Name of the Scheme	FY-2010-11	FY-2011-12
ST(N)	30.00	35.00
TSP	21.00	30.00
SCSP	33.75	40.00
Feeder Separation(capital)	20.92	100.56
Feeder Separation Ph-1 (IDC)	3.27	61.39
Feeder SeparationPh-2(IDC)	-	41.00
ADB incl ERP	100.00	248.00
RGGVY (Loan)	10.00	37.91
KMP-New Ag pump conn	5.00	5.00
Feeder Separation Loan(REC) Ph-1	83.60	585.20
Feeder Separation Loan(ADB) Ph-2	-	485.91
R-APDRP	181.72	414.00
RGGY(Grant)	90.00	341.17
JBIC	30.82	-
SBI counter Fund(ADB)	20.00	93.08
Consumer Deposits	43.00	45.00
Total	673.08	2563.22

Capitalization

3.82 The Licensee has submitted that it has Rs.640.76 Cr. CWIP as on 31st March 2010 as per the Audited Accounts for FY 2009-10. For the projection period, the capitalization has been assumed as follows:

3.83 It is assumed that achievement of the total investment plan on a yearly basis would be 65% for (FY 2010-11), 75% for (FY 2011-12). The entire investments achieved for a particular year are added to the opening CWIP to obtain the CWIP for the year.

3.84 The capitalization rate is considered as uniform for entire control period as 50% of the investment achieved.

3.85 Following table shows the year wise bifurcation of CWIP:

Table 47 : Yearwise bifurcation of CWIP (Rs in Crore)

Particulars	FY-2009-10	FY-2010-11	FY-2011-12
Opening balance of CWIP	640.76	766.91	830.89
Fresh investment during the year	378.53	666.19	2377.88
Investment capitalized	-252.38	-602.21	-1465.00
Closing balance of CWIP	766.91	830.89	1743.77

WEST DISCOM

Capital Expenditure plan

3.86 The Licensee has stated that it has developed an extensive investment plan, which will include implementing a number of schemes during the current year and over the first control period. These schemes have been developed keeping in consideration the following objectives:

- a) Capacity Building
- b) System strengthening
- c) Voltage improvement
- d) Loss Reduction
- e) Consumer Service
- f) Reliability of service
- g) Rural Electrification
- h) Meterisation of unmetered connection
- i) Feeder bifurcation

3.87 The capital expenditure plan for the licensee for FY 2010-11 and 2011-12 is as under:

Table 48 : Investment plan (Rs In Crore)

Sl. No.	Name of Scheme	Plan 2010-11	Plan 2011-12
1	ADB-Tr-IV	196.00	47.00
2	ADB-Tr-V		
3	PFC	0.00	0.00
4	RGGVY	0.00	0.00
5	R-APDRP 1	19.00	18.00
6	R-APDRP 2	40.48	138.40
7	JBIC	76.22	19.06
8	New Ag. Pumps	5.00	5.00
9	Feeder Bifurcation	2.50	0.00
10	System strengthening (STN)	31.92	35.16
11	System strengthening (SCSP)	56.50	46.23
12	Feeder Bifurcation with HVDS up to village level	56.40	884.10
13	REC (Meterisation)	0.00	0.00
	TOTAL	484.02	1,192.95

Transfer of CWIP to GFA (Asset Class)

3.88 The Licensee had a CWIP of Rs.1,178.86 Crs. as on 31st March 2010 as per the Accounts for the period FY 2009-10. For the projection period, the capitalization has been assumed as follows:

1. It is assumed that total investment plan would be executed during the year. The entire realized investments for a year is added to the opening CWIP to obtain the CWIP for the year.
2. The capitalization plan is considered to be 20% and 60% respectively for the new investment during the year and that for the capitalization of the opening CWIP the Capitalization rate is taken as 20% and 40%.
3. Expenses are capitalized at different rates based on their past trend. The asset capitalization details for FY 11 and FY 12 period are as follows:

Table 49 : Capitalization plan (Rs In Crore)

Particulars	FY11	FY12
Opening Balance of CWIP	1178.86	1,349.27
Fresh Investment during the year	507.72	1,227.05
Total Capitalisation during the year	337.32	1,021.59
Investment Capitalised out of opening CWIP	235.77	471.54
Investment Capitalised out of fresh investment	101.54	550.04
Closing Balance of CWIP	1,349.27	1,554.73

Terms and conditions of the loans

3.89 The table below provides information regarding the terms and conditions of the loans that are proposed to be drawn by the Licensee over the period FY11-FY12. In cases where there is some untied-up financing portion for the proposed capital expenditure plan, the same are proposed to be funded through “Other market borrowings”.

Table 50 : Financing plan

Funding agency	Interest rate (%)	Moratorium	No. of annual instalments
PFC	12.5%	5	7
ADB	10.5%	5	15
REC JBIC	10.9%	5	10
R APDRP	11.5%	3	7
STN	12.5%	1	10
Generic (Including Bonds & Debentures)	10.5%	1	10
Feeder Bifurcation with HVDS up to village level	10.5%	1	10
REC (Meterisation)	12.5%	1	10

CENTRAL DISCOM

Investments

3.90 The Licensee has stated that it has submitted the CAPEX plan for the year 2010-11 along with the scheme wise quarterly achievement for the quarter ending June 2010 & September 2010 to the Commission in the October 2010. In capital expenditure plan the summary of the estimated investment for the control period 2010-11 to 2011-12 is as given below:

Table 51 : Investment plan (Rs In Crore)

Particulars	FY11	FY12
ADB-II	139.92	250.00
RGGVY	100.00	195.34
R-APDRP	62.62	250.00
JBIC	-	-
New Ag. Pumps	5.00	15.00
Separation of Feeder	45.09	870.41
TSP/SCSP (GoMP equity)	84.61	150.00
New Scheme from HUDCO Assistance	68.49	68.92
PFC (Counterpart funding)	0.00	0.00
DFID (Grant)	20.0	0.00
GoMP equity/SSTD/MD	0.00	0.00
Market Loan (Loss reduction initiatives)	0.00	0.00
Total	525.73	1799.67

3.91 The plan was given as estimated on October 2010 & may get revised subject to availability of funds through REC/various other resources.

Financing Plan

3.92 Following is the summary of the scheme-wise financing sources for the above proposed investment plan submitted by the Licensee.

Table 52 : Financing plan

Schemes	PFC	JBIC	REC	ADB	SBI-CPF	HUDCO	GoMP/GoI	Consumer Contribution	Grants
ADB			45%	55%					
ST(N)							100%		
HUDCO						61%	39%		
RGGVY			10%				90%		
GoMP (TSP)							100%		
GoMP (SCSP)							100%		
DFID(ERP)						58%			42%
Feeder Segregation(P H-I)			96%				4%		
R-APDRP	84%					16%			
New Connection Deposit								35%	65%

Capitalization

3.93 The Licensee has stated that it has CWIP of Rs.511.55 Crs. as on 31st March 2010 as per the Audited Accounts for the period FY 2009-10. For the projection period, the capitalization has been assumed as follows:

- It is assumed that achievement out of 80% of the total investment plan would be realized investments for the year. The entire expected investments for a year is added to the opening CWIP to obtain the closing CWIP for the year.
- The capitalization rate is considered to be 80% of the entire CWIP for the year.
- Expenses are capitalized at different rates based on their past trend. The R&M expenses are capitalized at a rate of 3.53% while employee expense and A&G Expenses are capitalized at a rate of 3.49% and 1.39% respectively.

Table 53 : Capitalization plan (Rs In Crore)

Particulars	FY10	FY11	FY12
Opening Balance of CWIP	381.89	511.55	267.61
Fresh Investment during the year	277.20	511.32	1641.84
Total Capitalization during the year	147.54	755.26	1,447.89
Investment capitalized out of opening CWIP		409.24	214.08
Investment capitalized out of fresh investment		346.02	1233.81

Closing Balance of CWIP	511.55	267.61	461.55
-------------------------	--------	--------	--------

Commission's Analysis

- 3.94 The MPERC (Terms and Conditions for Determination of Tariff for Supply and Wheeling of Electricity and methods and Principles for Fixation of Charges) Regulations, 2009 prescribe the norms for business plan, investment plan, financial plan and Capitalization by the licensees.
- 3.95 As per the Regulations the Distribution Licensee shall file a business plan every year in July which shall comprise but not be limited to detailed capital investment plan, financing plan and physical targets in accordance with guidelines issued by the Commission in this regard for meeting the requirement of load growth, reduction in Distribution losses, improvement in quality of supply, reliability, metering etc.
- 3.96 The Capital plan shall show separately ongoing Projects that will spill into the Year under review and new Project (along with justification) that may commence but may be completed within or beyond the Tariff Period. The Commission shall consider and approve the Licensee's capital investment plan for which the Licensee shall be required to provide relevant technical and commercial details. The Licensee shall get the Capital Investment Plan invariably approved by the Commission before filing the Tariff application.
- 3.97 The Licensees have filed the capital investment plan in this petition for FY11-12. The progress of asset addition by the Licensees for FY 2007-08, FY 2008-09 and FY 2009-10 reveals that the GFA addition has been as follows:

Table 54 : Assets Capitalization during the year (2008-10) (Rs In Crore)

Addition during the Year	East	West	Central
FY 2007-08	194.34	127.45	345.16
FY 2008-09	305.27	180.41	349.76
FY 2009-10	252.38	75.40	173.24

- 3.98 As against the assets addition shown in previous table, as per investment plans the assets addition proposed by three Discoms for the FY 2010-11 and FY 2011-12 are as follows:

Table 55 : Assets Capitalization during the Year (2010-12) (Rs In Crore)

Addition during the Year	East	West	Central
FY 2010-11	602	337	755
FY 2011-12	1465	1022	1448

It can be seen from the above tables that the past performance of the three distribution licensees in execution of capital works as also in capitalization of assets has been much less as compared to the projections made. The Commission therefore is unable to accept the projections made for FY 11-12. For tariff formulation in FY 11-12, the Commission has computed assets addition for FY 2011-12 keeping in view actual assets addition in past three years.

Operations and Maintenance Costs

Licensees' submission

EAST DISCOM

3.99 The Licensee has stated that they have worked out O&M expenses based on the projected closing balances of FY 2011-12. The relevant provisions of the Regulations have been referred to justify their filing. However, the licensee has also claimed the O&M Expenses on the basis of projected actual O&M expenses under the head of "as per actual- additional submission". Details of the basis have been given in their petitions.

3.100 They have stated reasons for additional cost occurred for the parts of O & M expenses as given below:

- i. During the year 2010-11 pursuant to different orders of the Commission and Hon'ble High Court of Madhya Pradesh, the electricity distribution business of the four Rural Electricity Co-operative Societies viz. Nowgaon, Sidhi, Laundi and Amarpatan has been taken over by the Discom w.e.f. 15th Aug'2010. Therefore they are required to incur additional operating expenses such as salary of employees, administrative expenses and Repair and Maintenance of plant and machinery, lines and cables etc. Previously these expenses were incurred by the respective societies.
- ii. GoMP has increased DA of employees/Pensioners in the year 2010 by 13% in addition to normal yearly increment. The Discom has started paying DA at increased rate.
- iii. The Regulation of the commission came into force in the year 2009. However impact of 6th pay commission and increase in D.A. afterwards may not be fully incorporated therefore it is prayed that the commission may give due regards before allowing the employee cost for FY 11-12.
- iv. Employees cost has been projected on the basis of actual available data up to Sep'2010 and projected for next 6 months. The Employees cost has been inflated by 10% for FY 11-12 and FY 12-13 so as to accommodate the increase in salary cost due to increase in DA and effect of coalescence of consumers of RECS with LT consumers of the company.
- v. Terminal Benefit has been incorporated under employee cost.
- vi. MPERC fees has been incorporated under Administrative and General Expenses.
- vii. Expenses on A&G of society's area have been projected on the basis of actual figures of FY 2009-10 and subsequently inflated by 6.14%. The additional cost for society area is Rs. 2.97 Cr. (FY 2010-11) Rs. 3.15 Cr. (FY 2011-12) and Rs. 3.34 Cr. (FY 2012-13).

- viii. Expenses on R&M of societies area have been projected on the basis of actual figures of FY 2009-10 and subsequently inflated by 6.14% as Audit of Annual Accounts of some of the Societies is pending and proper capital work plan in the area of REC societies is to be prepared and approved by commission hence projection of Fixed assets cannot be made. The additional expenses have been projected as Rs. 1.09 Cr. (FY 2010-11) and Rs. 1.16 Cr. (FY 2011-12).
- ix. In addition to the aforementioned expenses the Discom has also claimed Rs. 140.92 Crore towards the current liabilities (i.e. for FY 2011-12) for the terminal benefits (pension, gratuity and others) of existing employees, in accordance with the clause 32.7 of the Regulations, for consideration under O&M expenses.
- x. The Discom have further claimed that on the basis of actuarial analysis, there would be additional liabilities arising towards the payment/contribution of terminal benefits of the employees since the formation of the Companies i.e. from 01/06/2005 to 31/03/2011 to the extent of Rs.657.05 Crore.

Table 56 : Comparison of O & M expenses for FY 12 (Rs In Crore)

Particulars	As per Norms	As per Additional Submission
Employee Cost	473.91	658.10
A&G Expense	77.87	99.23
R&M Expense	55.98	57.14
Other item of O & M expenses	141.42	-
Metered sale incentive	-6.54	-
Total	742.65	814.47

WEST Discom

3.101 Licensee has filed the O&M expenses as per norms provided in the Regulations and also on the basis of projected actual O&M expenses.

3.102 It is requested by the licensee that the Commission may allow the O&M cost as per Licensee's submission based on the audited accounts of 2009-10 and not based on Regulation because it is the licensee's view that the norms specified by the respective Regulation do not reflect the true picture of O&M expenses expected to be incurred by the licensee during the current MYT period.

3.103 The figures for employee expenses have been projected based on Sixth Pay Commission Norms, inflation rate, historical figures, and assumptions for the number of employees captured from the audited books of accounts of Discom for previous years.

Terminal Benefits:

3.104 The Discom has stated that the increase in the current year expense is based on the revised provision of the Terminal Benefits as per the Actuarial Report for the past liability of the Employees of the company for the period from FY 2006 to FY 2011 amounting to Rs.

651.45 Crore . The provision for the year FY 11-12 has been claimed as Rs 130.95 Crore based on Actuarial Report.

3.105 The Discom has requested to allow the cost of Rs.768.22 Cr. in the ARR of 2011-12 as Regulatory Assets, for meeting the past service liability in respect of West Discom as per the actuarial valuation report:

Table 57 : Terminal Benefit Liability

Particular	Gratuity	Leave Encashment	Pension	Total Liability
Past Service Liability Pertaining to West Discom as determined by actuary(From 01.06.2005 to 31st March 2009)	52.41	19.95	348.76	421.12
2009-10	23.40	2.96	101.60	127.96
2010-11	18.81	2.38	81.18	102.37
Total up 2010-11	94.62	25.29	531.54	651.45
2011-12 (already been included in the employee cost of 2011-12)	21.44	2.71	92.62	116.77
Total up 2011-12	116.06	28.00	624.16	768.22

3.106 Arrears -Using the sixth pay-commission norms, the total arrears booked in the annual audited accounts of FY 10 on accrual basis are to the tune of Rs. 167.21 Crore.

Table 58 : Comparison of O & M Expenses for FY-12 (Rs In Crore)

Particulars	As per	
	Regulations	additional submission
Repairs and Maintenance	48.72	48.72
Employee costs	575.54	662.98
Administration and General expenses	97.92	102.42

CENTRAL DISCOM

3.107 The Discom has submitted their claims for O&M expenses as per Regulations and as projected on actual O&M expenses are as follows:

3.108 The Discom has submitted that the future Service Liability of MPMKVVCL along with the breakup of past service liability including pensioners/family pensioners and the future contribution rate are as tabulated as below:

Table 59 : Service Liability as filed (Rs In Crore)

Employees	Gratuity	Leave Encash.	Pension	Total Liability
Past service Liability as on 31-03-2009	337.17	127.31	1471.68	1936.16
Future Service Liability	104.65	12.28	462.57	579.50
Total Service Liability	441.82	139.59	1934.25	2515.66

3.109 Further , the breakup of liability pertaining to period up to 01.06.2005 and thereafter is given below:

Table 60 : Breakup of Past Liability as filed (Rs In Crore)

Particulars	Gratuity	Leave Encash.	Pension		Total Liability
			Employees	Pensioners/Family Pensioners	
Past service Liability as on 31-03-2009	337.17	127.31	1471.68	619.99	2556.15
Liability Pertaining to MPSEB (up to 01-06-2005)	284.63	106.29	1242.75	523.38	2157.05
Difference	48.54	21.02	228.93	96.61	409.10

3.110 Break up of Past service Liability Including Pensioners/Family Pensioners Liability as on 31-03-2009. Future Contribution rate (as a % of Basic Pay+Grade Pay+DA) required to be made by the Discom towards meeting the liabilities arising due to future service has been stated as given below:

Table 61 : Service Liabilities for future services as filed (Rs In Crore)

Particulars	
No. of Employees	12585
Total Salary (Per month in Crs.)	27.23
Contribution Rate Per Annum for Gratuity	4.56%
Contribution Rate Per Annum for Leave Encashment	0.54%
Contribution Rate Per Annum for Pension	20.15%
Total Contribution Rate Per Annum	25.25%

Service Liability upto 31-03-2010	Rs.491.23Cr
Service Liability upto 31-03-2011	Rs.580.86Cr.

The Discom has further stated that this amount has not been included in expenses of ARR . Following table depicts the claims of the Discom:

Table 62 : Comparison of O & M Expenses for FY 12 (Rs In Crore)

Particulars	As per Regulations	As per additional submission
R&M Expenses	65.97	65.97
Employee Expenses	489.69	530.04
A&G Expenses	73.84	79.62

Commissions Analysis on O&M Expenses

- 3.111 The Commission’s Regulations on Terms and Conditions for Determination of Tariff for Supply and Wheeling of Electricity and methods and Principles for Fixation of Charges) Regulations, 2009 define the norms of O&M Expenses of each licensee.
- 3.112 The O&M expenses comprise of employee cost, repairs & maintenance (R&M) cost and administrative & general (A&G) cost. The amount of employee expenses, arrears and A&G expenses have been provided in the Regulations for the year FY 11-12. The R&M expenses are permitted in the Regulations as a percentage of opening GFA @ 2% for East and West Discom and 2.3% for Central Discom. These norms exclude pension, terminal benefits and incentive to be paid to employees, taxes payable to the Government, MPSEB expenses and fee payable to MPERC. Details of basis of arriving at the amount of expenses including expenses towards payment of arrears have been provided in the Regulations.
- 3.113 The amount of arrears on account of 6th Pay Commission for the period up to 31.08.08 actually paid by the Distribution Licensees shall be compared with amount towards this included in O&M charges at the time of true-up and variation, if any, shall be trued up.
- 3.114 With regard to the issue of expenses against terminal benefits for MPSEB/ successor entities employees who are to retire in FY 11-12 as well as pension payments to pensioners, the Commission has allowed the terminal benefits and pension expenses for FY 11-12 on provisional basis on “pay as you go” principle under the transmission charges to the extent of **Rs.361.90** Crore based on the claims as filed by the Transco in their petition for determination of MYT for FY 09-10 to FY 11-12.

- 3.115 Regulations at clause 32.11 provide for norms regarding the incentive/ dis-incentive for increase/ reduction in metered sale. Based on the factual sale data, the Commission shall appropriately provide for this item at the time of true up of this Order.
- 3.116 The Commission to allow the taxes payable to the Government and fees to be paid to MPERC separately as actual.
- 3.117 The norms for O&M expenses are given in following paragraphs.
- 3.118 **R&M Expenses** shall be allowed on the opening GFA of the financial year @ 2% for East Discom, @ 2% for West Discom and @ 2.3% for Central Discom.

Table 63 : Repairs and Maintenance (Rs In Crore)

Particulars	East	West	Central
Opening GFA as on 1 April 2010	2196.64	2061.31	2217.86
Addition considered during FY-11*	250.66	127.75	289.39
Opening GFA as on 1 April 2011	2447.30	2189.06	2507.24
Allowed % for R & M	2.00%	2.00%	2.30%
Total R&M	48.95	43.78	57.67

*Addition during the FY 11 is taken as average of addition in GFA in preceding three years as per audited balance sheets.

- 3.119 **Employee expenses** have been taken as provided in the Regulations. For first Financial Year of the control period, the impact of implementation of 6th Pay Commission recommendations has been considered in employees cost, which has been escalated @ 6.14% in subsequent Years. The Commission has also considered expected expenditure of Rs. 33.37 Crore for East Discom, Rs.31.31 Crore for West Discom and Rs. 29.52 Crore for Central Discom in each financial year towards payment of arrears up to 31.8.2008 for the period from 2010-11 to 2012-13 as one third each year for the Distribution Licensees.

Table 64 : Employee Expenses as Per Regulations (Rs In Crore)

Particulars	East	West	Central
Employee expenses excluding arrears as per Tariff Regulation for FY 2010-11	415.06	389.37	367.15
Add: escalation@ 6.14%	6.14%	6.14%	6.14%
Employee expenses excluding arrears for FY 2011-12	440.54	413.28	389.69
Arrears	33.37	31.31	29.52
Total	473.91	444.59	419.21

- 3.120 **A&G expenses** have been provided in the Regulations as shown below:

Table 65 : A&G Expenses as per Regulations (Rs In Crore)

Particulars	East	West	Central
A&G expenses as per Tariff Regulation For FY 2010-11	73.37	64.39	69.57
Add: escalation@ 6.14%	6.14%	6.14%	6.14%
A&G expenses as per Regulation for FY 2011-12	77.87	68.34	73.84

3.121 **Total O&M Expenses** for Financial Year 2011-12 of control period allowed by Commission are as under:-

Table 66 : O&M Expenses allowed for FY 2011-12 (Rs In Crore)

Particulars	East	West	Central
Repair and Maintenance	48.95	43.78	57.67
Employee Expenses	473.91	444.59	419.21
A&G	77.87	68.34	73.84
Total	600.73	556.71	550.72
Total O&M Allowed	600.73	556.71	550.72

Depreciation

Licenseses' submissions

East Discom

3.122 The Licensee has submitted that they have developed depreciation model based on rates specified by the Commission in annexure-III of said Regulation. However depreciation on assets prior to 01.04.2010 is calculated based on the rates specified in "Terms and Conditions for determination of Tariff for Distribution and Retail Supply of Electricity Regulations, 2005." Depreciation on fixed assets of Societies has not been taken as Audit of Annual Accounts of some of the Societies is pending and proper capital work plan in the area of REC societies is to be prepared and approved by the Commission. Hence projection of fixed assets cannot be made. The depreciation during the year so worked out for FY 2010-11 to FY 2011-12 is shown below:

Table 67 : Depreciation as per Regulations (Rs In Crore)

Particulars	FY-2010-11	FY-2011-12
Buildings	0.90	1.64
Hydraulic Works	0.09	0.09
Other Civil Works	0.05	0.05
Plant & Machinery	25.37	46.49
Lines and Cable Network	74.00	114.73
Vehicles	0.03	0.04
Furniture & Fixtures	0.00	0.00
Office Equipment	0.66	0.94
Total	101.09	164.00

West Discom

3.123 The Licensee has submitted that it has Opening GFA of Rs. 2061.31 Crs. as per the Audited Balance Sheet for FY 10. The capitalization of CWIP is transferred to the fixed assets as new asset additions for the year. It is expected that the addition to GFA during FY 11 to FY 13 would be Rs. 337.37 Crs., Rs. 1021.59 Crs., Rs. 1464.04 Crs. respectively. Accumulated depreciation during FY 10 to FY 13 would be Rs. 1,379.30 Crs, Rs. 1479.07 Crs., Rs. 1,605.05 Crs and Rs. 1810.62 Crs. respectively. The depreciation rate that have been adopted for the depreciation calculation is as per the GoI Mop notification (notified under S.O.265 (E) dated 27th March, 1994 by the Central Government) which is also being used in the preparation of the annual accounts of the licensee. The Discom has requested to consider MoP rates for working out depreciation expense. The licensee has also stated that they have submitted the depreciation expense

as per Regulation. The depreciation during the year so worked out for FY 12 is shown below:

Table 68 : Depreciation (Rs In Crore)

Additions to Depreciation during the Year	FY12	
	As per MoP norms	As per Regulations
Land & Land Rights	0.02	0.06
Buildings	1.40	1.65
Hydraulic Works	0.22	0.25
Other Civil Works	0.13	0.09
Plant & Machinery	39.81	40.80
Lines and Cable Network	83.44	62.82
Vehicles	0.14	0.06
Furniture & Fixtures	0.12	0.07
Office Equipment	0.72	0.98
Total	125.99	106.78

Central Discom

3.124 The Discom has stated that they have inherited Opening GFA of Rs. 2217.86 Crs. as per the Audited Balance Sheet for FY 10. The capitalization of CWIP is transferred to the Fixed Assets as new asset additions for the year. It is expected that the addition to GFA during FY 11 to FY 13 would be Rs. 755.26 Crs., Rs. 1447.89 Crs., Rs. 1559.12 Crs. respectively. Accumulated depreciation during FY 11 to FY 13 would be Rs. 1337.62 Crs, Rs. 1478.85 Crs. and Rs. 1671.80 Crs. respectively:

- (a) The period from the opening balance of the depreciable assets (assets not depreciated up to 90%) for each year of the projection period has been estimated based on the year-wise asset addition data of MPSEB from 1985-86 to 2004-05 under each account head. No depreciation has been charged on assets whose accumulated depreciation has reached 90% of the assets value (Original value).

The depreciation rates that have been adopted for the depreciation calculation is as per the CERC notification .However the MoP rates are used in the preparation of the annual accounts of the licensee. The Discom has requested to consider CERC rates applicable for a Transmission Licensee for Distribution Licensee also. The depreciation during the year so worked out for FY 11-12 is shown below:

Table 69 : Depreciation (Rs In Crore)

Depreciation	FY11-12
Total	141.23

3.125 The comparison of depreciation filed as per Regulation and as per additional submission filed by Licensees are as follows:

Table 70 : Comparison of Depreciation for FY 11-12 (Rs. in Crore)

Particulars	As per norms	As per additional Submission
East Discom	164.00	164.00
West Discom	106.78	125.99
Central Discom	141.23	141.23

Commission's analysis of Depreciation

3.126 As per MPERC (Terms and Conditions for Determination of Tariff for Supply and Wheeling of Electricity and Methods and Principles for Fixation of Charges) Regulations, 2009, depreciation is to be calculated annually based on 'straight line method' and at the rates specified in Annexure III to these Regulations for the assets of the Distribution System declared in commercial operation after 31/03/2010, provided that, the remaining depreciable value as on 31st March of the Year closing after a period of 12 Years from Date of Commercial Operation shall be spread over the balance useful life of the assets.

3.127 In case of the existing Projects, the balance depreciable value as on 1.4.2010 has been worked out by deducting the cumulative depreciation including Advance against Depreciation as admitted by the Commission up to 31.3.2010 from the gross depreciable value of the assets. The rate of Depreciation shall continue to be charged at the rate specified in Annexure-III till cumulative depreciation reaches 70 %. Thereafter, the remaining depreciable value shall be spread over the remaining life of the asset such that the maximum depreciation does not exceed 90 %.

3.128 It is observed that the filing by the Licensees has not been in accordance with the provisions of Regulations. Due to non submission of information such as assets wise detail, deprecation as per the rate specified in annexure-III, assets depreciated more than 90% of their value, useful life of assets and final depreciation model comprising all relevant information in the desired manner by the licensees in accordance with the provisions of the Regulations, the Commission has computed the depreciation as follows.

3.129 With regard to the value of the asset base, the Commission has dwelt at length on the reasons for not considering the projections of asset addition made by the Licensee for FY 2011-12 as these are not in conformity with the past trend. For FY 2011-12 the Commission, has therefore, computed depreciation taking assets base as closing balance of assets existing as on 31st March 2010 plus the Average of Addition in GFA in last three years of audited balance sheet for FY 2010-11 plus half of average addition in GFA in last three year for FY 2011-12. The Commission will true up the depreciation claim admitted now when the claims for true up are filed based on the audited balance sheet for FY 2011-12.

3.130 The addition in the consumer contribution during the year has been reduced from the gross fixed assets. Consumer Contribution during the FY 2010-11 is taken as average of addition in last three years in consumer contribution of Audited balance sheets and half of average addition in consumer contribution in last three year for FY 2011-12 have been considered.

3.131 The closing GFA as on 31.03.2010 of audited balance sheet i.e. Opening GFA as on 1st April 2010 is taken after eliminating the land cost and addition to consumer contribution during the FY 2009-10.

3.132 The depreciation admitted in this order for FY11-12 is given in the table below:

Table 71 : Depreciation (Rs In Crore)

Particulars	East	West	Central
Opening GFA as on 1 April 2010	2177.13	2042.34	2191.89
Add: Addition During FY-11	250.66	127.75	289.39
Less Consumer Contribution	25.24	40.27	36.48
Opening GFA as on 1 April 2011	2402.55	2129.82	2444.79
Average of addition less consumer contribution during FY 2011-12	112.71	43.74	126.45
GFA for Depreciation for FY 2011-12	2515.26	2173.57	2571.25
Depreciation Rate (%)	2.44%	2.81%	2.44%
Depreciation Allowed For FY12	61.37	61.08	62.74

**Depreciation Rates percentages taken in the above table are as provided in tariff order for FY 10-11 as the Licensees have not submitted the computation in accordance with the Regulations nor submitted requisite details of item wise assets vis-à-vis actual accumulated depreciation.*

Interest and Finance Charges

Licensees' submissions

3.133 The Licensees have stated that the interest costs as filed are based on calculation of interest and finance charges in following manner:

1. The MPSEB Generic Loan transferred through the provisional balance sheet as on 31.05.2005 has been now bifurcated into their respective heads and re-casted into separate accounts.
2. The interest and repayment of the loans is based on the respective repayment schedule of the loans and the interest.
3. The additions of the new loans are considered in tandem with the investment plan to reflect the actual cash inflows funding the projects.

East Discom

Table 72 : Interest Cost as per Regulations (Rs In Crore)

Particulars	FY-2010-11	FY-2011-12
Addition to GFA during the year	602.21	1465.00
Consumer contribution during the year	8.60	9.00
Net addition to GFA considered as funded through equity	593.61	1456.00
30% of addition to net GFA considered as funded through equity	178.08	436.80
Balance addition to net GFA during the year funded through debts	415.52	1019.20
Debt Repayment due during the year (equal to the depreciation claim)	101.09	164.00
Debt associated with GFA as per tariff order FY 10-11 (Rs 398.76 crore as on 31st March 2010 + addition in GFA funded through loan -debt repayment) and for subsequent years projected as per method adopted in tariff order of FY 10-11	712.43	1567.00
Weighted average rate of interest % on all loans	0.09	0.10
Total interest on project loans	67.56	162.51
Finance charges	2.00	2.50
Total Interest on project loans and Finance charges	69.56	165.01

Additional Submission

1. Interest and Finance charges of REC societies have not been taken as the Audit of some of the society is pending. Therefore, loan liability for future year cannot be ascertained from the available information.

2. The details of calculations for interest and finance charges are explained below. The scheme wise details have been presented in the tariff formats as annexure.
3. The interest and repayment of the loans is based on the respective repayment schedule of the loans and the interest.
4. The additions of the new loans are considered in tandem with the investment plan to reflect the actual cash inflows for the projects.
5. Based on the above assumptions interest and finance charges on project loans is as detailed below:

Table 73 : Interest Cost as per Additional Submission (Rs In Crore)

Particulars	FY11	FY12
Interest charges on State Govt. Loans, Bonds And Advances		
Interest charges on loans from the State Government	97.22	88.57
Interest charges on Bonds	0.69	0.02
Interest charges on debentures	0.10	0.00
Total of I	98.01	88.59
Interest on Long Term Loans / Credits from the FIs /		
APDRP	4.97	4.98
PMGY	2.26	2.26
MNP	1.16	1.16
NABARD	1.47	1.47
ADB	2.67	2.67
Market loan	8.66	8.67
PFC	2.20	1.76
REC(MPSEB)	9.96	9.18
HUDCO	14.66	13.42
SBI counter Guarantee Loan	2.30	8.33
REC-JBIC	7.68	11.6
PFC-RAPDRP	11.92	44.7
ADB(2324)	1.91	5.96
ADB(2347)	0.43	2.25
ADB (2520)	0.71	2.27
REC-FEEDER SEPERATION	3.27	61.39
ADB-FEEDER SEPERATION	0.00	16.2
STN	1.47	4.66
TSP	1.03	3.53
SCSP	1.65	5.27
Total of II	80.38	211.73
Total of : I + II	178.39	300.32
Cost of raising finance & Bank Charges on project loans	2.00	2.50
Less: capitalized	60.18	67.68
Total	120.21	235.14

West Discom

Table 74 : Interest on capital loans as per Regulation (Rs In Crore)

Particulars	2010-11	2011-12
Debt identified With GFA as on 31st March 2010 as per Tariff order 2010-11	145.46	205.95
70% of addition to net GFA considered as funded through loan net of Consumer contribution	101.19	306.48
Debt repayment	40.71	40.71
Total Debt Associated with GFA as on 31st March.	205.95	471.72
Weighted average Rate of Interest on Loans % (As per Interest on project loans)	11%	11%
Interest on Project loans	22.65	51.89
Other Charges	5.25	9.52
Total	27.90	61.41

Table 75 : Interest on capital loans as per additional submission (Rs In Crore)

Particulars	FY11
Interest charges on State Govt. Loans, Bonds And Advances	
Interest charges on loans from the State Government	29.56
Interest charges on Bonds	2.81
Interest charges on Foreign Currency Loans / Credits	0.00
Interest charges on debentures	2.66
Total of I	35.03
Interest on Long Term Loans / Credits from the FIs / banks / organisations approved by the State Government	
REC	4.82
PFC	5.47
ADB	35.98
RGGVY	0.00
RAPDRP	11.80
JBIC	14.85
Feeder Separation	52.34
Total of II	125.26
Total of A : I + II	160.28
Cost of raising finance & Bank Charges on project loans	9.52
Grand Total Of Interest & Finance Charges: A + B	169.80
Less: Interest & Finance Charges Chargeable to Capital Account	16.98
Net Total Of Interest & Finance Charges on Project Loans C-D	152.82

Central Discom

Table 76 : Interest on capital loans as per Regulation (Rs In Crore)

Particulars	FY11	FY12
Interest charges on State Govt. Loans, Bonds And Advances		
Interest charges on loans from the State Government	12.72	7.02
Interest charges on Bonds	1.35	1.35
Interest charges on Foreign Currency Loans / Credits		
Interest charges on debentures		
Total of I	14.07	8.37
Interest on Long Term Loans / Credits from the FIs / banks/ organizations approved by the State Government		
REC	6.53	6.02
PFC	13.76	1.51
ADB	3.36	3.36
APDRP	17.46	15.93
NABARD	0.52	0.29
PMGY	0.29	0.06
MNP	0.12	0.12
ADB II	15.52	36.54
RGGVY	0.79	2.59
RAPDRP	7.73	26.93
HUDCO	5.39	12.62
JBIC	5.06	5.06
Counterpart Funding		
Total of II	76.72	114.58
Total of I & II	90.79	122.95
Cost of raising finance & Bank Charges on project loans		
Grand Total Of Interest & Finance Charges	90.79	122.95
Less: Interest and Finance Charges chargeable to capital account	40.71	55.13
Net Total Of Interest & Finance Charges on Project Loans	50.08	67.81

3.134 The Comparison of Interest on Term Loan filed as per Regulation and as per additional submission filed by licensees are as follows:

Table 77 : Comparison of Interest on Term Loan for FY 12

Particulars	As per norms	As per additional Submission	Variation
East Discom	165.01	235.13	-70.12
West Discom	60.70	152.82	-92.12
Central Discom	67.81	no additional submission made	0.00

Commission's analysis of Interest and Finance Charges

- 3.135 The MPERC (Terms and Conditions for Determination of Tariff for Supply and Wheeling of Electricity and methods and Principles for Fixation of Charges) Regulations, 2009 allows interest charges only for those loans to be a pass through in the ARR for which the associated capital works have been completed and put to use.
- 3.136 The latest annual accounts provided to the Commission by the Licensees pertain to FY 2009-10. For all on-going works, the interest cost related to the loan funding of such works is considered as Interest during Construction (IDC) which shall be capitalised and added to the project cost at the time of asset capitalisation. Such interest cost is not considered as a pass through in the ARR. The principle is that the consumer can only be made to bear the interest cost related to those assets, which the consumer is making use of. The asset which is under construction is not used by the consumers; hence interest cost incurred by the Licensee during construction becomes a part of CWIP and is not allowed to be recovered through tariffs.
- 3.137 The Commission is aware that the Licensees may have completed some capital works during the course of FY 2010-11 and shall complete some work during FY 2011-12, which shall be capitalised and added to the asset base. However, as explained in the section on capitalization under network cost chapter, the Licensees' past performance with respect to actual capitalisation of assets is far less than the projections of assets addition that the Licensee has made. The Commission thus finds it appropriate not to consider the estimated capitalisation that is projected for FY 2011-12, but to consider the interest expenses attributable to such assets only when such assets are actually added to the asset base. This shall also serve as an incentive for the Licensee to expedite the completion of works and improve its accounting practices to ensure quick and efficient transfer of assets from CWIP to GFA.
- 3.138 The Commission, therefore, for FY 2011-12 has decided to follow the approach as adopted in its previous Tariff Order (FY 2010-11) to work out the interest cost chargeable to revenue account. This involves allocation of GFA and CWIP as available from the FY 2009-10 Audited Balance Sheet into debt and equity. This has been done in the following manner:
- a) Net addition to GFA during FY 2009-10 is worked out by subtracting the consumer contribution amount during the year from total addition to GFA during the year as available from the Balance Sheet.
 - b) 30% of the net addition to GFA during FY 2008-09 & FY 2009-10 has been considered as funded through equity, balance of net addition to GFA is considered as having been funded through debt and added to the total debt in GFA considered at the end of FY 2007-08 as per the FY 2007-08 True up Order.
 - c) Debt repayments have then been subtracted from the total debt identified with completed assets as computed from above. The repayment for FY 2010-11 and 2011-12 shall be deemed to be equal to the depreciation allowed for that Year.

- d) Asset addition net of consumer contribution during FY 2010-11 are worked out as average of additions of last three years from audited balance sheets. It is assumed that addition done have been financed 70% through loan and 30% through equity. The Commission has considered the weighted average rate of interest for FY 2011-12 as filed by East and West Discom and weighted average rate East Discom for Central Discom as the same is not filed by Central Discom for considering the interest cost for loans.

3.139 The cost of raising finance and bank charges for FY 2011-12 as shown in the balance sheet of the three Discoms is Rs.1.85 Crore for East Discom, Rs. 4.59 Crore for West Discom and Rs. 1.67 Crore for Central Discom. Therefore, total interest and finance charges allowed for FY 2011-12 are as under:

Table 78 : Total Interest and Finance Allowed for FY 2011-12(Rs In Crore)

Particular	East	West	Central
FY 09			
Debt identified with GFA as on 31st March 2008 as per True Up order 2007-08	164.82	200.95	256.14
70% of addition to net GFA considered as funded through Loan net of consumer contribution	179.23	65.77	190.33
Debt repayment	56.17	74.15	54.78
Total debt associated with GFA as on 31st March, 2009	287.88	192.57	391.69
FY 10			
Debt identified with GFA as on 31st March, 2009	287.88	192.57	391.69
70% of addition to net GFA considered as funded through Loan net of consumer contribution	163.00	39.50	103.05
Debt repayment	64.22	86.05	64.58
Total debt associated with GFA as on 31st March, 2010	386.66	146.02	430.16
FY 11			
Debt identified with GFA as on 31st March 2010	386.66	146.02	430.16
70% of addition to net GFA considered as funded through Loan net of consumer contribution	157.80	61.24	177.03
Debt repayment	58.62	59.85	59.65
Debt identified with GFA as on 31st March 2011	485.83	147.41	547.54
FY 12			
Debt identified with GFA as on 1st April 2011	485.83	147.41	547.54
70% of addition to net GFA considered as funded through Loan net of consumer contribution	157.80	61.24	177.03
Debt repayment	58.62	59.85	59.65
Total debt associated with GFA as on 31st March, 2012	585.01	148.81	664.92
Average of loan Balance for FY 11-12	535.42	148.11	606.23
Weighted average rate of interest (%) (as per Interest on Project Loans)	10.00%	11.00%	10.00%
Interest Charges	53.54	16.29	60.62
Other Charges (Balance Sheet FY 10)	1.85	4.59	1.67
Interest and Finance charges on Project Loans	55.40	20.88	62.30

Interest on Working Capital

Licensees' submission

3.140 The Licensee have stated that the working capital requirement has been estimated based on the norms as per the Regulations. Interest rate of 11.75% by the East and Central Discoms and 12.55% by the West Discom has been assumed for the calculation of the Interest on the working capital. The claims filed by the Discoms are given as below:

East Discom

Table 79 : Interest on Working Capital as Per Regulation (Rs In Crore)

Sl. No.	Particulars	FY12
A)	1/6th of annual requirement of inventory for previous year	19.39
B)	O&M expenses	-
	R&M expenses	55.98
	A&G expenses	71.83
	Employee expenses	614.83
B) i)	Total of O&M expenses	742.65
B) ii)	1/12th of total	61.89
C)	Receivables	-
C) i)	Annual Revenue from wheeling charges	-
C) ii)	Receivables equivalent to 2 months average billing of wheeling charges	-
D)	Total Working capital (A), B) ii), C) ii))	81.27
E)	Rate of Interest	0.12
F)	Interest on Working capital	9.55
	Actual expenditure as per Audited accounts	-
	For Retail Activity	FY12
A)	1/6th of annual requirement of inventory for previous year	-
B)	Receivables	-
B)i)	Annual Revenue from Tariff and charges	3494.43
B)ii)	Receivables equivalent to 2 months average billing	582.41
C)	Power Purchase Expenses	2960.6
C)i)	1/12 th of Power Purchase Expenses	246.72
D)	Consumer security deposit	63.92
E)	Total Working Capital(A+Bii-Ci-D)	271.77
F)	Rate of Interest	11.75%
G)	Interest on Working Capital	31.93
	Total Interest on Working Capital from wheeling activities	9.55
	Total Interest on Working Capital from retail activities	31.93
	Net Interest on Working Capital	41.48

As per Additional Submission

Table 80 : Interest on Working Capital as Per Additional Submission (Rs In Crore)

Sl. No.	Particulars	FY12
A)	1/6th of annual requirement of inventory for previous year	19.39
B)	O&M expenses	-
	R&M expenses	57.14
	A&G expenses	99.24
	Employee expenses	658.1
B) i)	Total of O&M expenses	814.48
B) ii)	1/12th of total	67.87
C)	Receivables	-
C) i)	Annual Revenue from wheeling charges	-
C) ii)	Receivables equivalent to 2 months average billing of wheeling charges	-
D)	Total Working capital	87.26
	(A), B) ii), C) ii))	-
E)	Rate of Interest	11.75%
F)	Interest on Working capital	10.25
	Actual expenditure as per Audited accounts	-
	For Retail Activity	FY12
A)	1/6th of annual requirement of inventory for previous year	-
B)	Receivables	-
B)i)	Annual Revenue from Tariff and charges	3494.43
B)ii)	Receivables equivalent to 2 months average billing	582.41
C)	Power Purchase Expenses	3263.67
C)i)	1/12 th of Power Purchase Expenses	271.97
D)	Consumer security deposit	63.92
E)	Total Working Capital(A+Bii-Ci-D)	246.51
F)	Rate of Interest	11.75%
G)	Interest on Working Capital	28.96
	Total Interest on Working Capital from wheeling activities	10.25
	Total Interest on Working Capital from retail activities	28.96
	Net Interest on Working Capital	39.22

West Discom

Table 81 : Interest on Working Capital (Rs In Crore)

Sl. No.	Particulars	2011-12
A)	1/6th of annual requirement of inventory for previous year	4.00
B)	O&M expenses	
	R&M expenses	49.42

	A&G expenses	97.92
	Employee expenses	575.54
B) i)	Total of O&M expenses	722.88
B) ii)	1/12th of total	69.09
C)	Receivables	
C) i)	Annual Revenue from wheeling charges	3.70
C) ii)	Receivables equivalent to 2 months average billing of wheeling charges	0.62
D)	Total Working capital	
	(A), B) ii), C) ii))	64.85
E)	Rate of Interest	12.50%
F)	Interest on Working capital	8.11

As per Additional Submission

Table 82 : As per Projection (Rs. in crores)

Particular	2011-12
Interest on working capital	357.48

Central Discom

Table 83 : Interest on Working Capital as Per Regulation (Rs In Crore)

Sl. No.	Particulars	Amount
	For Wheeling Activity	FY12
A)	1/6th of annual requirement of inventory for previous year	30.10
B)	O&M expenses	
	R&M expenses	65.97
	A&G expense	73.84
	Employee expenses	489.69
B) i)	Total of O&M expenses	629.50
B) ii)	1/12th of total	52.46
C)	Receivables	
C) i)	Annual Revenue from wheeling charges	
C) ii)	Receivables equivalent to 2 months average billing of wheeling charges	
D)	Total Working capital	82.56
	(A), B) ii), C) ii))	
E)	Rate of Interest	11.75%
F)	Interest on Working capital	9.70

	For Retail Activity	FY12
A)	1/6th of annual requirement of inventory for previous year	30.10
B)	Receivables	
B)i)	Annual Revenue from Tariff and charges**	3787.67
B)ii)	Receivables equivalent to 2 months average billing	631.28
C)	Power Purchase Expenses	3581.00
C)i)	1/12 th of Power Purchase Expenses	298.41
D)	Consumer security deposit	663.22
E)	Total Working Capital(A+Bii-Ci-D)	-300.25
F)	Rate of Interest	11.75%
G)	Interest on Working Capital	-35.27

3.141 The Comparison of Interest on working capital filed as per Regulation and as per additional submission filed by licensees are as follows:

Table 84 : Comparison of Interest on Working Capital as filed for FY 12 (Rs in Crore)

Particulars	As per Regulations	As per additional Submission
East Discom	41.48	39.22
West Discom	8.11	357.48
Central Discom	0.00	0.00

Commission's analysis of Interest on Working Capital

3.142 The MPERC (Terms and Conditions for Determination of Tariff for Supply and Wheeling of Electricity and methods and Principles for Fixation of Charges) Regulations, 2009 provide that the Working capital shall consist of expenses that are required for supply activity and wheeling activity. Parameters of these two have been prescribed separately. Rate of interest on working capital shall be equal to the State Bank of India Advance Rate as on April 1 of the relevant Year.

3.143 As per the Audited Balance Sheet, Gross block was of Rs. 2197 Crore of East Discom, Rs. 2061 Crore of West Discom and Rs. 2217 Crore of Central Discom at the end of FY 2009-10. One percent of this value pro-rated to two months would work out to Rs. 3.66 Crore for East Discom, Rs. 3.44 Crore for West Discom and Rs. 3.70 Crore for Central Discom. This has been considered as the inventory requirement for wheeling activity and retail activity. This has been further divided into wheeling and retail inventory in the ratio of 80:20 as adopted in last tariff order. The Consumer Security Deposit has been considered as discussed in the section on interest on consumer security deposit. The values of other elements of working capital have been recomputed for the amount allowed by the Commission in the relevant sections of this Order.

3.144 In the past tariff orders the Commission has been allowing the Interest on Working Capital separately for wheeling and retail activity. It has however been observed during

the true up exercise for the year 2006-07 and 2007-08 that the licensees have not been able to segregate the details for wheeling and retail activity. Moreover since both activities are undertaken simultaneously by the Licensees; hence the available resources are common for both. The Commission has therefore taken working capital requirement together for wheeling and retail activities.

3.145 The Regulations allow working capital interest to the Licensee at the rate equal to the State Bank of India Advance Rate as on April 1st of the relevant Year. The SBI PLR (SBAR- State Bank Advance Rate) presently stands at 11.75%. Therefore, going by the norms, the interest rate for working capital loans to the Licensee would be limited to 11.75%. The interest on working capital allowed by the Commission for wheeling and retail sale activity combined together is given in the table below:

Table 85 : Interest on Working Capital admitted by the Commission (Rs In Crore)

	Months	East	West	Central
Wheeling				
Inventory	2	2.93	2.75	2.96
Approved O&M	1	50.06	46.39	45.89
Total Working Capital Requirement (Rs. Crs.) – Wheeling		52.99	49.14	48.85
Interest Rate (%)		11.75%	11.75%	11.75%
Total Interest on Working Capital (Rs. Crs.)		6.23	5.77	5.74
Retail				
Inventory	2	0.73	0.69	0.74
Approved O&M	1	0.00	0.00	0.00
Revenue	2	566.93	788.75	598.42
Less: Power Purchase Cost	1	231.63	354.02	248.89
Less: Consumer Security Deposit		445.18	497.34	660.71
Total Working Capital Requirement (Rs. Crs.) - Retail		-109.14	-61.92	-310.45
Interest Rate (%)		11.75%	11.75%	11.75%
Total Interest on Working Capital (Rs. Crs.)		-12.82	-7.28	-36.48
Total interest on Working Capital Requirement (Rs. Crs.) - Wheeling		6.23	5.77	5.74
Total interest on Working Capital Requirement (Rs. Crs.) - Retail		-12.82	-7.28	-36.48
Net Interest on Working Capital		-6.60	-1.50	-30.74
Total Interest on Working Capital (Rs. Crs.) admitted		0.00	0.00	0.00

Interest on Consumer Security Deposit

Licensees' submissions & Commission's Analysis

3.146 Licensees have submitted claims of interest on consumer security deposit for FY 11-12. The Commission has observed from the details of the Audited Balance Sheets that the

outgo of annual interest on the Consumer Security deposit is not in tune with the quantum of security deposits held and the interest cost allowed in past. The methodology adopted in earlier Tariff Orders has been used to work out the assumed quantum of security deposit based on the projected monthly revenue at current tariff and then allow commensurate interest. However, the Licensees have been paying less interest than allowed may be due to the reason that amount of security reported as held is not adjusted after the permanent disconnections or on default of payments nor the interests is paid in such cases. The Commission has provisionally increased the Interest on Consumer Security Deposit by 7% from last tariff order of FY 2010-11 and accordingly admitted the interest on consumer security deposit to the tune of Rs. 90 crore, which is as given below:

Table 86 : Interest on Consumer Security Deposit (CSD) (Rs In Crore)

Particular	FY 12
East	25.44
West	36.83
Central	27.73
Total	90.00

Return on Equity

Licenseses' submissions

East Discom

3.147 The Licensees have submitted that the RoE for the period has been calculated as per the Regulations. The claims made by the Licensees are shown in following tables:

Table 87 : Return on Equity (Rs In Crore)

SL. No.	Particulars	FY 10-11	FY 11-12
A	Gross Fixed Assets at the beginning of year(net of consumer contributions)	1,585.04	2,083.64
A1	Opening balance of GFA identified as funded through equity	475.51	625.09
A2	Opening balance of GFA identified as funded through debt	1,109.53	1,458.55
B	Proposed capitalization of assets as per the investment plan(net of consumer contribution)	593.61	1,456.00
B1	Portion of capitalised assets funded out of equity, internal reserves	24.81	117.23
B2	Balance Proportion of capitalised assets funded out of project loans(B-B1)	568.8	1,317.56
C1	Normative additional equity(30% of B)	178.08	436.80
C2	Normative additional debt(70% of B)	415.52	1,019.20
D1	Excess/shortfall of additional equity over normative(B1-C1)	-153.27	-319.57
D2	Excess/shortfall of additional debt over normative((B2-C2)	153.27	298.36
E	Equity eligible for Return(A1+(C1/2)) OR (A1+(B1/2)),whichever is lower	487.92	683.71
	Return on Equity (16% on E)	78.07	109.39

West Discom

Table 88 : Return on Equity (Rs In Crore)

Sl. No.	Particulars	FY11	FY12
A	Gross Fixed Assets at the beginning of year (net of consumer contributions)	1,943.20	2,280.51
A1	Opening balance of GFA identified as funded through equity (30%)	582.96	684.15
A2	Opening balance of GFA identified as funded through debt (70%)	1,360.24	1,596.36
B	Proposed capitalisation of assets as per the investment plan (net of consumer contribution)	337.32	1,021.59

Sl. No.	Particulars	FY11	FY12
B1	Portion of capitalised assets funded out of equity, internal reserves	101.19	306.48
B2	Balance Portion of capitalised assets funded out of project loans (B - B1)	236.12	715.11
C1	Normative additional equity (30% of B)	101.19	306.48
C2	Normative additional debt (70% of B)	236.12	715.11
D1	Excess / shortfall of additional equity over normative (B1-C1)	0.00	0.00
D2	Excess / shortfall of additional debt over normative (B2-C2)	0.00	0.00
E	Equity eligible for Return (A1+(C1/2)) OR (A1+(B1/2)), whichever is lower	633.56	837.39
	Return on Equity (16% on E)	101.37	133.98

Central Discom

Table 89 : Return on Equity as per Regulations (Rs In Crore)

	Particulars	FY11	FY12
A	Gross Fixed Assets at the beginning of year (net of consumer contributions)	2217.86	2973.12
A ₁	Opening balance of GFA identified as funded through equity	665.36	891.94
A ₂	Opening balance of GFA identified as funded through debt	1552.50	2081.18
B	Proposed capitalization of assets as per the investment plan (net of consumer contribution)	755.26	1442.73
B ₂	Proportion of capitalized assets funded out of equity, internal reserves	226.58	432.82
B ₂	Balance Proportion of capitalized assets funded out of project loans (B - B1)	528.68	1009.91
C ₁	Normative additional equity (30% of B)	226.58	432.82
C ₂	Normative additional debt (70% of B)	528.68	1009.91
D ₁	Excess / shortfall of additional equity over normative (B1-C1)	0.00	0.00
D ₂	Excess / shortfall of additional debt over normative (B2-C2)	0.00	0.00
E	Equity eligible for Return (A1+(C1/2)) OR (A1+(B1/2)), whichever is lower	891.94	1324.76
	Return on Equity (16% on E)	142.71	211.96

Central Discom- Return on Equity (On actual basis as per additional submission)

Share capital as per Balance Sheet for the year 2009-10 - Rs.565.76 Crs.

Share deposit as per Balance Sheet for the year 2009-10 - Rs. 616.44 Crs.

Equity addition - Rs.104.86 Crs.

Equity for the year 2010-11	-	Rs.1287.06 Crs.
Equity for the year 2011-12	-	Rs. 1487.06 Crs.
RoE for the year 2010-11 (16%)	-	Rs. 205.93 Crs.
RoE for the year 2011-12 (16%)	-	Rs. 237.93 Crs.

3.148 The Comparison of Return on Equity capital filed as per Regulation and as per additional submission filed by licensees are as follows:

Table 90 : Comparison of ROE for FY 12 (Rs.in Crore)

Particulars	As per Regulations	As per additional Submission
East Discom	109.39	109.39
West Discom	133.98	133.98
Central Discom	211.96	237.93

Commission's analysis of Return on Equity

3.149 The MPERC (Terms and Conditions for Determination of Tariff for Supply and Wheeling of Electricity and methods and Principles for Fixation of Charges) Regulations, 2009 provides that Return on Equity shall be computed on pre tax basis @16%. The section of this order on interest and finance charges explains clearly the process of identification of debt and equity with completed assets. This process results in the total equity identified with GFA as at the end of FY 2011-12. This is presented in the table below. The Return on Equity as allowed for FY 2011-12 ARR is then determined by applying the specified rate of 16% on the total equity identified as allocated to GFA.

Table 91 : Return on Equity (Rs In Crore)

No.	Particulars	East	West	Central
FY 09				
1	Equity identified with GFA (as on 31.03.2008) in the True up Order 2007-08	428.35	530.20	433.14
2	30% of addition to net GFA considered as funded through equity net of consumer contribution	76.81	28.19	81.57
3	Total Equity identified with GFA as on 31st March 2009	505.16	558.39	514.71
FY 10				
1	30% of addition to net GFA considered as funded through equity net of consumer contribution	69.86	16.93	44.16
2	Total Equity identified with GFA as on 31st March 2010	575.02	575.32	558.87
FY 11				
1	30% of addition to net GFA considered as funded through equity net of consumer contribution	67.63	26.25	75.87
2	Total Equity identified with GFA as on 31st March 2011	642.65	601.56	634.74

FY 12				
1	30% of addition to net GFA considered as funded (for Half year) through equity net of consumer contribution	33.81	13.12	37.94
2	Total Equity identified with GFA eligible for return	676.46	614.68	672.68
3	RoE @16% of FY 2011-12	108.23	98.35	107.63

Other items of ARR

3.150 Apart from the components of expenses discussed above, there are certain other items which form part of the Aggregate Revenue Requirement. These include provision for Bad Debts, other miscellaneous expenditure, any prior period expenses / credits and Other (Non-Tariff) Income. These are analyzed below:

Bad and doubtful debts

Licensees' submission

3.151 The Licensees have claimed provision for bad debts as 1% of the total sales revenue as under:

Table 92 : Comparison of Bad and Doubtful Debts for FY 12 (Rs. In Crore)

Particulars	As per norms	As per additional Submission
East Discom	34.94	34.94
West Discom	51.56	251.95
Central Discom	37.88	150.65

Commission's analysis on Bad and Doubtful debts

3.152 The MPERC (Terms and Conditions for Determination of Tariff for Supply and Wheeling of Electricity and methods and Principles for Fixation of Charges) Regulations, 2009 specify that Bad and Doubtful Debts shall be allowed to the extent of the Distribution Licensee has actually written off bad debts subject to a maximum limit of 1 % of the yearly revenue.

3.153 The Commission while doing true up of 2007-08 has observed that the Licensees have actually written off bad debts to the extent of Rs.1.26 Crore only. The Regulations specify that the Bad Debts actually written off shall only be allowed to the extent of actually written off up to maximum of 1% of yearly revenue. The Claim of Licensees for provision of Bad and Doubtful is on very much higher side when compared with the meager amounts actually written off in the past and therefore the Commission considers it appropriate to not make any provision in this regard and any amount actually written off shall be considered during the true up.

Other miscellaneous expenditure

3.154 No other expenditure is forecasted by the Licensees except East discom. East discom has claimed the other expenditure based on the past trend to the tune of Rs 20.71 crore for FY 2011-12. However projection of other miscellaneous expenditure appears merely a provision made without substantiating it properly. The Discom has projected it in their additional submission on the basis of expenditure (Sundry expenses and extra ordinary items) likely to be incurred due to merger of RE Societies without giving requisite details. The Commission considers it appropriate to not make any provision in this regard and it shall be considered during the true up, if required.

Other Income

Licensees' submission

3.155 Schedule for other income as provided in the schedule of Miscellaneous Charges and General Charges under MPERC (Details to be furnished by Licensees for determination of Tariff and manner of making an application) Regulation 2004 as amended from time to time shall be classified under 'Other Income'.

3.156 Against the Other Income, the East Discom has filed an amount of Rs. 32.01 Crore; West Discom has filed an amount of Rs. 106.14 Crore and Central Discom has filed an amount of Rs. 62.29 Crore for FY 2011-12. This amount includes, inter-alia, meter rent, recovery from theft of energy and miscellaneous charges from consumers. West Discom has also filed other income as per additional submission of Rs 116.85 crore, The Commission observed from the audited balance sheets of the Discoms for the year 2009-10 that other income of these Discoms including the receipts against meter rent, recovery from billing against cases of theft, misc. receipts etc. have been of the order of around Rs.105 Crore for West Discom, Rs. 64 Crore for Central Discom and Rs.88 Crore for East Discom totaling to around Rs 257 Crore. Considering the rise expected in 2010-11 and 2011-12, this is like to increase to around Rs.300 Crore. The Commission has accordingly considered other income as Rs.300 crore and apportioned it amongst the Discom in accordance with the receipts of 2009-10.

3.157 The Table below indicates the filing by Licensees and the amount admitted against the other income by the Commission:

Table 93 : Other Income (Rs In Crore)

Discom	As filed	As admitted
East	32.01	105.00
West	106.14	120.00
Central	62.29	75.00
Total	200.44	300.00

3.158 The ARR as admitted for FY 2011-12 is presented in following table:

Table 94 : Total Aggregate Revenue Requirement as admitted (Rs In Crore)

PARTICULARS	East	West	Central	Total
Power Purchase	2306.15	3661.69	2498.19	8466.03
PGCIL charges	102.04	138.90	88.35	329.29
Transco Charges (MP TRANSCO)	369.26	445.37	397.80	1212.43
SLDC Charges	2.04	2.22	2.30	6.56
O&M cost	600.73	556.71	550.72	1708.16
Depreciation	61.37	61.08	62.74	185.19
Interest on Project Loans	55.40	20.88	62.30	138.58
Return on Equity	108.23	98.35	107.63	314.21
Interest on Working Capital	0.00	0.00	0.00	0.00
Bad Debts	0.00	0.00	0.00	0.00
Interest on CSD	25.44	36.83	27.73	90.00
MPERC Fees	0.36	0.45	0.38	1.19
Less Other Income - Retail & Wheeling	105.00	120.00	75.00	300.00
Total ARR for FY 2011-12	3526.02	4902.48	3723.14	12151.64
Add Sardar Sarovar Order diff.	22.37	30.43	24.95	77.75
Add MP Genco FY 07-08 True up	62.59	89.98	62.32	214.88
Total ARR	3610.98	5022.89	3810.41	12444.28
Revenue at existing tariff	3401.57	4732.51	3590.50	11724.58
Revenue Gap	209.41	290.38	219.91	719.70

Segregation of approved ARR between Wheeling and Retail Sale activities

- 3.159 The Regulations provide that the Distribution Licensees should file the Aggregate Revenue Requirement in three parts, viz. for power purchase activity, for wheeling (distribution) activity and for retail sale activity. The Regulations clearly listed out the items of fixed costs (i.e. other than power purchase) that should be included in wheeling and retail sale activities. The purpose of segregating the total distribution expenses into wheeling and retail sale activities is to establish the wheeling charges that are to be recovered from open access customers.
- 3.160 The Licensee has complied with the Commission's Regulations to the extent that they have filed the ARR segregated among expenses for power purchase, wheeling and retail sale activities. The Licensee has only considered normative interest on working capital for retail activity, provision for bad debts and interest on consumer security deposits into retail sale activity. All other items have been considered entirely as part of wheeling activity.
- 3.161 For the purpose of this Tariff Order, therefore, the Commission allocates the fixed costs (i.e. other than power purchase) in the following manner:

Wheeling activity shall include:

- (a) O&M expenses
- (b) Depreciation
- (c) Interest on project loans
- (d) Interest on working capital loans – for normative working capital for wheeling activity
- (e) Return on Equity
- (f) Other miscellaneous expenses
- (g) Less: Other Income as computed in previous section

Retail sale activity shall include:

- (a) Interest on working capital loans – for normative working capital for retail sale activity
- (b) Interest on Consumer Security Deposits
- (c) Bad and Doubtful debts
- (d) Less: Other Income as computed in previous section

Aggregate Revenue Requirement (ARR) admitted by the Commission for FY 2011-12

3.162 On the basis of above, the ARR for FY 2011-12 for wheeling and retail sale activity for all the three Discoms is admitted as under:

Table 95 : Total ARR (Wheeling and Retail) as admitted (Rs In Crore)

Particulars	East	West	Central	State
Power Purchase Cost	2306.15	3661.69	2498.19	8466.03
PGCIL Charges	102.04	138.9	88.35	329.29
MP Transco Charges	369.26	445.37	397.8	1212.43
SLDC Charges	2.04	2.22	2.30	6.56
(A) Sub Total - Power Purchase Cost	2779.49	4248.18	2986.64	10014.31
Wheeling activity:				
O&M cost	600.73	556.71	550.72	1708.16
Depreciation	61.37	61.08	62.74	185.19
Interest on Project Loans	55.40	20.88	62.30	138.58
Return on Equity	108.23	98.35	107.63	314.21
Interest on Working Capital – wheeling	0.00	0.00	0.00	0.00
MPERC Fees	0.36	0.45	0.38	1.19
(B) Sub-Total Wheeling ARR for FY 2011-12 as approved	826.09	737.47	783.77	2347.33
Retail Sale activity				
Bad Debts	0.00	0.00	0.00	0.00
Interest on CSD	25.44	36.83	27.73	90.00
Other Income – Retail	105.00	120.00	75.00	300.00
(C) Sub-Total Retail ARR for FY 2011-12as approved	-79.56	-83.17	-47.27	-210.00
Total ARR for FY 2011-12 (A+B+C)	3526.02	4902.48	3723.14	12151.64

Revenue from revised tariffs

3.163 The consumer category wise revenue at approved FY 2011-12 tariffs is presented in the table below:

Table 96 : Revenue from Revised Tariffs in FY 2011-12 (Rs In Crore)

Consumer Categories	2011-12							
	East		West		Central		Total	
	Sales (MU)	Revenue (Cr)	Sales (MU)	Revenue (Cr)	Sales (MU)	Revenue (Cr)	Sales (MU)	Revenue (Cr)
LV-1: LT	2546	1037	2754	1167	2490	1112	7790	3316
LV-2: Non Domestic	408	254	688	432	526	331	1622	1018
LV-3: Public Water Works and Street Light	244	96	173	71	224	89	641	256
LV-4: Industrial	239	131	415	227	213	119	867	477
LV-5.1: Irrigation Pumps for Agriculture	1842	604	3261	1069	2423	779	7526	2452
LV-5.2 Agriculture related use in Rural Areas	2	1	16	6	14	5	32	13
LT Units Sold (MU)	5282	2123	7307	2972	5890	2437	18479	7532
HT								
HV-1: Railway Traction	529	291	443	243	713	405	1685	939
HV-2: Coal Mines	514	296	0	0	34	22	548	319
HV-3.1: Industrial	1108	597	2686	1413	1282	692	5076	2702
HV-3.2: Non-Industrial	174	110	388	218	269	153	831	481
HV-4: Seasonal	5	3	8	6	1	1	14	10
HV-5.1: Irrigation	61	26	218	97	76	32	355	155
HV-5.2 other	10	5	5	2	3	1	18	8
HV-6: Bulk Residential Users	371	160	9	4	147	66	527	230
HV-7: Bulk Supply to Exemptees	0	0	206	68	0	0	206	68
HT Units Sold (MU)	2772	1487	3964	2052	2525	1373	9261	4912
Total LT + HT Units Sold (MU)	8053	3610	11270	5024	8416	3809	27739	12444

Gap / surplus at new tariffs:

3.164 The ARR as approved by the Commission and the revenue from revised tariff is indicated in the table below:

Table 97 : Final ARR and Revenue from Revised Tariff (Rs In Crore)

Particulars	East	West	Central	State
Total ARR for FY 2011-12 (A)	3526.02	4902.48	3723.14	12151.64
Difference of Sardar Sarovar (B)	22.37	30.43	24.95	77.75
MP Genco 07-08 True Up (C)	62.59	89.98	62.32	214.89
Total FY 2011-12 ARR as approved (A+B+C = D)	3,610.98	5,022.89	3,810.41	12,444.28
Revenue at Current Tariffs (E)	3,401.57	4,732.51	3,590.50	11,724.58
Gap at Current Tariffs (D-E)	209.42	290.38	219.91	719.70
Revenue at New Tariffs (F)	3,610.41	5,024.05	3,809.48	12,443.94
Uncovered Gap/Surplus (D-F)	0.57	-1.16	0.93	0.34

A4: PUBLIC OBJECTIONS & COMMENTS ON LICENSEES' PETITIONS

- 4.1 On admission of the ARR and Tariff proposals for FY 2011-12 filed by the three Discoms, salient features of the same were published in the newspapers. The Commission had directed the petitioners to publish the gist of their tariff applications and proposals to invite comments/objections/suggestions from various stakeholders in the news papers. The last date of submission was 06.04.2011 for Central Discom and 11.04.2011 for East and West Discom. The Commission has considered all the comments received up to the date of public hearings. Details of persons and organizations who had filed the comments/objections on Discoms' ARR/Tariff Proposals for FY 2011-12 are given in Annexure-I.
- 4.2 The Commission issued a public notice in a number of news papers having wide circulation in major towns of the State inviting all stake holders to present their suggestions/objections on the ARR and Tariff proposals in person during the public hearings. Number of comments received on ARR/Tariff proposals is shown in the table below :-

Table 98 : No. of Objections received

Sr. No.	Name of Discom	Number of comments received on ARR & Tariff Proposal for FY2011-12
1.	East Discom	24
2.	West Discom	128
3.	Central Discom	20
	Total	172

- 4.3 The Commission held public hearing as per following schedule:-

Table 99 : Public Hearings held:

Sr. No.	Name of the Distribution Company	Date of Hearing	Venue of hearing
1	Objectors of M.P. Poorv Kshetra Vidyut Vitaran Company Ltd., Jabalpur, M.P. Madhya Kshetra Vidyut Vitaran Company Ltd., Bhopal and NGOs	April 25, 2011	Auditorium, Academy of Administration, 1100 quarters, Bhopal
2	Objectors of M.P. Paschim Kshetra Vidyut Vitaran Co. Ltd., Indore	April 26 , 2011	

- 4.4 During the course of hearing, majority of the respondents from all consumer categories opposed tariff hike as proposed by the Discoms. Some of the respondents raised the issue that the major cause of poor performance of the three Discoms was high distribution losses and lack of meterisation of un-metered connections especially in rural areas for domestic & irrigational categories.
- 4.5 Some of the respondents were of the view that the terms and conditions of tariff schedule prescribed by the Commission in its tariff order should not be proposed for any change by

the Distribution Companies. It was also suggested that Distribution Companies should also explore Public private participation (PPP) model for bringing additional capital, specially for capacity building, consumer services like metering, feeder separation, computerization etc.

- 4.6 Respondents from various associations were of the view that as per the prevailing tariff Regulations under MYT frame work, a control period of 3 years (FY2010-11 to FY 2012-13) is envisaged hence it would be in the interest of both public and Distribution Companies that Multi Year Tariff is fixed in order to avoid un-certainty every year. It was also voiced by some of the respondents that besides Bhopal, public hearing should also be held at other towns of the State.
- 4.7 Major responses/objections raised during the course of public hearings, have been grouped together according to the nature of the comments/objections and are summarized in this Chapter as given in following paragraphs:

ISSUE NO. 1: To restore single- part tariff for Railway traction (HV-1) and fixation of tariff at reasonable level taking into account cost of supply

Issue raised by objectors

Indian Railways have made the representation that single part tariff for railway traction should be restored and existing traction tariff for the railway should be brought down to a reasonable level by declining the Discom's proposal for increase in fixed & energy charges . The cost of supply applicable for the particular voltage category should be taken in to account.

Response from Discoms

The Licensees have stated that the proposal for reintroducing two part tariff for Railway traction is in line with the provisions of the clause 8.4.1 of the Tariff Policy, which states *“Two part tariff featuring separate fixed and variable charges and time –differential tariff shall be introduced on priority for large consumers (say consumers with demand exceeding 1 MW) within one year. This would also help in flattening the peak and implementing various energy conservation measures.”*

Further, the tariff proposed for Railways is very reasonable and is in line with the road-map for reducing cross-subsidy as approved by the Commission. The marginal hike in tariff proposed is barely sufficient to cover the inflation. Further, the petitioner would like to bring on record again that a tariff rebate of 10% for new projects up to a period of 5 years has been proposed in the instant petition, which is definitely very attractive proposition.

Commission's views

The Commission considers the views of Discoms' as reasonable and also find it in accordance with the provisions of the Electricity Act, 2003 Section 45(3)(a). Accordingly the levy of fixed charges in case of Railway Traction has been continued.

ISSUE NO. 2 : Proposal for increase in excess demand charge at 2.5 times of fixed charges (>15% CD)& at 2 times the tariff for energy charges for consumption corresponding to excess demand is opposed.

Issue raised by objectors

Indian Railways have opposed the proposal of Discoms to charge the excess demand over contract demand at 2.5 times of fixed charges (>15% of CD) and corresponding energy to be charged at 2 times of normal tariff on prorata basis.

It is mentioned that due to the moving nature of traction load, overloading of the particular grid sub station (GSS) is for very short duration causing least disturbance on the SEB's grid. As such Railway should not be charged extra on this account by levying excess MD charges, considering negligible impact on grid due to overloading during traffic dislocation.

Response from Discoms

The current regime in the electricity sector requires additional charges to be levied for excess drawal of energy/power. Therefore, all the charges for excess demand are fully warranted. Every Licensee and consumer is expected to follow this discipline despite the unforeseen circumstances and conditions that take place.

Commission's views

The Commission has considered the views of both the stakeholders and has decided that existing provision of levy of additional charges for excess drawal of demand on fixed charges prescribed separately for Railways should be continued without any change.

ISSUE NO. 3 : Incentives on PF above 0.90 & Voltage rebate of 3% on energy cost (at 132kv/220 kV supply) is sought

Issue raised by objectors

Representatives from Railways have requested for following incentives/rebates

- (a) **Power Factor (PF) Incentive:** To consider giving incentive from PF above 0.90 for traction supply as was available earlier.
- (b) **Voltage Rebate:** To consider giving a voltage rebate of 3 % on energy cost as supply is availed at 132/220 kV

Response from Discoms

As per provision made in Grid Code notified by the Commission, the distribution licensee is required to draw power at 0.98 Power Factor and as such any incentive if required to be given must be given over and above 0.98 power factor. However, Company has not proposed any changes in the present structure of giving incentive above 0.95 power factor. From the tariff structure, it may be seen that the effective tariff for Railways is less than consumers availing supply at 33KV. However, the licensee has made a provision for 10 % rebate for new traction points.

Commission's views

The Commission is of the view that existing level of percentage power factor eligible for incentive is reasonable. Further, no separate rebate for supply voltage level is considered as the cost of supply is worked on average cost of supply across all voltage levels.

ISSUE NO. 4 : Proposal for levying penalty on PF below 0.90 in place of existing 0.85 is opposed.

Issue raised by objectors

PF surcharge should not be above 0.85 as existed earlier. It is highlighted that in many traction sub-stations in spite of putting shunt capacitors, power factor has not improved beyond 0.90/0.92 due to heavy load of varying nature. Therefore, Power factor surcharge should not be levied above 0.85.

Response from Discoms

Lowering the lower limit of P.F. for railways to 0.85 is against the spirit of the section 62(3) of the EA, 2003. As far as the problem of controlling the power factor is concerned, the best technological solution would be to curb the reactive flows right at the source i.e. the electric locomotives – e.g., suitable on-board reactive compensation devices/or circuits closely tracking the reactive load of the locomotives.

Commission's views

The Commission is of the view that considering the special nature of Railway's load, no change in the existing provision is warranted.

ISSUE NO.5: Separate tariff for Power Intensive Industries such as Mini Steel Plant/Electro- chemical is sought

Issue raised by objectors

Representatives from industrial associations are of the view that there is a need to provide separate tariff for power intensive industries such as Steel induction furnaces and Electro-Chemical industries like “Chlor Alkali” and “Caustic Soda” where cost of electricity alone constitutes 60% or more of cost of production .

Response from Discoms

The Licensees’ have stated that there is no need to introduce new tariff category like power intensive Tariff. Tariff proposal has been framed taking into account the average cost of supply and cross-subsidy road-map. Moreover, all the power intensive consumers in Madhya Pradesh have the advantage of load factor incentives to reduce their effective average cost of power and there is no justification for creating a separate category

Commission’s views

The Commission has introduced a separate category for Power Intensive industries.

ISSUE NO. 6: Proposal for change in load factor incentive calculation formula.

Issue raised by objectors

Representative from All India Induction Furnace Association has opposed the Discom’s proposal for Load factor incentive calculation. For Load factor incentive calculation following formula has been proposed by Discom

$$\text{Load factor (\%)} = \frac{\text{Monthly consumption X100}}{\text{No. of hours in the billing month X demand X PF}}$$

Wherein the demand shall be maximum demand recorded or contract demand whichever is higher ; and PF shall be 0.9 or actual average monthly power factor whichever is higher.

Instead, the respondent has suggested following formula for consideration :-

$$\frac{\text{Monthly consumption X 100}}{\text{Number of hours in the billing month X actual demand X 90\%}}$$

Response from Discoms

The formula suggested by the objectors for calculation of load factor shall result in an erroneous value if the actual power factor is more than the nominal value of 0.90. At times, the value of load factor so computed may even exceed unity- which is absurd. The petitioner has proposed a formula which is fair and reasonable and has already been agreed to, by the Commission in its Principal Tariff Order dated 18/05/2010 for FY 2010-11.

Commission's views

The Commission vide Order dated 07.10.2010 in respect of petition No. 51/2010 has amended the method of calculation of load factor and prescribed the new formula for FY2010-11. The Commission has continued with the same formula in this Order .

ISSUE NO. 7: Increase in Minimum Guarantee Consumption is opposed

Issue raised by objectors

Representatives from industries and industrial associations have opposed the increase in minimum annual guarantee consumption to 480 unit/HP from existing 360 unit/HP for LT industries in urban area under LV4 category. Similarly, an increase in minimum annual guarantee consumption for non –domestic category (LV2) from 360 units /kW to 480 unit/kW in urban area is also opposed.

Response from Discoms

Discom is of view that looking to the actual cost of the energy as well as increase in price index, the proposal of the Company is justified

Commission's views

The Commission is of the view that minimum guaranteed consumption needs to be progressively phased out. Accordingly the Commission has reduced the guaranteed annual minimum consumption from 240 units to 180 units per HP or per kW in rural areas.

ISSUE NO. 8 : Delayed payment surcharge should be considered as revenue earned in ARR

Issue raised by objectors

Some of the respondents raised the issue that the delayed payment surcharge is a part of the revenue earned and should be accounted for in the ARR.

Response from Discoms

The revenue gap has been calculated considering the collection efficiency as 100%. Therefore, the question of delayed payment surcharge does not arise for the purpose of tariff determination. In the ARR, the revenue accounted for accrual basis and not on the basis of cash collection. The working capital is also computed on normative basis. Any short fall in the revenue collection is to the account of Discom and cost of additional working capital is not allowed. The delayed payment surcharge is a compensation for the losses suffered by the Discom on these accounts.

Commission's views

The Commission continues to maintain its stand for reasons provided in its Regulations by not treating the receipts against the delayed payment surcharge as income and simultaneously not allowing overdue interest on account of default of payment by the Licensees.

ISSUE NO. 9: Reduction of Billing Demand to extent of 75% of CD

Issue raised by objectors

Some of the respondents suggested that the minimum billing demand should be made 75% of the contract demand against prevailing provision of 90% of the contract demand, as was the practice a few years back.

Response from Distribution Companies

The Licensees have stated that at present fixed cost of the Licensee is not recovered fully through the fixed charge component of the tariff. As the Licensee is required to enter into long term power purchase agreements and also to furnish day ahead schedule thus, it is not possible to reduce the demand (fixed) charges from the present level. The issue of minimum billing demand as a percentage of contract demand has earlier also been raised and as there is no proper justification to reduce the existing provision of minimum billing demand @90% of contract demand , no further reduction may be allowed.

Commission's views

The Commission is of the view that any change is not warranted. The Commission however has made changes on the consumers' demand such that the demand recorded up to 105 % of contact demand shall not attract levy of additional charges on excess demand.

ISSUE NO. 10 : Fuel Surcharge adjustment / expensive power charges

Issue raised by objectors

- (i) Respondents from Consumer Society suggested that for fuel surcharge adjustment, a formula can be approved through separate Regulation/ Order in view of multi- year tariff framework. Such formula should be applied only on multi-year tariff and once adjustment is made as per fuel surcharges adjustment formula, tariff revision /allowing true up cost shall not be required.
- (ii) With regard to expensive power charges , following objections were raised
 - (a) It is the obligation of a licensee to supply power for 24 hours and the cost of supply is based on this obligation.
 - (b) Already expensive power is being charged by differentiation in rate of urban & rural areas.
 - (c) The TOD tariff requires consumers availing peak load hour supplies at 25% extra tariff and thus charge for expensive power purchased.

Thus levying a special charge is to disturb the road map for cross subsidy surcharge which should not be accepted.

Response from Discoms

- (i) The cost structure in the distribution business is complex and subject to uncertainties which cannot be covered only by specifying a fuel surcharge adjustment. The petitioner feels that it is better to meet the uncontrollable costs speedily and not defer them to future consumers- which is very much in line with the National Tariff Policy. Therefore, Multi- Year Tariff model is not well suited to the distribution sector, in the present scenario, until a sort of “steady state” is attained on the economic front in the country. The fuel cost adjustment is meant to capture the variation in the power purchase cost only, while; the true-up exercise takes into account all the heads of expenditure on the basis of actual and audited accounts.
- (ii) All power purchases are undertaken by the licensee through the MP Tradeco. The MP Tradeco arranges the power for three Distribution licensees of the State. Also, apart from entering into contract for purchase of power from various sources, MP Tradeco has also entered into arrangement of banking of power under which the power is sold in kind and is returned in kind at a later date or vice-versa. The licensee generally avoids the load shedding of HT consumers and LT consumers of Commissionary and Distt. HQ. Therefore, in case of unforeseen shortage of power, the licensee is compelled to manage the power supply to these categories of consumers by arranging expensive power. Moreover, vide Para 40.1(j) of the instant MYT Regulation, the Commission has provided that it may consider to prescribe additional charges on account of procurement of costly power. In effect, through this Regulation, the Commission has contemplated a distinction between the cost of

long-term power and short-term power (i.e. expensive power) from the point of view of tariff determination. Therefore, licensee proposes that the additional cost of expensive power is allowed to be recovered from HT consumer and LT consumer of Commissioner/Distt. H.Q. Since the LT loss level of different area is different, therefore it will be appropriate to recover the cost of expensive power from LT consumers of Distt. H.Q. in proportion to their requirement

Commission's views

The Commission is of the view that levy of fuel surcharge adjustment charges shall not be considered at this juncture and actual impact on this account shall be considered at the time of true up for this order.

ISSUE NO. 11: Abolition of TOD incentive for off peak rebate & increase in peak load surcharge

Issue raised by objectors

Representatives from various organisations have objected that in the proposed tariff, off peak load period (10 pm to 6 am next day) incentive of 7.5% has been proposed to be abolished. This incentive should be revised to 15%. Similarly for peak load period 6 pm to 10 pm, 20% surcharge of normal rate has been proposed. This surcharge may be restored 15% at last year level.

Response from Discoms

The rate of additional power purchase during the peak period is generally higher as compared to the normal period rate due to increase in system demand. Similarly rate of additional power purchase during off peak period is less as compared to normal period due to decrease in system demand. It is noted that price of power during peak period is higher than the price of power traded round the clock by generally more than 15%.

It is also observed that price of power during off peak period is also generally higher than the price of power traded round the clock. It is therefore concluded that rebate offered in previous Tariff order during off peak period is not in line with the price of power during off peak period. The surcharge during peak period is also lower than the price of power during peak period. In the opinion of the Distribution Companies the range of surcharge during the peak period should be increased by at least 5% and rebate should be withdrawn during off peak period. It would also be appropriate to recover such additional charges from those consumers who have utilized the power during peak period

Commission's views

The Commission has fixed Time of Day surcharge for four hours (*from 6 pm to 10 pm*) and rebate for eight hours (*from 10 pm to 6 am next day*). The Commission does not find any justification in modification of rate of rebate to be provided in this regard.

ISSUE NO.12: Formation of Regulatory Assets

Issue raised by objectors

One of the objectors has raised the concern that formation of Regulatory Assets as proposed by Discoms is an indication of financial mismanagement. It is also an unhealthy trend.

Response from Discoms

The Regulatory Assets are basically meant to avoid tariff shocks to consumers. This is not an unhealthy trend. This actually allows deferring of burden on the consumers, as well as, time and scope for the Licensee to improve its performance and altogether obviate the burden currently being envisaged.

The petitioner is also of the view that Regulation for allowing Regulatory Assets may be framed by the Commission as per guidelines of the Tariff Policy.

Commission's views

The Commission has allowed only prudent level of costs. The Commission has also provided for the estimated revenue which fully meets the allowable costs hence there is no need of providing any Regulatory Assets.

ISSUE NO. 13: Increase in excess demand charge on fixed & energy cost in HV & LV category.

Issue raised by objectors

The representative from industrial associations have opposed the proposed increase in additional charges for excess demand on fixed and energy charges in LT & HT categories. It is further requested that additional charges may be taken on only fixed charges and no corresponding energy charges should be billed, as excess demand does not have any relation with consumption of unit.

In the matter, it is also suggested that in case of excess load, the billing should be done as per provision of tariff order only as it is observed that the officers of the Distribution Companies are billing as per Section 126 and 135 of the Electricity Act 2003 which is not correct as per provisions of tariff order. It is requested that guidelines in the matter may be issued by the Commission in tariff order itself to avoid hardship for paying consumers

Response from Discoms

It is submitted that Licensee is operating under the strict regime of Availability Based Tariff and UI charges. Hence it is expected that similar discipline should be observed by the respective consumers at their ends/levels. The observance of discipline itself leads to reduction in the effective tariffs and overall costs to the consumers and licensee alike. The proposal of increase in the panel charges is to ensure strict adherence of system discipline.

Commission's views

The Commission has taken all factors into account while deciding additional charges on demand recorded in excess of contract demand and has reduced it to 1.3 times from 1.5 times wherever applicable.

ISSUE NO. 14: To consider power purchase cost from approved ARR of M.P. Power Generating Co., MP Power Transmission Co. and M.P. Power Trading Company.

Issue raised by objectors

The representatives from various industrial associations have suggested that Power purchase costs have to be taken from approved ARR of M.P. Power Generating Co., MP Power Transmission Co. and M.P. Power Trading Company. However Tradeco could be directed by the Commission to file their proposals for purchase of power during 2011-12 and based on these costs power purchase costs be considered. It is submitted that that Tradeco has to work on commercial basis and hydel power available during peak time and monsoon period can be traded under ABT to earn revenue. This revenue may be passed on to the Distribution Companies.

Response from Discoms

The Commission may take an appropriate view in the matter. The data regarding power purchase have been projected in consultation with M.P Tradeco & M.P Transco.

Commission's views

The Commission has considered the views of both the objectors and Discoms and has allowed prudent power purchase costs. The Commission will separately consider the issue of Tradeco ARR.

ISSUE NO. 15 : Wheeling charges and Cross subsidy surcharge

Issue raised by objectors

The representatives from consumer society and industries have suggested that wheeling and cross subsidy surcharge are to be approved by the Commission based on ARR. In the year 2010-11, the tariffs were approved on 18th May, 2010 whereas the wheeling charges and cross-subsidy surcharge was approved on 3rd March 2011. Such gaps are not in the

interest of both consumers and utility. It is submitted that these charges be decided with the tariff.

Response from Discoms

The Commission may like to take an appropriate view on the issues raised by the objector.

Commission's views

The Commission is not in agreement with the views expressed by the objectors. The wheeling charges and cross subsidy charges are being determined separately.

ISSUE NO. 16: Tariff hike in domestic category and reduction in slabs for Domestic category

Issue raised by objectors

Domestic consumers including representatives from various organisations have opposed the proposed tariff hike in domestic category. It is suggested that domestic tariff should not be more than cost of supply as domestic category can not be expected to cross subsidise other categories. It is suggested that number of slabs in domestic category should be reduced to two only i.e. 0-30 and above 30 units with uniform charges applicable.

This initiative will save cost of billing, manipulation in meter reading and related malpractices, if any. Further, rational for determining fix charges are opposed by some of the domestic consumers

Response from Discoms

The licensee does not propose frequent changes in the slab structure. Further, provision of fixed charges is made in the tariff structure to recover the charges of fixed nature from the consumers which are incurred even when the consumer does not consume electricity. Further, the licensee could recover only 30-40% of total fixed cost and thus balance are to be recovered from provision of tariff minimum charges. Hence the objector's view regarding rationality of fixed charges is not correct.

Commission's views

The Commission agrees with the views expressed by the Discoms. Therefore, no change is being made.

ISSUE NO. 17: LV-4 Category –ceiling on connected load

Issue raised by objectors

- a) A majority of consumer in LT Industries category are provided with two part meters which record demand and energy. Once having installed demand meter, the whole concept of having connected load tariffs is irrational and unacceptable.
- b) It is also suggested that because of requirement of connected load many of the LT industries converted to HT Industries at 11 kV & 33 kV. Their demand however remains less than 60 kVA. It is thus necessary to reduce the minimum demand requirement of HT tariff of 11 kV & 33 kV to 60 kVA. With technology development meters to record 60 kVA demands accurately are available.

Response from Discoms

- a) Removal of ceiling of connected load is technically unacceptable because the distribution licensee's system will not be properly geared up to handle the loads if the actual demands of the consumers exceed their contract demands (CDs) by an appreciable amount. The licensee should be able to assess and put a restriction on the maximum possible load that could be incident on his system under any abnormal conditions or exigencies.
- b) The minimum CD at 11 kV has already been reduced to 50 kVA by the Commission. Further reduction of CD is neither feasible nor technically justified due to design constraints related to the metering equipments.

Commission's views

- a) The Commission intends to delete the provision of ceiling on connected load wherever demand based tariff is applicable to LT industries in the next tariff Order. The Commission is separately directing the discoms to ensure AMR metering of all demand based LT industries by March, 2012 so that the Commission's intention could be given effect commencing next tariff period.
- b) The Commission after considering all relevant aspects and the difficulties of industrial consumers having connected load in excess of the ceiling prescribed for LT connections but actual CD below the minimum level of 60 kVA at 11 KV, has permitted the HT connections at 11 KV with minimum contract demand of 50 kVA in the tariff Order for FY 10-11. The Commission is of the opinion that no change in present ceiling of connected load in LT categories is considered in this tariff Order.

ISSUE NO. 18 : Permitting use of 10% of domestic sanctioned load for non-domestic Purpose

Issue raised by objectors

Representative from Chamber of Commerce has requested that in respect of domestic category, 10% of the sanctioned load should be allowed to use for non-domestic purpose. These measures shall be helpful in promoting the self –employment and making livelihood.

Response from Discoms

As per the provisions of the Electricity Act 2003, requisite connection is not permitted.

Commission’s views:

The Commission agrees with the view expressed by the Licensees

ISSUE NO. 19 : Change in definition of Rural area

Issue raised by objectors

Representatives from various industrial organizations & industries have opposed the Discom’s proposal regarding change in respect of definition of “Rural area” in general terms & conditions of Low tension tariff wherein it is stated that “Rural Areas means feeder declared by the Distribution Licensee for receiving supply as per rural discipline under load regulatory measure”.

It is submitted by the objectors that definition of rural area may be continued as per tariff order clause 1 of general terms and conditions for L.T. Consumer and accordance with GoMP Notification No. 2010/F13/0513/2006 dated 25th March, 2006.

Response from Discoms

The concept of urban area in electricity field is quite different, which is in the interest of public at large as well as number of equity that the consumers, who are getting supply from urban feeders under urban discipline that must be billed on urban tariff. There is no need of any notification. The objector should understand the electricity cycle and supply system along with regulatory measures.

Commission’s views

The Commission considers that no change is required, as this issue has already been dealt in the previous tariff Orders.

ISSUE NO.20: Rebate in Cold storage tariff

Issue raised by objectors

The representatives from cold storage associations have requested that the cold storage to be considered in the agriculture category and tariff rate meant for agriculture should be made applicable in HT & LT category.

Response from Discoms

It may be mentioned that cold storages are being operated on commercial basis as they are charging the cost of service provided by them to their customers; hence the category need not be changed.

Commission's views

The Commission agrees with the views expressed by the Discoms.

ISSUE NO. 21 : Tariff hike in Agriculture Category

Issue raised by objectors

The agriculture consumers have raised the objections against tariff hike proposed by the Licensees in respect of agriculture connections. Representatives from various farmers associations of District Burhanpur have also opposed the increase in assessed consumption for billing of un-metered agriculture consumers as proposed by the Discom.

In this regard, it is mentioned that agricultural consumers in rural areas are not given supply as per directives of the Commission for their irrigations pumps. In respect of marginal farmers in tribal areas, it is stated that actual consumption of such farmers are far less than prescribed annual norms. It is suggested that an independent survey should be carried out to assess the consumption of marginal farmers. It is also suggested that all the agriculture connections should be meterized so that small farmers could pay their bill in accordance with their actual consumptions. It is also suggested that tariff for agro based industry/uses should be at par with agriculture tariff.

Farmers voiced the common difficulties being faced by them on account of poor voltage of agricultural feeders which not only burns their agricultural pump motors but also contribute in raising line losses significantly due to inductive nature of load and lack of suitable compensation in place.

In respect of Agricultural tariff, it is suggested that tariff has to be uniform for all areas whether urban or rural. Further, more concession for energy conservation including use of CFL be introduced.

Response from Discoms

The Discom has submitted that in accordance with the provisions of Tariff Policy, the tariff for each consumer category should be as per cost of electricity for that particular category and that each consumer category shall bear as minimum 80% of the cost of average cost of electricity of that particular category.

Further, the feasibility of effective metering in the agricultural sector is a serious constraint which is difficult to overcome. Meters are being provided on agricultural pre-dominated DTRs.

As regards uniform tariff for urban and rural areas is concerned there is a considerable qualitative and quantitative difference, between urban and rural areas, in the power supply. There is sufficient rebate in the energy charges for energy conservation in the pumping system. The use of CFL reduces the energy consumption for the same level of illumination and the consumer gets benefited by reduction in units and thus further incentive is not called for.

Commission's views

The Commission has kept in view the objector's suggestions and Licensees' response as well as the provisions of Tariff Policy while finalising agricultural tariff.

ISSUE NO.22: Tariff hike in water works

Issue raised by objectors

Representatives from Nagar Nigam, Indore and other related NGOs /activist have opposed the proposed tariff hike in water works category in LV & HV category. Further, in respect of 132kV connections of Nagar Nigam Indore (Narmada phase I, II & III), a request has been made to exempt this connection from fixed charge, meter rent, additional load charge. It is further requested that voltage wise cost should be worked out keeping in view of line losses, cost of power production with applicable minimum margin.

Response from Discoms

The Discom stated that proposed tariff rates are determined on the basis of average cost of supply and in accordance with the principles laid down in tariff Regulation. Further the rates are increased due to increase in cost of electricity. However, the energy charges at high voltage level are kept at reduced level due to reduced loss level. It may be appreciated that fixed nature of expenses of the Company has to be met from fixed charges hence Company is not in favour of objector's request in respect of exemption from fixed charges. Further, such preferential tariffs would set precedence and cause complexities in future. Further, it is again the spirit of the section 62(3) of the Electricity Act 2003, wherein "undue preference" should not be shown to any particular consumers of electricity.

Commission's views

The Commission has kept in view the objector's suggestions and Licensees' response as well as the provisions of Tariff Policy while finalising tariff.

ISSUE NO. 23 : Tariff for Telecom service Providers

Issue raised by objectors

Representatives from Telecom service providers requested to support the telecom industry, by converting the connection from non domestic / commercial category to industrial category or a separate category may be created for mix load.

Response from Discoms

The Discom stated that the Tele services are billed in non-domestic category (LV2). However, regarding industrial category, it has been clarified in the order that this category is framed for such industrial establishment where manufacturing of goods/material is done and also for processing of food items/agricultural items. However, a separate subcategory under schedule LV2 may be considered for Tele Services if the Commission finds it appropriate.

Commission's views

The Commission does not agree with Objector's suggestion of transferring telecom service provides to industrial category or creating a new category for them. However, to give impetus to proliferation of telecom infrastructure in rural areas suitable rebate in energy charges for such consumers situated in rural area has been provided.

ISSUE NO. 24: Reduction of Fixed charges

Issue raised by objectors

Some of the respondents have requested that the Discom's proposal for increase of fixed cost charges should not be accepted and should be retained at the existing level.

Response from Discoms

The provision of fixed charge is made in the tariff structure to recover the charges of fixed nature from the consumers which are incurred even when the consumer does not consume electricity.

Commission's views

The Commission has taken all factors into account while determining fixed charges and accordingly provided the same in the tariff.

ISSUE NO. 25: Minimum consumption / Minimum charges

Issue raised by objectors

Representatives from various consumer organisations have demanded that provision for minimum consumption/ charges for LT and HT industrial categories should be abolished.

Response from Discoms

The Discoms are of the view that normally tariff minimum should not be recovered from consumers if the fixed cost is fully recovered through fixed charges. However, if fixed charges are kept at very low level then there is no alternative but to levy minimum charges for some of the categories of consumers so as to keep revenue balance. Further, for those consumers whose average consumption per kW per month is more than tariff minimum, this provision will not make any change in billing. As such tariff minimum as proposed by licensee is justified and as per provisions of Regulation.

Commission's views

The Commission is of the view that normally tariff minimum should not be recovered from consumers if the fixed cost is fully recovered through fixed charges. However, if fixed charges are at very low level then there is no alternative left but to levy minimum charges for some of the categories of consumers so as to keep revenue balance. It is also to mention here that if the consumption is above the threshold limit of minimum charges then actual consumption charges only are recovered. The Commission has however reduced annual minimum consumption charges from 240 units per HP or per kW as the case may be to 180 units for rural areas.

ISSUE NO. 26 : 1) merge LF incentives in the tariff to reduce overall tariff ; 2) to provide LF incentives on all the units and not only on the consumption above the minimum prescribed level eligible for load factor incentive.

Issue raised by objectors

Some of the respondents from industries advocated that Distribution Companies instead of increasing Load factor incentive should merge LF incentive in the Tariff which will reduce the overall tariff. The load factor incentive may be given on all the units and not only on the consumption above the minimum prescribed level eligible for load factor incentive.

Response from Discoms

The basic purpose of providing Load factor incentive is to encourage the consumers for optimum utilization of load. The licensee's average power purchase cost and consumers average tariff will automatically get reduced if a consumer draws maximum power in the same Contract Demand and therefore the gain on account of reduction on average power

purchase cost will be passed on to the consumer through load factor incentive. Hence, consumer gets double benefit, first in terms of reduction in its average tariff and secondly through load factor incentive.

Apart from the foregoing, in general, incentive is a distinguishing factor between consumers according to the optimal utilization of resources put in place. Therefore, Discom does not agree with the suggestion given by the objector

Commission's views

The Commission is of the view that the load factor incentive should be progressively reduced, which it has been doing in the past tariff Orders. In line with this policy, the Commission has increased the threshold level of load factor eligible for incentive from 50% to 75% in this Order. The Commission does not agree with the suggestion to provide incentive on entire consumption instead of incremental consumption in excess of minimum benchmark level for load factor incentive.

ISSUE NO.27: Agro based industries such as Ginning, Pressing and oil mills units to be considered in the Agriculture category

Issue raised by objectors

Representatives from Agro based industries have requested that Ginning, Pressing and Oil mills units to be considered in the Agriculture category and tariff rate meant for agriculture should be made applicable for the Ginning, Pressing and Oil mills in HT & LT category. It is further stated that due to change of policy of Central Govt., ginning and pressing industries is not able to consume even monthly tariff minimum units. Hence it is also requested that off seasonal period for seasonal consumer should be kept for 4 to 6 month

Response from Discoms

The tariff for various categories is fixed by the MPERC considering various factors and in line with the provisions of the Tariff Policy. The tariff structure for seasonal consumers was fixed by the MPERC after considering the views of public and the nature of consumption of such industries.

Commission's views

The Commission has considered the objectors' suggestions and Licensees' views while finalising tariff and no changes in the existing provisions have been considered.

ISSUE NO .28: Power factor incentive for HV industries

Issue raised by objectors

The industrial consumers have suggested that power factor incentive for HV category should be provided above 0.90 in place of existing 0.95.

Response from Discoms

As per the Grid Code, Discom has to maintain the power factor at the level of 95%. Therefore, penalty levied on consumers for fall in the power factor below 95% is justified.

Commission's views

No change in existing provision is considered appropriate by the Commission.

ISSUE NO. 29 : Rounding off of Load factor integer (below 0.5 will be rounded off to lowest value and above 0.5 will be rounded off to higher value)

Issue raised by objectors

Representative from various industrial organisations have suggested that it is universal procedure to follow rounding of integer of digital value that integer below 0.5 will be rounded off to lowest value and above 0.5 will be rounded off to higher value, but in case of load factor it is rounded off to nearest lower integer as per the provisions of tariff Order for FY 10-11. This should be changed so that fraction below 0.5 is rounded off to lowest integer and above 0.5 will be rounded off to higher integer.

Response from Discom

The Discom stated that if load factor is rounded off to a higher value, then it will result in higher load factor and the consumer is wrongly benefited. Therefore, the LF rounded off to lowest integer is just, fair and reasonable.

Commission's views

The Commission has kept in view the objectors' suggestions and Licensees' views. The provision of load factor incentive is to incentivise higher usage of the infra structure and is a special provision for this purpose. The incentive cannot be claimed as right and nor its formulation can be insisted upon in a specific manner only. The Commission while finalising the incentive has been of the view that to earn this incentive the threshold limit of the integer is required to be achieved in full and not in fraction. Therefore no change in the existing provisions has been considered.

ISSUE NO. 30 : Temporary supply should not be charged higher than 1.1 times the normal charges

Issue raised by objectors

Representatives from industrial associations have suggested that temporary charges in all categories has to be similar and it shall not be higher than 1.1 times the normal charge. It is also suggested that in LT & HT category temporary demand can be allowed for a short period on permanent supply.

Response from Discoms

The provision of availing temporary supply for existing permanent connections is already there in case of HT consumers. It is not feasible to extend such facility to LT consumers, as majority of LT consumers are not provided with meters for recording the maximum demand. Temporary consumers do not provide a permanent revenue stream to the licensee and the power for temporary connections has to be procured sometimes from power exchanges, when there is no availability from long term power purchase agreements, which is substantially higher. Therefore, the proposed rate of 1.5 times of the normal charge is quite reasonable. A rate of 1.1 times appears to be inadequate compensation for the facility of temporary supply which is normally extended almost immediately

Commission's views

The Commission has provided billing of temporary connection at 1.3 times the rate applicable for permanent connections considering all relevant factors. No further change is considered appropriate. The Commission does not consider it feasible to provide temporary connection on LT through the permanent connection.

ISSUE NO. 31: Validation of data through independent experts

Issue raised by objectors

The representative from industrial associations has suggested that figures in the tariff proposals submitted by the Distribution companies need validation through a team of independent experts. The validation of data may be carried out in respect of;

- (a) Whether all the figures are consistent with the Regulations framed by MPERC in respect of determination of retail distribution tariffs.
- (b) Validation for demand forecast, realization rates and revenue estimates in respect of determination of retail distribution tariffs.

Response from Discom

The Discom stated that the matter had been considered by the Commission and the need for third party validation has not been endorsed. In this context, the objector may refer to the Commission's order in the petition no. 80/07 filed by the M.P. Electricity Consumer Society, Indore.

Further, such validation of data shall be a time consuming exercise and may ultimately prove to be redundant, as sufficient opportunity for validation, recording objections/suggestions and required transparency is already there in the procedure being followed at present.

Commission's views

The Commission agrees with the views expressed by the Discoms.

ISSUE NO. 32: Suggestion for change in category in respect of Poultry farm

Issue raised by objectors

Representatives from poultry farms have suggested that poultry farms fall into category of agriculture use hence their tariff should be at par with agricultural tariff and their tariff category should be converted into LV 5.1 (Agriculture use) from existing LV5.2 (For other than agriculture use).

Response from Discom

Making of new slab in a tariff order is dealt by the Commission, which is framed on the basis of consideration of various views of effected consumers and in companies are of the view that no changes are required.

Commission's views

The Commission agrees with the views expressed by the Discoms.

ISSUE NO. 33: Seasonal HV-IV tariff should be included in HV III

Issue raised by objectors

Representative from Federation of MP Chamber of Commerce suggested that seasonal HV-IV tariff should be included in HV III tariff except a different annual minimum charge be prescribed as is done in LT tariff

Response from Discoms

The Discom stated that their proposals are quite reasonable and justified

Commission's views

The Commission agrees with the view expressed by the Discoms and has not made any changes in the present tariff structure for these consumers.

ISSUE NO. 34 : Rationalization of EHV /HV category and rates for CPP

Issue raised by objectors

The representatives from industries have requested for rationalization of fixed charges for all categories of EHV/HV categories and make it lower for EHV category with respect to HV category. It should be linked with voltage wise cost of supply. The categories such as (i) Coal mines (ii) Seasonal (iii) Bulk residential users need to be abolished. It is also suggested that reasonable rate should be fixed for purchase of power from Captive Power Plant.

Response from Discoms

The petitioners have not proposed any structural changes in the tariff proposal, keeping in view of the convenience to the consumers. Tariff Policy does not envisage voltage-level wise cost of supply. The instant tariff proposal is in line with the Tariff Policy and Cross-subsidy road-map and Regulations notified by the MPERC.

Commission's views

The Commission has taken into account all factors including the provisions of cross subsidy road map while determining fixed charges and energy charges in the tariff. Hence, no change is warranted. The rate for purchase of power from Captive Power Plants has been suitable enhanced in view of higher input costs.

ISSUE NO. 35 : Tariff hike is opposed for Shopping Mall category

Issue raised by objectors

One of the respondents has objected that the tariff proposed for Malls should not be raised and it should be kept same as was for the FY2010-11. It is stated that that mall industry in any case, pays a large sum during the winter period as minimum charge, when the air conditioning requirement is reduced. This is not offset in the summer when their demand is high. This results in their actual tariff being much more than what is approved. Hence effectively, malls are already paying a higher than approved tariff due to seasonal factors.

Response from Discoms

The Discoms have stated that the Malls are not power intensive installations and they normally cater to the higher income groups as such have considerable freedom to enhance their service charges etc. The tariff proposals have been framed as per the

provisions of the Electricity Act 2003, the Tariff Policy, MPERC's Regulations, cross-subsidy road-map and average cost of supply and are rational.

Commission's views

The Commission has considered the objections/suggestions of the objectors and Discoms' views and while determining tariff for shopping malls appropriate tariff has been fixed.

ISSUE NO. 36 : Suggestion to levy domestic tariff for institutions/ hospital run by the Charitable Trust.

Issue raised by objectors

Representatives from the Charitable Trust have requested that institutions/ hospitals run by Charitable Trust and those who are working for the welfare of the mankind and providing free medical assistance should be categorized under domestic tariff category in place of existing non-domestic.

Response from Discoms

Domestic category is meant for residential purpose for domestic class only. However, there are two sub-categories (LV2.1 & LV2.2) under non-domestic tariff category and tariff rate of LV2.1 is comparably less than the LV2.2. The Commission may like to take an appropriate view on objector's request to put such charitable hospitals into LV2.1 tariff category.

Commission's views

The Commission does not find any merit in the contention of the stakeholders as the domestic tariff is mainly meant for residential users. Hence, no change is warranted.

ISSUE NO. 37 : Removal of second slab of energy charges for consumption in excess Of 50% load factor in HV category

Issue raised by objectors

Representatives from some of the industries & associations have suggested for removal of the differential rate of energy charges for consumption in excess of 50% load factor in HV category

Response from Discoms

The basic purpose of providing LF incentive is to encourage the consumers for optimum utilization of load. The licensee's average power purchase cost and consumers average tariff will automatically get reduced if a consumer draws maximum power in the same CD and therefore the gain on account of reduction on average power purchase cost will

be passed on to the consumer through load factor incentive. Hence, consumer gets double benefit, first in terms of reduction in its average tariff and secondly through load factor incentive. Apart from the foregoing, in general, incentive is a distinguishing factor between consumers according to the optimal utilization of resources put in place

Commission's views

The Commission subsequent to revisiting the entire structure of related tariff and its likely impact on the consumers has further taken the view that providing uniform energy charges for entire consumption at this juncture may not be appropriate in the interest of affected consumers.

ISSUE NO. 38 : Increase in Incentive for prompt payment to extent of 1% is suggested.

Issue raised by objectors

The representatives from various industries & industrial organizations have requested that prompt payment rebate of 1% should be given in place of existing 0.25%.

Response from Discoms

An incentive of 1% for period of only 7 days seems to be too high. Therefore, the proposal of petitioner is reasonable.

Commission's views :

The Commission does not agree with the suggested change and has decided to continue with the existing provisions of incentive @0.25% for payment in advance of 7 days before the due date.

ISSUE NO. 39 : Rebate for supply through rural feeder

Issue raised by objectors

Representatives from industrial associations have suggested that rebate of 15% should be given on tariff rate of demand and energy charges. It is further suggested that declared rural feeder should be those feeder which are to be declared rural feeder (33kV & 11kV) from EHV substation (132kV & above only).

Response from Discoms

The Discoms have stated that request made by the objectors for providing rebate for supply through rural feeder is not acceptable as the Commission has already taken all care in its retail supply tariff order for FY2010-11 for H.T consumer and thus, the provision is not required to be introduced for rebate of 15% on tariff rate of demand charges and energy charges.

Commission's views

The Commission has considered the matter and decided to continue with existing provisions in this regard.

ISSUE NO. 40 : sale forecast

Issue raised by objectors

Representatives from various industrial organisations have suggested that in absence of singular full proof method of forecasting system in place ,it is necessary to check up the past forecast made with actual and corrections factors be worked out. It is further opined that if the reliability and quality of power improve, the consumption would be more than. It is also suggested that other factors such as power saving with star levels issued by BEE and wide scale of use of CFL under National Energy Efficiency mission should also be considered.

Response from Discoms

The sale forecast has been done on the basis of annual CAGR method, which fully captures the annual growth trends and rates. On the whole, with the accumulation of sufficient historical data and trends, this method would automatically take into account all the impacts such as energy conservation measures, efficiency drives, increase in reliability, continuity and quality of supplies etc.

Commission's views

The Commission is in agreement with the views expressed by the Distribution Companies, however this year the filing of sale for unmetered connections which was found in excess of prevailing benchmarks has been pruned down to that extent.

ISSUE NO. 41 : Summary of ARR

Issue raised by objectors

It is suggested by the respondents that summary of ARR should be made available in Hindi to ensure active public response which is intended under Electricity Act 2003

Response from Discoms

As per the directives of the Commission, the main features of the ARR and tariff proposals, in Hindi and English both, were published in the newspapers. Any objector who is interested to offer his comments in detail, invariably, has to go through the relevant details of the petition.

Commission's views

The Commission is of the view that Discoms should also submit a summary of their petitions and proposals which should be both in Hindi as well as English.

ISSUE NO. 42 : Uniform tariff across the Discoms

Issue raised by objectors

In the tariff order issued by the Commission on 18th May 2010, the issue of 'Uniform Retail Tariff across Discoms' was discussed and based on discussions with the State Govt. it was decided to have uniform tariffs for all three Companies. However, it was found that different tariffs rates are proposed by the distribution companies. It is submitted that different tariffs for same categories in different part of the states will not be acceptable to general public and industry. It is necessary to ascertain views of State Govt. before tariff proposals are considered.

Response from Discoms

The distribution licensees in the state function as commercially separate entities in their respective areas of operations and have different consumer-mix, costs and incomes, normative regulatory parameter. Hence, the question of "clubbing" the tariff proposals does not arise. The decision about maintaining a uniform tariff in the state is a prerogative of the Commission in consultation with the State Government.

Commission's views

The Commission is in agreement with the views expressed by the Distribution Companies and as per the advice of the GoMP has kept uniform tariff across the State.

ISSUE NO. 43 : Determination of cost of supply to Agriculture consumers.

Issue raised by objectors

The representatives from the consumer society have suggested that an effort should be made to work out the cost of supply to agriculture category separately. The tariffs have to be based on cost of supply. Some of the respondents have suggested that in order to control the wastage of electricity and preserve the ground water ,it is necessary that a reasonable level of user charges tariff is levied on such consumers and they should have provision of meters.

Response from Discoms

The matter is to be decided by the Commission in consultation with the State Govt.

Commission's views

Working out cost of supply in isolation only for agricultural consumers is not justified as the feeders are not separate and all the categories of consumers in rural areas including industries, domestic, non-domestic are fed from the same feeder. Moreover, the Discoms are not yet geared up to work out category wise cost of supply by a method which is acceptable to all. The Commission, therefore, finds the suggestion as not acceptable.

ISSUE NO. 44 : Initiatives towards R&D & promotion of renewable sources as Distributed Generation.

Issue raised by objectors

The Licensees do not have any research and development facilities or a separate cell and also do not have any fund allocation in ARR towards R&D activity. It is stated that there are scope for the development of renewable based distributed generation and utilization schemes by using solar panels for irrigation and house lighting in the entire villages. It is requested that Licensees may be directed to make their own R&D cell for development of renewable energy sources in the rural areas and make suitable provisions in the ARR for the required fund.

Response from Discoms

The petitioners appreciate the concerns of the Objectors about the need of research and development work. The Commission may like to take an appropriate view in the matter. Regarding renewable energy development, the State Government has prepared an intensive incentive policy for promoting generation of non conventional energy including solar energy and the Licensees adhere to it.

Commission's views

The Commission agrees with the views of the Discoms and would give due consideration if the Discoms come up with worthy proposals.

ISSUE NO. 45 : Claiming high distribution losses over normative loss

Issue raised by objectors

One of the consumers from East Discom has observed that the East Discom has proposed the distribution losses at 29.35 % including additional 2.35% losses on account of R.E. Co-operative societies (REC). The REC are just like any other Rural Divisions in the area of the Company. Therefore, the merger of the area of REC should not be treated as a cause for increasing the average losses of 27%, as per the normative level fixed by the Commission. The burden on his account should not be passed on to the consumers; more so, because the segregation of 11 KV feeders for agricultural consumers has already advanced substantially as reported in news papers

Response from Discoms

The MPERC Regulation G-35 of 2009 was framed when RECs were the HT consumers of the Discom and they were operating their business independently. After the issue of the Regulation, the petitioner on the directives of MPERC had taken over the business of these RECs w.e.f. 15th Aug'2010 and the consumers of the then societies are now the LT consumers of the petitioner. Due to such a sudden change in the scenario after the issue of Regulation, there has been an increase in the losses by almost 2.35% over and above the normative loss level specified in the Regulations, increase in O&M expenses - such as employee costs, A&G expenses and R&M expenses without corresponding increase allowed in the normative expenses. Therefore due to increase in such expenses there is a substantial increase in the overall cost.

As per the Tariff Policy, uncontrollable costs are to be recovered speedily to ensure that future consumers are not burdened with the past costs. Therefore, it is necessary to recover such prudent and legitimate costs as soon as possible, rather than leaving them as a legacy for future consumers, or postponing them indefinitely. The petitioner is sensitive to the consequences of such recovery and always strives to minimize the magnitude of tariff hikes and shocks.

Commission's views

The Commission is of the view that the claimed increase in losses on account of merger of RE Societies is not justified. The Discom needs to increase efficiency of the operations instead of seeking hike in normative distribution loss levels.

ISSUE NO. 46 : Terminal benefit

Issue raised by objectors

- (i) The representatives from various associations of Distribution Companies including MP pensioners associations have requested that the provision for contribution to the terminal benefits Trust as provided by the East & West Discoms in their ARR as per additional submission should be allowed so that the Funds could be built up in terminal benefit trust.
- (ii) In respect of the Central Discom, the liability towards terminal benefit could not be included in ARR as BOD of the Company has not accord the approval in this regard.

Response from Discom

The Petitioner agrees with the contention of the stakeholder and requests the Commission to consider the request of stakeholder and allow such costs as claimed by the petitioner in its ARR for FY12.

Commission's views

The Commission has already notified amendment in the Regulations and agrees to provisionally allow expenses towards Pension and Terminal Benefits in the ARR for FY 11-12. The expenses to the extent of Rs.361.90 Crore for FY 11-12 has been included in the ARRs of Discoms .

ISSUE NO. 47 : Separate Tariff to avail HT connection for domestic purpose

Issue raised by objectors

Representatives from Association of Industries MP, Indore have made a request that separate tariff for consumers who want to avail HT connection for domestic purpose may be introduced.

Response from Discom

The Company has not submitted the response in the matter.

Commission's views

The Commission permitted individual HT connection under HV category 6.2 of the tariff.

A5: RETAIL TARIFF DESIGN

Legal Position

- 5.1 The Commission has determined the Aggregate Revenue Requirement for FY 2011-12 for the three Distribution Companies based on the Regulations notified on 9th December 2009, under Sec 181(2) (zd) read with Sec 45 and 61 of the Electricity Act, 2003. The aggregate revenue requirement approved by the Commission for the Generating Company, Transmission Company and the Distribution Companies forms the primary basis for recovery of charges from consumers through retail tariffs.
- 5.2 Further, in determining the consumer category-wise tariffs, the Commission is also guided by the provisions of the Tariff Policy, notified by the Government of India on 6th January, 2006.

Commission's Approach to Tariff Determination

Uniform vs. Differential Retail Tariffs

- 5.3 In consultation with the State Government, the Commission formed the view that uniform retail supply tariffs should be continued for FY2011-12 also.
- 5.4 The GoMP issued a notification on 16th May,2011 in respect of the revised allocation of the existing generating capacity among the three Discoms to make it possible to have a uniform tariff with more or less a balanced revenue income vis-à-vis the approved aggregate revenue requirement of the Discoms. The revenues worked out using FY 2011-12 approved tariffs when compared with the approved ARR for FY 2011-12 results in non-uniform revenue gaps/surpluses across the three companies. The GoMP has reallocated the generating capacities among the Discoms, vide notification mentioned above, so as to rebalance the power purchase costs among the Discoms. This makes it possible to achieve a more or less balanced revenue income at approved FY 2011-12 tariffs vis-à-vis the approved ARR of FY 2011-12 for all three Discoms, thereby ensuring uniform retail tariffs in the State.
- 5.5 Determination of the aggregate revenue requirement is based on loss level trajectory provided in the MPERC (Terms and Conditions for Determination of Tariff for Supply and Wheeling of Electricity and methods and Principles for Fixation of Charges) Regulations, 2009.

Linkage to Average Cost of Supply

- 5.6 In determining the tariffs, the Commission has given due consideration to the requirement of the Electricity Act, 2003 that consumer tariffs should reflect the cost of supply. The average cost of supply for the year FY 11-12 works out to Rs.4.49 per unit as against Rs.4.22 for FY 2010-11. The table below shows the cost coverage on account of tariff for FY 2011-12 as compared to the cost coverage as determined by the Commission in the FY 2010-11 Tariff Order:

Table 100 : Comparison of tariff v/s average cost of supply

Category/ sub-category	Average realisation as % of Average CoS		
	FY 2010-11 (as per Tariff Order dated 18 th May,10)	FY 2010-11 (Target as per Cross- Subsidy reduction roadmap notified on 6th October 2007)	FY 2011-12 (achieved as per this Tariff Order)
Domestic	94.85%	95%	94.79%
Non-domestic	138.78%	120%	139.80%
Public water works	90.13%	95%	88.01%
Street Light	92.01%	100%	90.55%
Industrial	123.94%	120%	122.64%
Agriculture	74.62%	80%	73.23%
Railways	125.27%	120%	124.09%
Coal Mines	129.28%	120%	129.38%
Industrial	121.23%	120%	118.54%
Non-industrial	125.62%	120%	128.96%
Irrigation, PWW and Other than agriculture	95.60%	95%	97.51%
Bulk residential users	100.16%	97%	97.28%
Bulk supply to exemptees	88.42%	95%	73.45%

- 5.7 The cost structure has undergone a change during the year as explained in previous sections of this order. Due to increase in costs primarily on account of power purchase there has been increase in average cost of supply. In order to bridge the ARR gap, the Commission has consciously attempted to align the tariff keeping in mind the cross subsidy road map as a guiding factor as also other relevant factors. A number of factors have affected the fixing of tariff which includes the effect of increase in prevailing rates for the different consumer categories. Attempt has however been made to progressively move forward to meet the objectives of the Tariff Policy.
- 5.8 The Commission has made some changes in the tariff design for FY 2011-12 and has also introduced a new category under HV tariff considering the suggestions/ objections of the Objectors. These changes are mentioned in following paragraphs.
- 5.9 **Levy of additional charges if the maximum demand(MD) exceeds 105% of contract demand:** At present the additional charges are levied if the MD is recorded in excess of contract demand. The Commission has reconsidered the matter on representation of the

stakeholders and decided that the additional charges on excess demand will not be levied if the MD recorded is up to 105% of the contract demand.

- 5.10 **Rate of levy of additional charges:** The rate for levy of additional charges shall be 1.3 times instead of 1.5 times of fixed and energy charges if the excess demand is recorded, for all LV/ HV categories, where applicable.
- 5.11 **New Power Intensive consumer category under HV tariff:** A new sub-category under tariff schedule HV-3 under heading of “Power Intensive Consumers” has been introduced with lower tariff as compared to other industrial connections to incentivise power intensive industries. Consumers under new category shall however be not eligible for load factor incentive.
- 5.12 **Revision in structure of load factor incentive:** The Commission is of the view that the load factor incentive should be progressively reduced, which it has been doing in the past tariff Orders. In line with this policy, the Commission has increased the threshold level of load factor eligible for incentive from 50% to 75% in this Order.
- 5.13 **Reduction in minimum consumption charges:** The Commission considering the suggestions from the Objectors has reduced levy of annual minimum guaranteed consumption in all those LT categories, where applicable, from 240 units per HP or per KW per annum to 180 units.
- 5.14 **Revision in levy of power factor incentive:** The Commission considering the difficulties expressed by the stakeholders in rounding off the fractional power factors, has decided to make it applicable for whole integer instead of adopting the methodology of rounding off the fraction. Thus for entire range of power factors recorded in fraction between the lower and higher integer, the incentive shall be payable at a single rate. This is explained in details in the relevant HV/ LV tariff schedules.
- 5.15 **Rebate to Telecom Industries in rural areas:-** The Commission has considered the submission made by the Telecom Infrastructure service providers that they need impetus to increase the coverage of communication network in rural areas for catering to telecommunication needs to rural section of the society. The Commission has therefore provided a rebate in energy charges for connections of mobile towers in rural areas.

A6: COMMISSION'S DIRECTIVES

- 6.1 The enactment of the Electricity Act, 2003 has initiated the reform process in the power sector to usher in efficiency and competition amongst the entities operating in the Sector as well as to improve their commercial viability so as to provide reliable quality supply to the consumers at an affordable price. The power utilities are not only expected to become commercially viable but are also expected to bring desired level of efficiency in their services to meet the expectations of the consumers. The Regulation of the sector under the provisions of the Act requires defining framework within which the power companies are required to function. The Commission is concerned over the fact that a lot of time has elapsed since the process of reforms began. However the desirable levels of operations have not been achieved. The Commission in the tariff orders issued in the past has been consistently advising the Distribution Companies to align with the new initiatives envisaged in the Electricity Act, 2003 and consequent policies to fulfil the objectives of reforms.
- 6.2 The distribution licensees have submitted the status of compliance against various directives issued in the previous tariff Order. A review of the submissions made by the distribution licensees in this regard reveals that although the Discoms have initiated the required steps but tangible results have not emerged. The Commission wishes to focus on those issues that are of high priority for overall improvement in the performance of distribution system. The Commission in its Retail Tariff Order for FY 2010-11 had issued a number of directives with focus on issues critical to the performance of the Sector. The status of compliance submitted by the Licensees, observations and further directives of the Commission are as given below :
- 6.3 **Distribution losses:**

Commission's Directives: The distribution companies were directed to make all out efforts to show definite improvement in reduction of losses. It was directed by the Commission that Licensees should concentrate on this very important issue during the ensuing period so as not only to reach the level of normative losses but improve further.

Status Reported by Discoms

East Discom:

1. The Discom has submitted that the loss level which was 37.23% for the year 2008-09 has reduced to 33.45% during 2009-10. They have achieved the reduction of loss level by 3.78%. As per the loss trajectory notified by the GoMP the target for reduction of losses in the year 2009-10 was 3.00% i.e. the reduction of losses from 29.5% to 26.5%. The Discom has already achieved more than the desired reduction in losses.

2. The company has stated that it has submitted the 5-years Capex plan for reduction in technical losses and it is expected that after such investment the desired reduction in losses shall be achieved.

West Discom:

The Discom has submitted that:

1. In order to reduce losses in LT category, an intensive campaign was launched during the year 2009-10 to serve maximum number of new domestic light and fan connections. As a result, more than 3.81 Lacs DLF connections have been served during the year.
2. More than 60 vigilance teams and field units equipped with vehicles, man power and home guard jawans were deployed for checking of unauthorized connections and detection of theft especially during Rabi Season. As a result, 127695 nos of illegal connections/malpractice cases have been detected up to Nov'10 in all categories and an amount of Rs.140.00 Cr was billed and Rs.60.00 Cr. realised.
3. A special program has been launched to physically check the connected load of agriculture pumps because many consumers are utilizing pump of higher capacity than the sanctioned load. Around 126104 No. of pump locations were checked and 20930 nos. of connection were found with higher capacity load. Necessary action has been taken to discourage the excess load than the sanctioned.
4. Under PFC scheme, installation of 11 KV capacitors in 33/11 KV Substations on 11 KV feeders have been provided. Total of 496 MVAr capacity of capacitor banks have been commissioned and further work order for 286 No.11 KV capacitor bank (total of 248 MVAr) has also been awarded under ADB-II; Tr.-V. As a result, improvement in power factor and voltage is observed, which has impact in reduction of technical loss to a great extent. Over loading of power transformers and 33 KV feeders and loading in 11kV lines have reduced causing reduction in losses. Addition of proposed capacitor bank will further reduce the technical loss in distribution network.
5. Automatic meter readings have also been implemented in case of LT high value consumers having high consumption in city area. HVDS system has been implemented in banana and sugar cane producing belt of Burhanpur district and some areas of Narmada belt under ADB scheme with provision of 291 KM new 11 KV line , 805 KM LT to HT conversation, and 3900 No. DTRs installation, for reduction of losses. These initiatives have good impact of reducing the commercial loss.

Central Discom:

1. For 2009-10 distribution losses were 35.15%, which is 1.15% higher than the milestone for distribution losses as per target given by GoMP and approved by Commission. Loss trajectory for MYT period 2010-13 as given in the Regulation & AT & C Loss targets as fixed by GoMP are tabulated below:-

Table 101 : Loss Trajectory for Central Discom

Year	2010-11	2011-12	2012-13
Distribution Loss %	33	29	26
AT & C Loss %	34.48	30.48	26.48

2. Effective loss reduction strategy in LT segment is in place. Capex has been linked with loss reduction potential and being regularly monitored/modified with that goal. Licensee has inherited an inefficient distribution network which has not been designed on broad commercial principle, rather erected to serve requirement of welfare of the State. Assets are still in use even after completing useful life. Licensees cannot plan to revamp whole distribution network and erect new one, even if finance is available, due to serving obligations. Modifications in existing network and bringing it at par with best distribution networks is a huge task, which licensee is performing and picking up. Strategy being followed to bring down the loss level is as follows:-

i. Execution of work under RAPDRP Part A & Part B:-

Work under this scheme is under execution in 32 major towns having population more than 30,000 as per census of 2001. Scheme aims to establish base line data of AT&C losses and reducing this to 15% level through carrying out work as identified in each Town. Status of implementation is as follows:-

Part A:- Work under RAPDRP, Part A includes preparation of base line data, consumer Indexing, GIS mapping, metering of distribution transformer and feeders, - automatic data log in for all DTRs and feeders, IT application for meter reading, billing and collection, energy Accounting and auditing, etc. Contract for this has been awarded to M/s TCS Mumbai with scheduled date of completion as Aug 2011.

Part B:- Works under RAPDRP, Part-B included Renovation, Modernization and strengthening of sub-stations, Reconductoring, Load Bifurcation and feeder separation, Load balancing, HVDS (11 KV), Aerial bunch conductoring in dense area, installation of tamper proof electronic meters in place of electromagnetic energy meters etc. Work order is expected to be issued soon with scheduled time of completion as 24 months i.e. Nov. 2012.

After completion of Part-A & Part-B up to Nov. 2012, all these 32 towns are targeted to achieve 15% AT&C losses.

ii. HVDS work of 156 Smaller Towns under ADB tranche:-

On the lines of RAPDRP work for 32 towns, other 156 towns under licensee's area will also be brought to AT&C level below 15% by March 2013. In these towns, HVDS and separation of 11 KV feeders for pump consumers and domestic consumers will be executed with total cost of scheme as Rs 170 Crore. Apart from feeder separation, consumer indexing & asset mapping along with installation of I.T. infrastructure on the line of RAPDRP Part A is also proposed for these towns. Bid document of this work is finalized. The work is scheduled for completion by March 13.

With execution of above two projects 15% AT&C loss level of Urban area will be achieved which leads to saving of 1493 million units and revenue growth by 750 Crores per year after March 2013.

iii. Segregation of rural feeders into agriculture and others:-

Licensee is serving approx. 3.20 lakh agricultural consumers, contributing LT sale of 2305 MU and of total LT sale of 4692 MU, which is 49 %. Apart from that approx. 1.70 lakh temporary connections are also served during Oct. – March period every year (source- R-15). Also, approx. 10.37 lakh DL&F consumers are on book in rural area (Sept.2010), out of which 4.17 lakh are un-metered. At present rural 11 KV feeders are catering requirement of all types of connected consumers. With an objective to separate domestic load in rural area and for conversion of existing LT system to HVDS, Feeder Separation Scheme has been prepared and is under implementation.

The scheme will be implemented in two phases. Brief summary of the scheme is as follows:-

Table 102 : Implementation Schedule of Feeder Separation Scheme as filed:

Phase	Districts covered	Estimated Cost	Implementation Schedule	Remark
Phase I	Bhopal, Harda, Raisen, Vidisha, Hoshangabad, betul, Sehore	454.55	01.06.2010 to 31.05.2012	Letter of Acceptance Issued.
Phase II	Guna, Ashok Nagar, Rajgarh, Datia, Bhind, Morena, Shivpuri, Sheopur and Gwalior	717.88	01.01.2011 to 31.12.2012	Proposed for ADB funding. Bids are expected to be issued in January 2011.

Under this contract, certification of distribution loss from Distribution transformer premises is required and it is anticipated that problem of illegal connections in rural DL&F

sector will be completely wiped out. Further, regulated supply of 8 hours to agriculture pumps will help in bringing down loss in rural area to acceptable level.

iv. RGGVY SCHEME:

Scheme of rural electrification along with serving connections to rural DL & F both BPL & Non BPL Category is under implementation in 8 districts, namely Guna, Ashok Nager, Betul, Harda, Datia, Morena, Sheopur & Shivpuri with estimated cost of Rs.499.06 Crore. Schedule date of completion of project is December 2010 for Guna & Ashoknagar and March 2013 for rest of districts. Under this scheme approximately. 5.91 lakh connections will be released by laying new 9410 K.M. 11 KV line & 4058 KM ABC Cable L.T. line in 283 un-electrified & 6682 already electrified villages. Apart from electrical line network, 4747 No. 10 KVA (1 Phase), 2162 No 16 KVA, 831 No. 16 KVA (3 Phase) & 2861 No. 25 KVA (3 Phase) will be installed in these villages for infrastructure strengthening. As on 31.10.10, 66198 connections have been served which includes 29495 connections to BPL category in these eight districts. Also, 75 Nos of un-electrified villages have been electrified & intensive electrification of 904 has been done up to 31.10.2010.

v. Enhancement of Normative consumption norms of un-metered Agriculture & DL&F consumers:

Licensee is serving app.3.20 lakh agriculture and 16.53 lakh DL&F consumers as on 31.03.10. Out of this, 2.18 lakhs agriculture & 2.79 lakhs DL&F consumers are un-metered. Normative consumption approved by Hon’ble Commission @ average 100 units/ month and 30 units/month (for rural area) are at lower side. It is requested that consumption based on sample meter reading i.e. 152 unit/month for agriculture, 151 units /month for urban DL&F & 69 unit/months for DL&F (rural) may be allowed for year 2011-12 and onwards.

If the norms of un-metered sale is taken as per the details given in preceding Para, the loss level for the MYT period may be reduced as given below:-

Particular	2010-11	2011-12	2012-13
	(Million Units)		
Additional sale if consumption allowed as per sample meter reading	788	836	913
Distribution loss trajectory	33%	29%	26%
Distribution loss on filed sale+ Additional sale as per sample meter reading	26%	23%	19%

Commission’s observations and directives

In the first MYT period ending in FY 2009-10, the loss level trajectory was prescribed by the Commission as suggested by the State Government. It is seen that none of the distribution companies could come close to the prescribed loss level trajectory during the entire MYT period. It was in this context that the Commission revisited loss level trajectory and raised it close to actual in the new MYT effective from FY 2010-11. As the tariffs as well as the true-ups are based on normative loss levels, the cost of serving losses beyond normative levels is being borne by the distribution companies. The power procurement cost, in the recent past, has registered substantial increase. Inability of distribution companies to achieve normative losses is making large impact on their finances and has resulted in their incurring substantial operating losses. The Commission has observed that the efforts so far made to reduce either technical losses or commercial losses have not been of desired level. Given the rising cost of power it has now become imperative that distribution companies make all out efforts to improve capex implementation as also metering, billing and detection for plugging commercial leakages. The Commission therefore once again directs that the licensee should improve upon their efforts to cut down both technical and commercial losses so that they not only reach the level of normative losses but go beyond that so that their losses are at a level comparable with better performing utilities in the country.

6.4 **Meterization of un-metered connections – revisions of billing benchmarks for un-metered connections**

Commission’s Directives: The Commission had directed as follows:

- i. All un-metered domestic connections in urban areas be provided with the meters by end of December ,2010
- ii. All un-metered domestic connections in rural areas should be provided with meters in a phased manner and metering be completed by March, 2011.
- iii. Not less than 25% of the distribution transformers having pre-dominantly agriculture load spread over the entire area of the Company be provided with the meter by end of December, 10.
- iv. Data of all metered DTRs but not less than 10% of the total DTRs having pre-dominant agriculture load and capturing diverse consumption pattern, should be collected and compiled on a regular basis. The consumer indexing and verification of actual connected load be also got done and compared with the recorded consumption. The Commission directs to submit the above data and its analysis on a quarterly basis and also along with the petition for ARR and tariff proposals for the next year.

Status Reported by Discoms

East Discom:

- i. It is submitted that the company has achieved the target of 100% meterization of Domestic categories in urban area. For rural area, due to stressed financial condition and limited resources the company is not in a position to procure and install the meters on all un-metered domestic consumers of rural area. Since the quantum of un-metered DL&F consumers in rural area due to regularization of ghost consumers has already reached to the tune of 7 lakhs, the company is facing difficulty for procuring such a huge quantum of costly meters with stressed financial conditions.
- ii. Regarding DTR meterization of agricultural predominant DTRs, the company has started implementation of HVDS scheme under ADB funding wherein meters for individual agricultural consumers are being installed inside the distribution box of DTR. Under ADB scheme it is proposed to install 17656 nos. DTR in first phase and 16739 nos. DTRs in second phase. On all the 34395 transformers, total 130761 Agricultural consumers will be provided with meters. Till 31st July'2010 total 7950 DTRs have been installed with 22597 consumer meters. Under feeder bifurcation scheme the agricultural feeders are being separated with provision of feeder meters.
- iii. It is submitted that the company is in progress for collecting the data from field for those consumers who have been provided metered connections under HVDS scheme and the same will be submitted.

West Discom

- i. As of Sep, 10 the Company has made work plan to install meters at 100 % un-metered DTRs. It is submitted by the Company that out of 23,31,928 domestic consumers as on Sep,10, un-metered domestic connections exist to extent of 1,85,867 (As per R-15 of domestic connections). The meterisation programme shall be completed by September, 2012.
- ii. Status of DTR metering: It is submitted that out of 60194 nos. of predominantly agriculture DTRs, 8073 DTRs have been provided with meters. It is submitted that provision for installation of 24,677 meters on DTRs have already been made under ADB scheme and work is under progress.
- iii. Regarding compilation of data of at least 10% of total DTR having pre-dominant agricultural load, it is submitted that data of DTRs are being regularly collected and submitted. As per the abstract of data of agriculture predominated DTRs, the consumption pattern on the basis of which Commission may consider monthly consumption per HP are listed below :-.

Sr. No.	Category	No. of DTR	No. of Consumer	Consumption
---------	----------	------------	-----------------	-------------

1	Un-metered agriculture in Rural area.	5675	20032	78 Units/H.P./Month for non-season period. 180 Units/H.P./Month for Season period. 250 Units/HP/Month for Banana & Narmada River Belt.
---	---------------------------------------	------	-------	--

The Discom has requested to consider the above data for determination of units for agriculture consumers of West Discom, which is having more than 50 % input and sold units of agriculture base in ARR for MYT period 2010-11 to 2012-13 and also in true up for year 2008-09 and 2009-10, which will be the real justice in the interest of organization, nation as well as public at a large.

Central Discom

(i) All un-metered domestic connections in urban areas should be provided with the meters by end of Dec.2010.

In compliance to above directives, the meterization status of urban domestic consumers is reported as follows:-

S. No.	Particulars	March 10	Sept. 10	% Increase / Decrease with respect to March 10
1	Total Urban domestic consumers	855587	899067	5.08 %
2	Un-metered – Gen	16,334	10115	
	– SC/ST/BPL	3050	4176	
	Total Un-metered	19384	14291	(-) 26.27 %
3	% of un-metered with respect to Total consumers	2.26 %	1.59 %	(-) 0.67%

The Discom has stated that from the above table it may be seen that company is constantly improving meterization status in urban area. As on Sept. 2010 only 1.59 % of connections are to be provided with meter. Prime focus of licensee is to meterise balance un-metered connections & replace stop /defective meters on demand .Provision of procurement of meters for urban area has been made in various on-going scheme viz. RAPDRP (part B –about 2.45 lakh), HVDS (ADB tranche VI) & through HUDCO assistance @5400 meters per quarter .The work is likely to be complete with completion of these scheme i.e. March 2013.

(ii) All un-metered domestic connections in rural areas be provided with meters in a phased manner and meterization be completed by March 2011.

In compliance to above directives, the meterization status of Rural domestic consumers is reported as follows:-

Sl. No.	Particulars	March. 10	Sept. 10	% Increase / Decrease
---------	-------------	-----------	----------	-----------------------

				with respect to March 10
1	Total Rural domestic consumers	797928	1037096	29.97 %
2	Un-metered – Gen SC/ST/BPL	67690 192415	106652 310547	
	Total Un-metered	260105	417199	60.39 %
3	% of un-metered with respect to Total consumers	32.60 %	40.23 %	7.63 %

About 3.10 lakh consumers under SC/ST/BPL Category & 1.06 lakh consumers under General Category are un-metered as on Sept. 2010 in rural area. It may be seen that nearly 2.39 lakh consumer have been added after March, 2010. This drastic increase in figure is due to the fact that as per directive of MP Govt. the licensee is implementing a scheme to regularize all domestic household connections as per voter list. In this scheme the consumers are released connections under un-metered category. Licensee plans to take care of these un-metered connections under proposed /on -going schemes viz. RGGVY (6,25,235 No), HVDS under ADB Tranche V (34,390 No.), Feeder separation (8,61,187) and through procurement of meters under HUDCO assistance @8100 meters per quarter. The licensee envisages completing the balance consumer metering in rural area including replacement of stop /defective meters by December, 2016.

Complete Meterisation Programme:

Meterization plan of all DL & F consumers' urban and rural, non-domestic and other consumers is under implementation. In this plan meterization of 7500 Agriculture dominating DTRs will only be done. Further feeder metering work will be got executed under various running contracts. Company has drawn very aggressive plan for meterization of un-metered DLF consumers by March 2013 in urban area & by Dec 2016 in rural area. Provision for meterization is done in various on –going schemes; also meters @ 13500 per quarter are being procured through HUDCO finance.

(iii) Not less than 25 % of the distribution transformers having pre-dominantly agriculture load covering the entire area of the company be provided with the meter by end of March 2010.

Status of DTR meterization:

DTR metering Target & status is as given below:

Scheme	No. Of DTR	Progress /Target for completion	Area Covered	Scheme

APDRP	7865	Already Installed	Town area	APDRP
HUDCO	7500	Work in Progress. 5953 meters installed./Dec.2010.	Rural feeders to know consumption pattern of agriculture consumers	HUDCO
ADB Tranch IV	3679	Work in Progress. 3257 meters installed. /Dec 2010	Part of Gwalior & Morena Ambha city	ADB Tranch IV
RAPDRP	6217	/March 2011	32 RAPDRP Town	RAPDRP

Work order for providing AMR meters on distribution transformers installed on predominantly agriculture feeders with two years energy audit has been placed as follows:

Agency	Contract Amount
(1) M/s Omne Agate System Pvt. Ltd., Chennai	10.815 Crs.
(2) M/s Genus Power Infrastructure Ltd., Jaipur.	4.853 Crs.

Work of installation of AMR on Distribution transformers will cover 175 No. 11 K.V. feeders, and 20 No. of O&M Divisions as show below:-

Region	Name of Circle	Total No. of Division covered	No. of 1 KV Feeder covered	No. of DTs covered
Bhopal	Bhopal (O&M)	03	34	1497
	Hoshangabad	03	22	1063
	Betul			
	Vidisha	02	13	698
	Rajgarh	03	13	622
	Sehore	02	17	587
Gwalior	Shivpuri	02	11	452
	Guna	03	12	523
	Gwalior (O&M)	01	33	1045
	Bhind	02	10	586
	Morena	01	10	426
	Total		20	175

*Tentative against 7500 DTR to be meterised from HUDCO Finance.

Progress of DTR meterization from HUDCO finance& against above two mentioned contract up to March 2010 & Sept 2010 is summarized as follows:

Circle	Target	Achievement	
		March 2010	Sept 2010
Bhopal (O&M)	1497	1493	1497
Hoshangabad	1063	761	765
Betul	-	-	-
Vidisha	698	76	311
Rajgarh	622	56	622
Sehore	587	279	596
Shivpuri	452	20	361
Guna	523	74	362
Gwalior (O&M)	1045	751	1041
Bhind	586	-	-
Morena	426	398	398
Total	7499	3908	5953

From above, it is clear that as on 30/09/2010 nearly 6000 DTRs have been metered against total 51525 agricultural predominant DTRs, which is 12 %.

(iv) Data of at least 10 % of the total DTRs having pre-dominantly agriculture load should be collected & complied on regular basis:

Agriculture DTR Data:

Regarding compilation of data of at least 10% of total DTR having pre-dominant agricultural load, the Discom has submitted that approx. 51525 DTRs are working in pre-dominantly agriculture area & this figure will increase further due to various ongoing capital schemes in rural area.

Licensee foresees installation of 10,520 additional AMR metered DTRs of smaller capacity under HVDS scheme by removing existing DTRs from service. After installation of AMR metered DTR under HVDS ,whole matrix will change .

DTR metered data of agriculture pre-dominantly area is being regularly collected & same is submitted with the petition. The data is from April -09 to March-10 period. Similarly, data for un-metered domestic Light & Fan category of consumers connected to 37 DTR has also been collected; same is also submitted. Consumption pattern on the basis of above data for agriculture un-metered Rural and for Domestic Light & Fan, both Rural & Urban for the period 2009-10 is worked out as follows:-

S. No.	Category	No. of DTR	No. of Consumer	Consumption
--------	----------	------------	-----------------	-------------

1	Un-metered agriculture in Rural area.	159	472+ Betul circle	152 Unit/H.P./Month (Average)
2	Un-metered Rural L&F	15	1437	69 Units/Consumer/Month.
3	Un-metered Urban DL & F	22	2288	151 Unit/Consumer/Month

Though, no. of Agriculture DTR metered connections is more than 159, but for want of consistency of data regarding connected consumers etc, same is not being reproduced. The Commission is requested to consider billing of un-metered category on the basis of above study.

Commission's observations and directives:

The progress so far achieved by the Discoms with regard to domestic meterisation in rural area is highly unsatisfactory, while meterization of agricultural pre-dominant DTRs has shown some improvement in Central and West Discom. The Commission feels that much more sincere efforts are required in this direction. It is in the interest of the Licensees to provide meters on un-metered connections and in case of agricultural connections at least on DTRs so that realistic consumption gets captured. The Commission has already taken up this issue with the Discoms and has directed the Discoms vide letter no. 833 dated 10th March, 2011 that:

- i. All un metered domestic connections in urban areas should be provided with the meters by end of Sept,2011
- ii. All un-metered domestic connections in rural areas be provided with meters in a phased manner and meterization be completed in following manner :
 - a. 25% of un-metered consumers by end of September,2011
 - b. 60% of un-metered consumers by end of December,2011
 - c. 100% of un-metered consumers by end of March,2012
- iii. Distribution transformers having pre-dominantly agriculture load spread over the entire area of the Company be provided with the meter in a phased manner and meterization be completed in following manner:
 - a. 25% of total such DTRs by end of September,2011
 - b. 60% of total such DTRs by end of December,2011
 - c. 100% of total such DTRs by end of March,2012

- iv. Data of all metered DTRs but not less than 10% of the total DTRs having pre-dominant agriculture load and capturing diverse consumption pattern across the area of the Discom, should be collected and compiled on a regular basis. The consumer indexing and verification of actual connected load be also got done and compared with the recorded consumption. The Commission directs to submit the above data and its analysis along with the petition for ARR and tariff proposals for the next year by end of October, 2011.

The Commission therefore in consonance with the mandate in Electricity Act, 2003, directs that all connections are to be metered. The Commission is unable to concede the argument advanced by licensees that lack of funds is hampering installation of meters. The Commission intends to do away with bench mark consumption for domestic consumers in near future. Similarly, for agricultural consumers the Commission intends to prescribe tariff for only individual metering or group metering by way of DTR metering to ensure that consumers pay for their actual usage of electricity

The Commission therefore again directs to ensure compliance of above directives.

1.5 Capex plan for reduction of technical losses:

The Licensees were directed to file the progress of Capex during the year FY10-11 up to June'10 by end of July'10 and quarterly thereafter. In addition the Capex plan for the year FY 11-12 be also filed by July'10.

Status Reported

- i. **East Discom:** It is submitted that the company has already filed the 5-years capex plan funded by GoMP to the Commission vide letter no. 7516 dtd. 23-10-2010 along with the progress.
- ii. **West Discom:** The eleventh five year plan in respect of West Discom was approved by the GoMP and conveyed by Energy Department, vide letter no. S5-39/2007/13 dated 18-08-2008, the same has been forwarded to the Commission vide letter no CMD/WZ/08-03/ 18993 dated. 12-09-2008. The plan has been approved by State Planning commission. In accordance with the annual plan of FY10-11; 69 numbers of new 33/11 KV S/s, 67 numbers of augmentation of power transformers, 53 nos, additional power transformers, 698 Km. of 33 kV line, 5950 Km of 11 kV line, 12183 nos distribution transformers shall be installed and commissioned in different on going schemes such as JBIC, ADB (Tr. IV), SSTD(GoMP, TSP & SCSP), RGGVY. Intensive electrification of villages and households is being carried out in Indore & Ujjain district (10th plan) & in Ratlam, Dhar, Jhabua & Alirajpur districts (11th plan). Works are also being executed for system strengthening under ADB scheme.

The quarterly progress up to Sep-10 in respect of the annual plan for the year FY10-11 has already been forwarded to the Commission vide letter no. CMD/WZ/Works/22712 dated 15-12-2010

The Capex plan for the year FY 11-12 will be submitted shortly, considering the annual plan approved by the State planning commission. The Capex plan FY 11-12 includes the work under RAPDRP Scheme and feeder separation scheme in addition to the SSTD (GoMP, TSP & SCSP) schemes. The RAPDRP scheme is launched for 24 towns in the area of West Discom to reduce AT&C loss up to 15%. Feeder separation up to village level is launched for providing continuous power supply to all domestic consumers.

iii. Central Discom :

Capex plan for the year 2010-11 along with scheme wise quarterly achievement for the quarter ending June 2010 & September 2010 along with Mid-term 7 year Capex plan for the year 2010-11 to 2016-17 has been submitted to the Commission vide letter No.CMD/MK/Works/ 763 dated 12/10/2010.

It may be envisaged from the Capex plan 2010-11 that all the schemes mentioned therein viz. (i) ND (ii) TSP, (iii) SCSP, (iv) new agriculture pump connection (v) Feeder Separation through IDC and external loan from REC/ADB, (vi) R-APDRP, (vii) ADB-II, (viii) RGGVY, (ix) HUDS for agriculture pump/area and (x) Distribution Infrastructure for Urban/Slums/illegal colony are primarily been framed to strengthen distribution infrastructure and to provide new electricity distribution network to the new growth centres/deficient areas.

Licensee is having strong monitoring plan through third party inspection and internal review. Efforts made to implement Capex have started giving return, which is evident from fact that licensee is able to achieve financial target to the tune of 73% & 71% during Ist and IInd quarter of financial year 2010-11. Work of 145 crores against provisions of 526 crores have already been completed by Sept.2010.

Capex for the year 2011-12 is prepared with an ambitious target of capital expenditure of 1800 Crores. Major share of this is attributed to Feeder Separation (806 Crores), improvement of 32 town area infrastructure against R-APDRP (250 Crores), improvement of small town area infrastructure against ADB-II (250 Crores) & RGGVY works (195 Crores). It may be appreciated that all this planned capital work will lead to reduced technical and commercial losses. Licensee is confident to achieve loss trajectory for control period 2011-13.

Commission's observations and directives:

The Commission feels that a fragmented approach to planning and implementation of Capex may not yield desired level of results. The targets/ goals have to be kept in sight while planning the Capex and its cost benefit analysis after implementation is necessary. The size of overall Capex to reach the desired goals has to be envisaged and thereafter the process of implementation under strict monitoring is needed. The Commission has been allowing Capex based on the past actual as in the previous years the Licensees have not been able to reach anywhere near projections made by them. Moreover, the plans filed by the Licensees were not found in accordance with the provisions of the Regulations and nor the filing has been done timely. The Licensees have been approaching the Commission to seek approval for individual Capex schemes like RAPDRP, Feeder separation etc. While the Commission has granted approval to such schemes with conditions given therein, the Commission has directed to submit comprehensive Capex plan for five years giving details of the schemes envisaged to be taken up, prudence of such schemes for effective reduction in losses and improvement in consumer services. While the Commission in no way would like to discourage the investments in the Sector, at the same time it would also like to ensure that benefits achieved after implementation of such schemes should take care of the financial investments made in them and no undue burden is passed on to the consumers through tariff. Filing the Capex plan by July every year is the requirement of the Regulations. The Licensees are directed to file the progress of Capex during the year FY10-12 up to June, 11 by end of July, 11 and quarterly thereafter. In addition the Capex plan for the year FY12-13 be also filed by July, 11 in accordance with the provisions of the Regulations.

6.6 Installation of meters having facility to record average monthly demand on domestic category of consumers:-

Commission Directives: The Commission directed to provide meters having facility to record average monthly demand on all the domestic connections having a connected load of 10 KW and above during the year.

Status Reported by Discoms

- i. **East Discom :** It is submitted that the project of AMR for all such consumers having connected load above 10HP is already in progress and 75% consumers have already been covered. It is expected that balance 25% consumers will be covered by March'2011. However the company proposes the demand based tariff for consumer having connected load of 10kW and above.
- ii. **West Discom:** Adequate capacity of meters have been provided for domestic connections having connected load of 10 KW and above. Automatic meter reading system in LT category has also been implemented.
- iii. **Central Discom:** All the domestic connections will be provided with demand meters, as and when such tariff becomes applicable for DL&F category of consumers.

Commission's observations and directives: The East Discom has not submitted that all the domestic consumers having loads of 10 kW and above have been provided with demand based meters. The West Discom has stated that meters of adequate capacity have been installed but has not specifically stated that demand based meters have been installed. The Central Discom has stated that domestic consumers having loads of 10 kW and above, will be provided with meters having facility to record demand as and when such tariff becomes applicable. It is evident that under the circumstances it is not feasible to introduce demand based tariff for domestic category at this juncture. The Commission has noted that the approach adopted by the Central Discom is not in the spirit of compliance of the directions. Unless there is a confirmation that all the domestic consumers having loads of 10 kW and above have been provided with demand based meters, it will not be appropriate to consider demand based tariff. The West Discom has also not given proper compliance report and has circumvented in its submission the reply to specific question as to whether the meters provided on the domestic category of connections have the feature of recording the demand. Only the East Discom has stated that it will provide such meters by 31st march,11 indicating the compliance in the matter. *The Commission therefore directs the Central and West Discom to provide meters having facility to record average monthly demand on all the domestic connections having a connected load of 10 KW and above during this year. The Commission directs the East Discom to ensure that all new connections/ load enhancement cases in future having loads above 10 kW under domestic category are provided with demand based meters.*

6.7 Segregation of rural feeders into agricultural and others:

Commission's Directives: Distribution licensees were directed that comprehensive details indicating total no. of 11kV feeders that require separation, no. of feeders for which the schemes have been prepared and no. feeders for which the scheme is under preparation be filed. Proposed source for funding and timelines for completion indicating as to when all such feeders would be separated be informed. The information be filed by end of July'10.

Status Reported by Discoms

- i. **East Discom:** It is submitted that the company has already filed a petition before the Commission for approval of feeder separation scheme.
- ii. **West Discom:** The petition for approval of feeder separation scheme under Clause 10.3 of MPERC 2004 has already been submitted to the Commission.
- iii. **Central Discom:** A Petition No.63/2010 dated 28.08.2010 has been registered with the Commission for approval of feeder separation work of agriculture and others.

Commission's observations and directives: The Commission has given in principle approval to the Feeder separation scheme of Central and East Discom on 12th Jan'11 and West Discom on 2nd Feb,11 with certain conditions. *The Commission directs that the progress of implementation of these schemes be included in the progress reports on Capex directed to be submitted herein before.*

6.8 **Minimum supply hours:**

Commission's directives: The Commission directed the Distribution Licensees to ensure that following minimum daily supply hours during the year be ensured:

- (i) *Commissionary head quarters: 22 hours*
- (ii) *District head quarters : 19 hours*
- (iii) *Tehsil head quarters : 14 hours*
- (iv) *Rural areas : Total 12 hours out of which three phase supply for at least 6 hours*

Status Reported by Discom

- i. **East Discom :** The Discom has reported month-wise average supply hours for the financial year 2010-11 up to Sept' 10 as given below:

MONTH	COMM. H/Q	DISTT. H/Q	TEHSIL H/Q	Rural
April-10	21:16:00	18:36:00	13:07:00	9:44:00
May-10	21:22:00	19:20:00	13:14:00	9:31:00
June-10	21:45:00	19:33:00	13:29:00	9:29:00
July-10	23:18:00	22:02:00	14:59:00	11:20:00
Aug-10	23:44:00	22:28:00	15:51:00	13:15:00
Sep-10	23:44:00	23:36:00	20:22:00	19:10:00
AVERAGE	22:31:30	20:55:50	15:10:20	12:04:50

- ii. **West Discom :** Supply hours (3Ph+1 Ph) of West Discom from April 10 to Nov 10 as submitted are as given below:-

MONTH	COMM. H/Q	DISTT. H/Q	TEHSIL H/Q	Rural
April-10	22.07	18.55	13.14	9.52
May-10	21.48	18.47	12.56	9.17
June-10	21.21	18.25	13.00	8.35
July-10	23.09	19.26	13.43	9.59
Aug-10	23.36	20.58	14.18	11.10
Sep-10	23.55	23.22	19.14	17.41
Oct-10	22.10	18.04	12.16	10.01
Nov-10	23.09	21.27	14.04	11.04

- iii. **Central Discom :** Supply hours from December 09 to March 10 & April 10 to September 10 submitted are as given below:-

SUPPLY HOURS – 2009-10					
S. No.	Month	Comm. HQ	Distt. HQ	Tehsil HQ	Rural (3Ph +

					1Ph)
1	Dec. 09	23.14	21.09	16.39	13.04
2	Jan. 10	23.06	20.28	14.50	11.41
3	Feb. 10	22.52	19.43	14.35	10.37
4	March 10	22.04	20.12	14.26	11.12
SUPPLY HOURS – 2010-11					
1	April 10	23.48	19.37	13.31	10.26
2	May 10	23.55	20.20	13.31	9.36
3	June 10	24.00	20.38	13.46	9.38
4	July 10	24.00	20.38	13.46	9.38
5	Aug. 10	23.42	22.00	15.10	12.13
6	Sept.10	23.53	23.30	19.53	18.15

The Central Discom has stated that the supply hours for rural area & Tehsil Head Quarters are less in some months due to less schedule of power available for Central Discom. To manage system, load shedding has been done resulting less supply hours to Tehsil & Rural area in some months.

Commission's observations and directives: The Discoms have not furnished compliance on minimum daily supply hours. It is noted that average supply hours during some months has been less than minimum supply hours directed to be provided. The Commission is of the opinion that the Licensees are under obligation to provide adequate supply to its consumers and therefore a minimum assured level of supply hours was directed to be maintained to various areas under the jurisdiction of the Licensee. *The Commission therefore again directs the Licensees to maintain the minimum daily supply hours as directed in the tariff order for FY 10-11 during this year also.*

6.9 **No new connections- load enhancement under LV 4.1 c category**

6.10 **Commission's directives:** The Commission directed that no new connections be released or enhancement of load be permitted under LV 4.1 c category.

Status Reported by Discom

- i. **East Discom:** As stated they have issued the bills to the consumers under this category strictly as per the provisions of the tariff order.
- ii. **West Discom:** No new connection released and load enhancement made under this category of consumers.
- iii. **Central Discom:** Demand based tariff under tariff category L.T. industrial 4.1 C is being made applicable for existing consumers only. It is to confirm that no new connection has been released under this category.

Commission's observations and directives: Compliance of directive has been reported by the Discoms.

6.11 Appointment of Franchisees:

Commission's Directives: The distribution licensees were directed to submit details whenever a franchisee is appointed in the area of the licensee.

Status reported by Discom

i. **East Discom:** The status of the franchisee during the year 2008-09 has already been submitted before the commission by the company in the response of queries of the commission in True-up petition 2008-09. The status for the year 2009-10 will be submitted along with the True-up petition for 2009-10.

ii. **West Discom:** Initially as a pilot project initiative, the Company has appointed gram panchayat level franchisee at village Rupakheda in Ratlam District. This is an input based franchisee model i.e., metering at 11 KV feeders installed at input point of supply. This Gram Panchayat Franchisee is working satisfactorily since last two years.

Presently 9 nos. input based Gram Panchayat level rural franchisees are working within the area of West Discom. They are:-

1. Rupakheda District: Ratlam
2. Dhaturiya District: Ratlam
3. Dharad District: Ratlam
4. Sanghvi District: Khargone
5. Rahimpura District: Khargone
6. Kampel District: Indore
7. Pipalda District: Indore
8. Pivday District: Indore
9. Sundrel District: Dhar

Gram Panchyats are being motivated to take up franchisee works and all efforts are being made to increase Gram panchayat level input based franchisees.

In addition to above, the State Government is preparing a standard bidding document (SBD) for awarding the contract for district level franchisee. It is proposed to invite offers for 5 districts of Ujjain Region.

iii. **Central Discom :** In order to improve operational efficiency of the distribution system and quality of service to its consumers, the Company seeks to bring in management expertise through public-private participation in distribution of electricity. In pursuance of Electricity Act 2003, 7th proviso Sec 14, the Company intends to appoint Franchise to improve the quality and quantity of electric supply, to minimize AT & C losses, improvement in metering billing, revenue collection, and to minimize billing arrears and overall satisfaction to the consumers. Initially, as a pilot project, the Company had appointed zone level Franchise, with an input based franchisee model i.e. metering at 11 kV feeders through meters installed at input point of supply.

5 nos. of franchisee has been appointed under Central Discom, Bhopal on input based model details given below:-

Sl. No.	Name of DC/Zone awarded to franchise	Name and Address of Franchise	Operational date of Franchisee
1	Berasiya DC under O&M Circle Bhopal	Social Welfare Organization Vidisha	1 st May, 2007
2	Karond Zone under City Circle Bhopal	Agrawal Power Bhopal	1 st October,2007
3	Chhola Zone under City Circle Bhopal.	Shyam Indus Power Solution New Delhi	1 st February,2008
4	Jahangirabad Zone under City Circle Bhopal.	Zoom Developer Indore	1 st February,2008
5	Chandbadh Zone under City Circle Bhopal.	Shyam Indus Power Solution New Delhi	1 st March,2008

Presently only 2 no. Franchises (at S. No. 2 & 3) are working. Franchisee shown at S. No. 1, 4, and 5 have discontinued before completing the tenure. Looking to the success rate of small level franchisee, the company has decided to appoint the division/circle level franchisee. Accordingly, for Guna Circle an EOI has been issued on 01.07.09. But looking the AT & C loss reduction and improvement in RPU in the Guna O & M circle under Gwalior region, it was decided to drop the proposal for appointment of franchisee in Guna Circle presently and initiate the process of appointment of franchisee in Gwalior & Bhind districts in first phase.

Proposal for new franchisee

Following areas have been identified for implementation of distribution franchisee in phased manner.

Phases	Districts
Phase - I	Gwalior, Bhind, and Datia
Phase - II	Morena, Shivpuri, Sheopur kala

Packages for phase-I

Package-I :- Gwalior and Datia Districts – The operational O&M circle Gwalior and city circle Gwalior excluding operational area of Malanpur O&M division.

Package-II :- Bhind District. – Which covers the whole Bhind O&M circle comprising of Bhind, Mehgaon, Gohad, Lahar, O&M division, and Malanpur O&M division of Gwalior City Circle.

Packages for phase-II

Package-I Morena District – This covers operational area of Morena-I, Morena-II, and Sabalgarh O&M divisions of Morena circle.

Package-II Shivpuri and Sheopurkala District – The operational area of Shivpuri – I, Shivpuri-II, Pichhore and Sheopur O&M divisions of Shivpuri circle.

Standard bid document for appointment of Franchisee has been prepared and submitted to the GoMP for approval. After getting approved document from GoMP bid may be issued first for the districts covered under phase-I and then Phase-II.

Commission’s observations and directives: As reported by the Central and West Discoms, the East Discom was also expected to report current status instead of referring to old submissions. The Commission considers that appointment of franchisees as envisaged in the Electricity Act,2003 needs to be encouraged. However due care is required to be taken that consumers under such franchisee areas do not get adversely affected and the Licensee’s due revenue is also protected. In addition, adequate Capex implementation is also required to be taken care of. *The Commission directs the licensees to submit details whenever a franchisee is appointed in the area of the licensee. The East Discom should report current status within a month.*

6.12 **Issue of tariff card with first bill based on new tariff for the year 2010-11 :**

Commission’s Directives: The distribution companies were directed to issue a tariff card to all consumers containing details of tariff for various categories applicable as per the tariff order for the year FY 2010-11 with the first bill based on this tariff order.

Status Reported by Discoms

- 1 **East Discom:** It is submitted that the tariff booklet to all HT consumers has been provided by the company. The tariff order is available on the website of the commission and wide publicity has already been made for implementation of applicable tariff for the year 2010-11. The printing of tariff card is costlier affair and therefore it is prayed that the company may please be exempted for providing the tariff card to all the LT consumers.
- 2 **West Discom:** The tariff card as per the tariff order for the year 2010-11 had been issued to all consumers of West Discom.
- 3 **Central Discom:** Tariff cards showing the tariff provisions have been issued to L.T. consumers. In addition, tariff schedule booklets have been provided to all H.T. consumers.

Commission’s observations and directives: The East Discom has made tariff booklet available to only HT consumers and although it claims to have made wide publicity but has not complied the directives of providing the Tariff card to all its consumers. This is noted with serious concern. It is the obligation of the Licensee to provide necessary

details to the consumers in the desired manner and in future any laxity in this regard may attract suitable action. *The distribution companies are directed to issue a tariff card to all consumers containing details of tariff for various categories applicable as per the tariff order for the year 2011-12 with the first bill based on this tariff order.*

6.13 **Filing of ARR and tariff proposals in Hindi language**

Commission's Directives: All the distribution companies were directed that ARR and tariff proposals and true up petitions in future should be filed both in English and Hindi.

Status Reported by Discom:

- i. **East Discom:** It is submitted that the filing has been made in English and all the sincere efforts will be taken for conversion of this petition into Hindi.
- ii. **West Discom:** Hindi version of ARR will be submitted shortly.
- iii. **Central Discom:** For Hindi translation of ARR, contract has been awarded and Hindi version of ARR will be submitted shortly.

Commission's observations and directives: Hindi translation of ARR has not been submitted by any of the Licensee. *The Commission directs that the Discoms at least should prepare an executive summary of their proposals including due data in Hindi and should file it along with ARR/tariff proposals and true up petitions in future.*

6.14 **Accounting of rebates/incentives/ surcharge:**

Commission's Directives: The Licensees were directed to ensure capturing of requisite details from the revenue billing of the consumers and submit the data failing which the Commission may initiate suitable proceedings.

Status Reported

- i. **East Discom:** The month-wise billing details of HT consumer is submitted in the soft copy of the petition. It is submitted that the requisite details is available in the submitted data.
- ii. **West Discom:** Software is being developed for recording details of consumer category wise, month wise rebate/incentives/surcharge and the requisite information will be submitted shortly.
- iii. **Central Discom:** The work of Entrepreneur Resource Planning (ERP) is in progress .After completion of this work all the billing details would be available on the bill of consumer.

Commission's observations and directives: Details sought by the Commission have not been furnished by the Discoms except partially by one of the Discom. *The*

Commission again directs the Licensees to compile requisite details from the revenue billing of the consumers and ensure its submission in future petitions.

6.15 **Maintaining uniform accounts:**

Commission's Directives: *The Commission directed that all the three Companies should evolve a common acceptable methodology of capturing cost and ensuring that in future accounts, this methodology is consistently applied with a common Accounting Policy taking into consideration of followings:-*

- (i) *Basis of framing account should be same for all the three Distribution Companies.*
- (ii) *All the three Distribution Companies should evolve a common chart of accounts.*
- (iii) *Methodology of presentation of expenditure and revenues in Financial Accounts should be common.*

It is suggested that the three Discoms should form a committee of their Officers who should come up with suitable recommendations, keeping in above view, by August, 2010.

Status Reported

- i. **East Discom:** It is submitted that the three distribution companies are functioning independently w.e.f. 1st June'2005. Since different statutory auditors for the three distribution companies are functioning separately therefore the company is facing difficulty for compliance of aforesaid directive. The Company has stated that it has filed petition for FY2011-12 in accordance with the provision of the with additional submission.
- ii. **West Discom:** The Company was incorporated on 31st May, 2002. However, the commercial operations commenced from 1st June 2005 pursuant to Government of Madhya Pradesh Notification no 226 dated 31st May, 2005. The accounts of the erstwhile MPSEB have been based on the principles and policies enunciated under the Electricity Supply Annual Accounts Rules, 1985 (ESAAR, 1985). These policies and principles have also been continued for the current year operations of the Company. To that extent some of the accounting policies and principal of the Company may not be in consonance with the Accounting Standards referred to in Section 211 (3 C) of the Companies Act, 1956. The Company during this period of transition is the process of gradually evolving and modifying its existing Accounting policies to be in line with Accounting Standards referred to in section 211(3C). In addition to above it is to inform that ERP project of MPPKVVCL, Indore is proposed for procurement, customization, implementation and subsequent support of Enterprise Resource Planning (ERP) application systems for Finance, HR, Material Management and Project Management modules are in scope of

implementation. This ERP implementation will ensure best accounting practices and regulatory compliance.

- iii. **Central Discom:** The ERP program covers the accounting part also which is in progress. Maintaining of uniform accounts will be implemented after completion of ERP.

Commission's observations and directives:

The Commission has observed none of the Discoms has complied with the directives. While the status reported by the West and Central Discoms indicate that they are gradually moving towards Standards Accounting in line with the requirement; the response of East Discom is not satisfactory. *The Commission again directs all the Discoms to expedite the process of satisfying the requirement of standard accounting practices for the Companies so as to have uniformity in maintaining the accounts for all the Discoms.*

- 6.16 **Compliance of the Regulations:** The Commission observed that the Licensees have submitted their ARR/ Tariff petition for FY 11-12 in variance to with the provisions of the and the Commission had to insist on revised filing for complying the requirement of the Regulations . *The Commission directs that in future the petition be filed strictly in accordance with provisions of the Regulations and if a Licensee wishes to draw the attention on some specific issues, it can be done through additional submissions in the petition.*

6.17 **New Directives:**

- (a) The Commission intends to introduce mandatory demand based tariff for all Non-domestic LV consumers from 2012-13 having load in excess of 25 HP. The Discoms are directed to ensure that meters having features to record the maximum demand be installed on all such connections and report compliance.
- (b) The Commission also intends to do away with the connected load ceiling in case of demand based LV consumers. The licensees are directed to ensure that all such LV consumers have AMR metering by March,2012.

Annexure-1 (List of Objectors)**LIST OF OBJECTORS OF EAST DISCOM**

Sr No.	Name of the Objector and Address
1	Shri R.N. Mishra, RNM Engineers and Consultant P.Ltd., Chamber 17, Goodluck Apartment, Katanga, 82, Narmada Road, Jabalpur
2	Shri Satish Kumar Aarya, Aata Chakki, Main Road, Nainpur, Distt. Mandla
3	Shri Rajnarayan Bhardwaj, Plot No. 453, Sanjeevani Nagar, Jabalpur
4	Shri Rajendra Prasad More, Prabudhapuri, Street No. 4, Aadarsh Colony Marg, Katni.
5	Shri Shiv Kumar, Mining Engineer, P.O. Jaitwara Distt. Satna
6	Shri Alok Byohar, Brahamanpura , Sihora, Distt. Jabalpur
7	Shri Anant Johari, Madhya Pradesh Kisan Adhikar Manch, Anuppur
8	Shri Chandrashekhar Singh Tiwari, MP Kisan Adhikar Manch, Distt. Rewa
9	Shri Ravi Dutt Singh, State President , Bhartiya Kisan Sangh, Mahakaushal Prant, Khutehi, Distt. Rewa
10	Shri Ramesh Patel, Chairman, Bhartiya Kisan Union, Byohar Building, Near Mahavir Chowk, Teh.Sihora, Distt. Jabalpur.
11	Shri G.C Jain, M/s HJI Division of Orient Paper Mills, PO Amlai Paper Mills, Distt. Anuppur
12	The Director M/s. Ramnik Power & Alloys (P) Ltd. C/o M/s. A P Trivedi Sons Main Road, Balaghat
13	Shri A.P. Tiwari, General Manager, South Avenue Mall, Jabalpur Entertainment Complex Pvt. Ltd., Narmada Road, Jabalpur
14	Shri Shankar Nagdev, Mahakoshal Chamber of Commerce & Industry, Chamber Bhawan, Civic Centre, Marhatal, Jabalpur
15	Shri Prem Dubey, Jabalpur Chamber of Commerce & Industry, Malhotra Sadan, H N. 113, Napier Town, Jabalpur
16	Shri Deepak Ramchandani, Shree Dhan, Chawal, Poha Vyapari Sangh, Balaghat
17	Shri Rajendra Prasad Sharma, Rewanchal Vyapar Mandal, Shilpi Plaza, Rewa
18	Shri D.R. Jeswani, Mahakaushal Udyog Sangh, Industrial Area, Richhai, Jabalpur
19	Shri S.K. Sukalika, Chief Electrical Distribution Engineer, West Central Railway Addl. General Manager (O), Electrical Branch, Indira Market, Jabalpur
20	Dr. P.G. Najpande, President, Nagarik Upbhokta Margdarshak Manch, 6/47, Ramnagar, Adhartal, Jabalpur – 482004
21	Shri Dinesh Kumar, Bhartiya Manvadhikar Association, Teh. Amarpatan, Distt. Satna
22	Shri R.P. Nigam, Secretary, MP Pensioners Association, 39 Satyanand Vihar, Rampur, Jabalpur
23	Shri Pawan Kumar Jain, MP Vidyut Mandal Abhiyanta Sangh, Shade No. 13, Vidyut Nagar, Rampur, Jabalpur – 482008
24	Shri M.L. Chokse, MP Vidyut Karmachari Janta Union, Shram Bhawan, Shakti Bhawan Road, Jabalpur

LIST OF OBJECTORS OF WEST DISCOM

S.No.	Name of the Objector and Address
1	Shri Prem Chand Guddu, Member of Parliament , 32 -B , Sant Nagar, Ujjain
2	Shri Tulsiram Silavat, Member of Legislative Assembly (MLA), Sanver, 80, Agrawal Nagar, Indore
3	Shri Hemant Pal, Indore District Congress Committee, A-19, Yashwant Road, Indore
4	Shri Chandra Kumar Chatras, 130, Dashara Maidan, Ujjain
5	Shri Satish Gangrade, Indore
6	Shri Sohanlal Agrawal, 26, Alakhddham Nagar, Sanver, Ujjain
7	Shri Deepak Kasliwal, Shanti Jellwel, 16, Heritage 582, MG Road, Indore
8	Shri P.V. Dhanodkar, Varishtha Nagrik, E/1, Rajendra Nagar, Indore
9	Shri Praveen Kumar Jain, 23/2 Freeganj, Ujjain
10	Shri Dhananjay Kaveeshwar, Indore HB-19, Takshashila Parisar, AB Road, Indore
11	Shri Kishore Deepak Kodwani , Vikas Mitra Dristi, Pushpdeep Apartment, Sarvodaya Nagar, Indore.
12	Shri Lokendra Dhangar, Vill. Kesarpura, Teh. Barwani
13	Shri SM Jain, M/s. All India Induction Furnaces Association, Industrial Area, Mandsaur
14	Shri S.M.Jain, M/s. Venus Alloys Pvt Ltd. 67, Industrial Area, Mandsaur
15	Shri Pankaj Bansal, M/s. Shivangi Rolling Mills Pvt. Ltd., 16/9, Tongia Compound, Race Course Road, Indore
16	Shri Lalappan T K M/s. Jaideep Ispat & Alloys Pvt. Ltd., 103, Laxmi Tower, 576, M.G. Road, Indore
17	Shri Sandeep Jain M/s. Moira Steels Ltd. 103, Laxmi Tower, 576, M.G. Road, Indore
18	The Director, M/s. Kesar Alloys & Metals P Ltd., 201, Rudraksha Apartment, 16, Meera Path, Dhenu Market, Indore
19	The Director M/s. Anant Steel P Ltd., 170/10, Fils Colony, RNT Marg, Opp. Ravindra Natya Gruh, Indore
20	Shri I.C Jindal, Magnum Iron & Steels P Ltd., A-4, Industrial Area, Banmore, Distt. Morena
21	Iron & Steel Mills Association (Regd.), Sanver Road, Indore
22	Shri B.L. Jaju, M/s. MP Cold Storage Association, 115-B, Industrial State, Pologround, Indore
23	Shri Yogendra Sharma, Commissioner, Nagar Nigam, Indore
24	Shri Sushil Sharma, Vidyut Karmchari Union Madhya Pradesh, Main Road, Indore
25	Mohd. Hazi Salim Ahmed, Madhya Pradesh Vidyut Upbhokta Association, 375, Jawahar Marg, Indore
26	Shri Sanjay Kumar Agrawal, "Upbhokta Hit Prahari", 970 Manak Chowk, Mhow
27	Shri Keshavlal Gupta, Bijli Karmchari Sangh, Freeganj, Ujjain
28	The Secretary, Vidyut Upbhokta Jagriti Samiti, Shanku Marg, Freeganj, Ujjain
29	Shri Kailash Yadav, Kshipra Upbhokta Sanrakshan Samiti, Ankpat Marg, Ujjain
30	Shri Darshan Singh Bhatia, M/s. Sanjot Poultry, Nemawar Road, 67, Vishnupuri Annex, Indore
31	The Director, M/s. Simran Farm Ltd. 1-B, Vikash Rekha Complex, Tower Chouraha, Indore
32	Shri Inder Bir Singh Nayyar, Sec. Indore Poultry Federation, Khatewala Tank, Indore
33	M/s. Ideal Farm, 330, Vishnupuri Annex, Indore
34	M/s. Trilok Poultry Farm, 4, Gurukripa Apartment, Vishnupuri AB Road, Indore
35	M/s. Choice Poultry Farm, Vill Tillarkhurd, Distt. Indore
36	M/s. Orient Traders, 16/02, Manik Bag Road, Indore
37	M/s Indore Poultry, Farm No. 10, KM Nemawar Road, Indore
38	Shri Gautam Kothari, M/s. Electricity Consumers Society C/o All India Manufacturers Organisation (MP State Board), Industrial Estate, Pologround, Indore
39	Shri M.C. Rawat, The Madhya Pradesh Textile Mills Association, South Tukoganj, Indore
40	Dr. Gautam Kothari, Pithampur Audhyogik Sangathan, 231, Saket Nagar, Indore

41	Shri C.P. Bansal, Grasim Industries Limited (Chemical Division), Birlagram, Nagda
42	Shri Sanjay Jain, Kirloshkar Brothers Limited, Dewas
43	Shri Atul Kulkarni, Sidharth Tube Ltd, 3rd floor, Old IDA Building, 15-16, Jawahar Marg, Indore
44	Shri Ashok Jaiswal, M/s Association of Industries MP, 96 Industrial Estate, Pologround, Indore
45	Shri Ashok Khandellia, M/s. Association of Industrtries, Dewas, Industrial Area, No. 1, A.B. Road, Dewas
46	Shri Ashish Doshi, Mahima Purespun 406, Corporate House, 169, RNT Marg, Indore
47	M/s. Kashyap Sweetners Limited , Indore
48	M/s Divya Jyoti Industries Ltd., 92/3, Sapna-Sangeeta Main Road, Near Tanishq Showroom, Indore
49	M/s. Satyam Spinners Pvt. Ltd., Sendhwa, Barwani (M.P.)
50	Shri Prakash Shahani , Iron & Steel Re-Roller Association , Sanwer Road ,Indore
51	Shri R. Bhatewara, Ipcalaboratories Limited, P.Box No. 33, P.O. Sajavta, Distt. Ratlam
52	Shri Satish Sood, M/s. Oasis Distilleries Ltd. H-102, B-2, Metro Tower, Vijay Nagar, Indore
53	M/s. Dhanlaxmi Solvex Pvt. Ltd., 201, Bansi Plaza, M.G. Road, Indore
54	Shri Kailash Khandelwal, Vikas Cot Fiber Pvt. Ltd., Sendhwa, , Distt. Barwani (M.P.)
55	Shri Dilip Jain, Mahivir Cot Fiber, Khetia, Distt. Barwani
56	M/s. Masand Agro Equipments P.ltd., 70, Shastri Market, Indore
57	Shri Manish Shrimal, M/s. Tirupati Fibres, Village Khedi Bujurg, Julwania Road, Distt. Khargone
58	Shri Pawan Goyal, M/s. Pawan Cotton Industries, Verla Road, Sendhwa
59	Shri Rasdipsingh Chawala, M/s Harman Cotex, Khargone
60	Shri Sanjay Agrawal, M/s Mittal Oil Industries, Khetia Tahsil, Pansemal, Distt. Barwani
61	Shri R.S. Goyal, 51, Prakash Nagar, Nemawar Road, Indore
62	Shri R.C. Somani, 67, CH Scheme No. 74 C, Vijay Nagar, Indore
63	Varisth Nagarik Manch, 37, Prakash Nagar, Navalakha, Indore.
64	Shri Shiv Garg, President, Agrawal Parisad, 18, Vaibhav Chamber, 1st Floor, 7/1, Ushaganj, Indore
65	Shri Ashutosh Rao, Secretary, Prakash Nagar Vikas Sangh, 46, Prakash Nagar, Navalakha, Indore.
66	Shri Anil Garg, 304 AD, Scheme No. 74C, Vijay Nagar, Indore
67	Shri M.V. Bhale, Dewas Varishtha Nagrik Sansthan, Dewas
68	Shri Rajiv Shrivastava, 20, Vaibhav Nagar Extn. Kanadiya Road Indore and 19 others
69	M/s. Idea Cellular Limited, 139-140, Electronic Complex, Pardeshipura, Indore
70	Shri Anil Kumar Sharma, Vice President, Block Office Congress Committee, Malhargarh, R/o Mahavir Ganj, Pipaliya Station, Distt. Mandsaur
	Pragatisheel Kisan Sangthan, Madhya Pradesh, Head Office: Dapora, Distt. Burhanpur
71	Shri Raghunath Vishwanath Patil, Chairman
72	Shri Hiranman Patil
73	Shri Praveen Chaudhary
74	Shri Satish Rampal
75	Shri Purushottam Gopal Patil
76	Shri Shiv Kumar Singh Pratap Singh Kushwaha
77	Shri Kamlesh Narayan Patil
78	Shri Vijay Mahajan
79	Shri Chandrashekhar Mahajan
	Kisan Vikas Manch, Burhanpur M.P.
80	Shri Manohar Chaudhary, Chairman, Kisan Vikas Manch , Gram Loni, Teh. Burhanpur
81	Shri Naveen Kumar, Chhotelal Patidar, Sardar Patel Colony, Burhanpur
82	Shri Gyaneshwar Narayanrao Patil, Post Basad, Teh Distt. Burhanpur
83	Shri Dilip Heeralal Patel, Post Basad, Teh. Neapanagar, Distt. Burhanpur
84	Shri Prabhakar Shamrao Patil, Burhanpur
85	Shri Shivaji Rambhau Patidar, Post Basad, Teh. Neapanagar, Distt. Burhanpur

86	Shri Aatmaram Ganpatrao, Burhanpur
87	Shri Naresh Dinkarrao Patil, Post Basad, Teh. Neapanagar, Distt. Burhanpur
88	Shri Govindrao Patidar, Post Basad, Teh. Neapanagar, Distt. Burhanpur
89	Shri Madhavrao Ganpatrao, Post Basad, Teh. Neapanagar, Distt. Burhanpur
90	Shri Manikrao Ganpatrao, Post Basad, Teh. Neapanagar, Distt. Burhanpur
91	Shri Vinayakrao Ganpatrao Patil, Post Basad, Teh. Neapanagar, Distt. Burhanpur
92	Shri Jayant Madhukar Chaudhary, Vill. Loni, Distt. Burhanpur
93	Shri Gopal Dashrath Mahajan, Loni, Distt. Burhanpur
94	Shri Prakash Kadu Mahajan, Vill. Loni, Distt. Burhanpur
95	Shri Praveen Dashrath Mahajan Loni, Distt. Burhanpur
96	Shri Yuvraj Vaman Mahajan, Post- Loni, Distt. Burhanpur
97	Shri Bhagwat Raghunath Mahajan, Loni, Distt. Burhanpur
98	Shri Digambar Kadu Mahajan, Vill. Loni, Distt. Burhanpur
99	Shri Vinod Kadu Mahajan, Vill. Loni, Distt. Burhanpur
100	Shri Manohar Raghunath Chaudhary, Loni, Burhanpur
101	Shri Eknath Tukaram Chaudhary, Loni, Burhanpur
102	Shri Krishnadas Baldevdas, Tilgaon, Post Dariyapur, Distt. Burhanpur
103	Shri Mahendra Bhagwat Bodke, Post- Chapora, Distt. Burhanpur
104	Shri Pandurang Bhavdu Ugve, Post Chapora, Distt. Burhanpur
105	Smt. Bebabai Rambhau Bodke, Post Chapora, Distt. Burhanpur
106	Shri Subhash Tukaram Bodke, Post Chapora, Distt. Burhanpur
107	Shri Triyambak Sakharam Bodke, Post Chapora, Distt. Burhanpur
108	Shri Ritesh Sadashiv Gawande, Post Chapora, Distt. Burhanpur
109	Shri Prashant Sunil Bodke, Post Chapora, Distt. Burhanpur
110	Shri Shyamkant Bhagwan Gawande, Post Chapora, Distt. Burhanpur
111	Shri Kailash Sopanrao Gawande, Post Chapora, Distt. Burhanpur
112	Shri Bhagwat Mitharam Mahajan, Post Chapora, Distt. Burhanpur
113	Shri Manoj Pudlik Pawar, Post Chapora, Distt. Burhanpur
114	Shri Sahebrao Aamrao Chopde, Post Chapora, Distt. Burhanpur
115	Shri Ganesh Kashinath Mahajan, Post Chapora, Distt. Burhanpur
116	Shri Sanjay Ratiram, Post Chapora, Distt. Burhanpur
117	Shri Sandeep Raghunath Mahajan, Post Chapora, Distt. Burhanpur
118	Shri Ravindra Eknath Mahajan, Post Chapora, Distt. Burhanpur
119	Shri Ramesh Niranjnlal, Post Chapora, Distt. Burhanpur
120	Shri Bhagwat Shankar Mahajan, Post Chapora, Distt. Burhanpur
121	Shri Prakash Sitara, Post Chapora, Distt. Burhanpur
122	Shri Siraj Khan, Post Chapora, Distt. Burhanpur
123	Shri Sunil Chaveeldas Bodke, Post Chapora, Distt. Burhanpur
124	(Name of the objector has not been provided) Post Chapora, Distt. Burhanpur
125	Shri Neetish Prabhakar Chaudhary, Post Chapora, Distt. Burhanpur
126	Shri Ravindra Sahebrao Chopde, Post Chapora, Distt. Burhanpur
127	Shri Dilip Sopan Gawande, Post Chapora, Distt. Burhanpur
128	Shri Kishor Rajaram Patil, Bhartiya Shopping Complex, Stadium Road, Distt. Burhanpur

LIST OF OBJECTORS OF CENTRAL DISCOM

Sr No.	Name of the Objector and Address
1	Shri Lokchandra Janiyani (Trustee), Sewa Sadan Eye Hospital (Trust), Sant Hirdaram Nagar, Bhopal
2	Shri Dayashankar Swarnakar, Near Kripal Aashram, Chandranagar, Gwalior
3	Senior Citizen (Earlier associated with financial affairs)- Name & Address has not been provided
4	Shri Praveen Saxena, E-7/78, SBI, Arera Colony, Bhopal
5	Shri Chandrakant Gaur, Bharitya Kisan Sangh, D- 103/4, Shivaji Nagar, Bhopal
6	Shri Ramsevak Gupta, Bhartiya Upbhokta Sarankshan Samiti, Lohiya Bazar, Lashkar, Gwalior
7	Shri D P Goyal, MP Agrawal Maha Sabha, Sukhsagar, 6, Patrakar Colony, Kolar Road, Bhopal
8	Shri B.I. Jwardar, Jankalyan Nagrik Samiti, Lohiya Bazar, Lashkar, Gwalior
9	Shri Ashish, M/s. VIOM Networks Ltd, 162, Modi Heights, Near PF Office, MP Nagar, Zone-II, Bhopal
10	Shri S. Pal, Vardhman Textiles Limited, C/o Vardhman Yarns, Satlapur, Mandideep, Distt. Raisen
11	Shri A.K. Kaushik, Vardhman Yarns, (Vardhman Textiles Ltd), Satlapur, Mandideep, Distt. Raisen
12	Shri Pratap Verma, Federation of Madhya Pradesh Chambers of Commerce & Industry, Udyog Bhawan, IInd Floor, 129-A, Malviya Nagar, Bhopal
13	Shri S.K. Pali, Laghu Udyog Bharti, Madhya Pradesh, R-2, Zone-1, M.P. Nagar, Bhopal
14	Dr. Praveen Agrawal, Madhya Pradesh Chambers of Commerce & Industry, Chamber Bhawan, Gwalior
15	Shri Suhash Virani, Bhopal Hostel Owners' Association, C/o, Vindhyashree Girls Hostel, 50, Zone-II, M.P. Nagar, Bhopal
16	Jeevdaya Gaurakshan avam Paryavaran Samvardhan Kendra, Vishwa Hindu Parishad Karyalaya, Chhola Road, Bhopal
17	Shri K.N. Mathur, HEG Limited, Mandideep, Distt. Raisen
18	Shri Dinesh Sharma, SE (E), M/s. Bharat Sanchar Nigam Ltd, on behalf of M.P. Telecom Circle, Bhopal, Through Chief Engineer Electrical Bhopal, Office of BSNL Bhawan, Arera Hills, Bhopal
19	Shri Somkant Umalkar, Chairman, M/s. Seva Bharti Madhya Bharat, Matrachhaya (Shishu Kalyan Kendra), Swami Ramtirth Nagar, Near Maida Mill, Hoshangabad Road, Bhopal
20	Shri Shreechand Lalwani, M.P. Aata avam Masala Chakki Pisai Mahasangh Samiti, Office 35, Main Bazar, Jahangirabad, Bhopal

TARIFF

SCHEDULES

Annexure-2 (Tariff Schedules for Low Tension Consumers)

**ANNEXURE TO THE TARIFF ORDER PASSED BY MPERC FOR
FINANCIAL YEAR 2011-12**

**MADHYA PRADESH ELECTRICITY REGULATORY COMMISSION
TARIFF SCHEDULES FOR LOW TENSION CONSUMERS**

Table of Contents

Tariff Schedules	Page No.
LV-1 Domestic	150 - 153
LV – 2 Non-Domestic	154 - 157
LV – 3 Public Water works and Street Lights	158 - 159
LV – 4 LT Industrial – Non-Seasonal and Seasonal	160 - 163
LV – 5 Agricultural and Other than Agricultural	164 - 167
General Terms and Conditions of Low Tension Tariff	168 - 175

Tariff Schedule-- LV-1

DOMESTIC: ---

Applicability:

This tariff is applicable for light, fan and power for residential use only. Dharamshalas, old age houses, rescue houses, orphanages, places of worship and religious institutions will also be covered under this category.

Tariff:

LV 1.1 (Consumers having sanctioned load not more than 100Watts (0.1KW) and consumption not more than 30 units per month)

(a) **Energy Charge and Fixed charge** – For metered connection

Monthly consumption	Energy charges (paise per unit) Urban/ Rural areas	Monthly Fixed charges (in Rs.)
Up to 30 units	290	NIL

(b) **Minimum charges:** Rs. 40 per connection per month as minimum charges is applicable to this category of consumers.

LV 1.2

(a) (i) **Energy Charge and Fixed charge** – For metered connection

Slabs of monthly consumption	Energy charges with telescopic benefit (paise per unit) Urban/ Rural areas	Monthly Fixed Charges (in Rs)	
		Urban areas	Rural areas
Up to 50 units	330	30 per connection	20 per connection

51 to 100 units	375	55 per connection	30 per connection
101 to 200 units	460	60 for each 0.5 KW of authorised load	40 for each 0.5 KW of authorised load
Above 200 units	480	70 for each 0.5 KW of authorised load	60 for each 0.5 KW of authorised load

Minimum charges: Rs. 60 per connection per month as minimum charges towards energy charges are applicable for above categories.

Note: The authorized load shall be as defined in the Electricity Supply Code 2004. (Every 75 units consumption per month or part thereof shall be considered equal to 0.5 KW of authorised load. Example: If consumption during the month is 125 units, then the authorised load will be taken as one KW. In case the consumption is 350 units then the authorised load will be taken as 2.5 KW.)

Temporary/ DTR meter connection	Energy charges (paise per unit) Urban/ Rural areas	Monthly Fixed Charges (in Rs)	
		Urban areas	Rural areas
Temporary connection for construction of own house (max. up to one year).	650	200 for each one KW of sanctioned or connected or recorded load whichever is highest	150 for each one KW of sanctioned or connected or recorded load whichever is highest

Temporary/ DTR meter connection	Energy charges (paise per unit) Urban/ Rural areas	Monthly Fixed Charges (in Rs)	
		Urban areas	Rural areas
Temporary connection for social/marriage purposes and religious functions.	650	40 for each one KW of sanctioned or connected or recorded load, whichever is highest, for each 24 hours duration or part thereof.	20 for each one KW of sanctioned or connected or recorded load, whichever is highest, for each 24 hours duration or part thereof.
Supply through DTR meter for clusters of Jhuggi/Jhopadi till individual meters are provided	300	NIL	NIL

Minimum charges: Rs. 500/- per connection per month is applicable towards energy charges for temporary connection and no minimum charges are applicable for supply through DTR meter for clusters of Jhuggi/Jhopadi.

(ii) Energy charge and Fixed charge for un-metered domestic connections:

Particulars	Units and Energy charges to be billed per month for unmetered connections (paise per unit)	Monthly Fixed Charges (in Rs)
Un-metered connection in urban areas	77 units @ 400 per unit	60 per connection
Un-metered connection in rural areas	30 units @ 330 per unit	25 per connection

(b) Minimum charges: No minimum charges are applicable to this category of consumers

Specific Terms and conditions for LV-1 category

- a) The energy charges corresponding to consumption recorded in DTR meter shall be equally divided amongst all consumers connected to that DTR for the purpose of billing. The licensee will obtain consent of such consumers for billing as per above procedure.
- b) In case energy charges for actual consumption are less than minimum charges, minimum charges shall be billed towards energy charges. All other charges, as applicable, shall also be billed.
- c) Other terms and conditions shall be as specified under General Terms and Conditions for Low Tension consumers.

Tariff Schedule – LV-2

NON-DOMESTIC: ---

LV 2.1

Applicability:

This tariff is applicable for light, fan and power to Educational Institutions including workshops & laboratories of Engineering Colleges / Polytechnics/ITIs (which are registered with /affiliated/ recognized by the relevant Govt. Body or University) , Hostels for students or working women or sports persons (run either by Govt. or individuals)

Tariff:

Tariff shall be as given in the following table:

Sub category	Energy charges (paise/unit) Urban/ Rural areas	Monthly Fixed Charges (in Rs.)	
		Urban areas	Rural areas
Sanctioned load based tariff	480	75 per KW	50 per KW
<u>OPTIONAL</u> Demand based tariff for Contract demand above 10KW	480	160 per KW or 128 per kVA of billing demand	100 per KW or 80 per kVA of billing demand

LV 2.2

Applicability:

This tariff is applicable for light, fan and power to Railways (for purposes other than traction and supply to Railway Colonies/water supply), Shops/showrooms, Parlors, Government Offices, Government Hospitals and Government medical care facilities including Primary Health Centers, offices belonging to public/private organisations, public buildings, guest houses, Circuit Houses, Government Rest Houses, X-ray plant, recognized Small Scale Service Institutions, clubs, restaurants, eating establishments, meeting halls, places of public entertainment, circus shows, hotels, cinemas, professional's chambers (like Advocates, Chartered Accountants, Consultants, Doctors etc.), private clinics, nursing homes and private hospitals, bottling plants, marriage gardens, marriage houses, advertisement services, advertisement boards/ hoardings, training or coaching institutes, petrol pumps and service stations, tailoring shops, laundries, gymnasiums and health clubs and any other establishment (except those which are covered in LV 2.1), who is required to pay Commercial tax/service tax/value added tax (VAT)/entertainment tax/luxury tax under any Central/State Acts.

Tariff:

Tariff shall be as given in the following table:

Sub category	Energy charges (paise/unit) Urban/ Rural areas	Monthly Fixed charges (in Rs)	
		Urban areas	Rural areas
On all units if monthly consumption is not more than 50 units	515	40 per KW	20 per KW
On all units in case monthly consumption exceeds 50 units	570	70 per KW	40 per KW
<u>OPTIONAL</u> Demand based tariff for contract demand above 10 KW	485	175 per KW or 140 per kVA of billing demand	100 per KW or 80 per kVA of billing demand
Temporary connections including Multi point temporary connection at LT for Mela*	690	110 per KW or part thereof of sanctioned or connected or recorded load whichever is highest	65 per KW or part thereof of sanctioned or connected or recorded load whichever is highest

Sub category	Energy charges (paise/unit) Urban/ Rural areas	Fixed charges (in Rs)	
		Urban areas	Rural areas
Temporary connection for marriage purposes at marriage gardens or marriage halls or any other premises covered under LV 2.1 and 2.2 categories	690 (Minimum consumption charges shall be billed @ 6 Units per KW or part thereof of Sanctioned or Connected or Recorded Load whichever is highest for each 24 hours duration or part there of subject to a minimum of Rs.500/-)	Rs. 40for each KW or part thereof of sanctioned or connected or recorded load whichever is highest for each 24 hours duration or part thereof	Rs. 20 for each KW or part thereof of sanctioned or connected or recorded load whichever is highest for each 24 hours duration or part thereof
For X-Ray plant	Additional Fixed charges (Rs. per machine per month)		
Single Phase	400		
Three Phase	600		

*In case permission for organizing Mela is granted by Revenue Authorities of Government of Madhya Pradesh.

Specific Terms and Conditions for LV-2 category:

- a) **Minimum consumption:** The consumer shall guarantee a minimum annual consumption of 360 units per kW or part thereof in urban areas and 180 units per kW or part thereof in rural areas of **sanctioned load or contract demand (in case of demand based charges)** . However, the load of X-Ray unit shall be excluded while considering the load of the consumer for calculation of minimum consumption. The method of billing minimum consumption shall be as given in General Terms and Conditions of Low Tension tariff.
- b) **Additional Charge for Excess demand :** Shall be billed as given in General Terms and Conditions of Low Tension tariff.

- c) **Rebate in energy charges for connection of Telecom Infra Structure situated in rural areas:** In order to give impetus to proliferation of telecommunication services in the rural areas in the State, a rebate of paise 25 per unit in energy charges shall be given to the connections of mobile communication towers situated in rural areas.
- d) Other terms and conditions shall be as specified under General Terms and Conditions.

Tariff Schedule – LV-3

PUBLIC WATER WORKS AND STREET LIGHTS

Applicability:

The tariff **LV-3.1** is applicable for Public Utility Water Supply Schemes, Sewage Treatment Plants, Sewage Pumping Installations run by P.H.E. Department or Local Bodies or Gram Panchayats or any other organization authorised by the Government to supply/ maintain public water works / sewerage installations and shall also be applicable to electric crematorium maintained by local bodies/trusts.

Note: Private water supply scheme, water supply schemes run by institutions for their own use/employees/townships etc. will not fall in this category but billed under the appropriate tariff category to which such institution belongs. In case water supply is being used for two or more different purposes then the highest tariff shall be applicable.

The tariff **LV-3.2** is applicable to traffic signals and lighting of public streets or public places including parks, town halls, monuments and its institutions, museums, public toilets, public libraries, reading rooms run by Government or Local Bodies and Sulabh Shochalaya.

Tariff:

Category of consumers/area of applicability	Energy Charges (paise per unit)	Monthly Fixed Charges (in Rs. per KW)	Minimum Charges (Rs)
LV 3.1 Public Water Works			
Municipal Corporation/ Cantonment Board	350	130	No Minimum Charges
Municipality/ Nagar Panchayat	350	110	
Gram Panchayat	350	45	
Temporary supply	1.3 times the applicable tariff		
LV 3.2 Street light			
Municipal Corporation/ Cantonment Board	360	220	No Minimum Charges
Municipality/ Nagar Panchayat	360	200	
Gram Panchayat	360	45	

Specific Terms and Conditions for LV-3 category:

(a) Incentives for adopting Demand Side Management

An **incentive** equal to 5 % of energy charges shall be given on installation and use of energy saving devices (such as ISI energy efficient motors for pump sets and programmable on-off/ dimmer switch with automation for street lights). **Incentive** will be admissible only if full bill is paid within due dates failing which all consumed units will be charged at normal rates. Such incentive will be admissible from the month following the month in which energy saving devices are put to use and its verification by a person authorized by the licensee. This incentive will continue to be allowed till such time these energy saving devices remain in service. The licensee is required to arrange wide publicity of above incentive.

(b) Other terms and conditions shall be as specified under General Terms and Conditions.

Tariff Schedule – LV-4

LT INDUSTRIAL

Applicability:

Tariff LV-4 is applicable to light, fan and power for operating equipment used by printing press and any other industrial establishments and workshops (where any processing or manufacturing takes place including tyre re-treading). These tariffs are also applicable to cold storage, gur (jaggery) making machines, flour mills, Masala Chakkies, hullers, khandsari units, ginning and pressing units, sugar cane crushers (including sugar cane juicing machine), power looms, dal mills, besan mills, and ice factories and any other manufacturing or processing units (excluding bottling plant) producing/processing food items or processing agriculture produce for preservation/increasing its shelf life and Dairy units (where milk is processed other than chilling, pasteurization etc to produce other end products of milk.)

Tariff: For Non seasonal and seasonal consumers

	Category of consumers	Monthly Fixed Charges (in Rs.)		Energy Charges (paise per unit) – Urban / Rural Area
		Urban Areas	Rural Areas	
4.1	Non seasonal consumers			
4.1 a	LT industries having connected load up to 25 HP	70 per HP	25 per HP	375
4.1b (i)	Demand based tariff (Contract demand and connected load up to 100HP)	200 per kW or 160 per kVA of billing demand	90 per kW or 72 per kVA of billing demand	480
4.1b (ii)	Demand based tariff (Contract demand up to 100 HP and connected load more than 100 HP but not exceeding 150 HP)	280 per kW or 224 per kVA of billing demand	190 per kW or 152 per kVA of billing demand	480

4.1c	Demand based tariff (Contract demand more than 100 HP & up to 150 HP with connected load not exceeding 150HP*) (For existing consumers only)	280 per kW or 224 per kVA of billing demand	190 per kW or 152 per kVA of billing demand	480
4.1 d	Temporary connection	1.3 times of the applicable tariff		
*In addition, these consumers are also liable to pay transformation loss @ 3% and transformer rent as per the MPERC (Recovery of expenses and other charges for providing electric line or plant for the purpose of giving supply) Regulations (Revision-I), 2009.				
4.2 Seasonal Consumers (period of season shall not exceed 180 days continuously). If the declared season or off-season spreads over two tariff periods, then the tariff for the respective period shall be applicable.				
4.2 a	During season	Normal tariff as for Non seasonal consumers	Normal tariff as for Non seasonal consumers	Normal tariff as for Non seasonal consumers
4.2 b	During Off -season	Normal tariff as for Non-seasonal consumers on 10 % of contract demand or actual recorded demand, whichever is more	Normal tariff as for Non-seasonal consumers on 10 % of contract demand or actual recorded demand, whichever is more	120 % of normal tariff as for Non-seasonal consumers

Terms and Conditions:

- (a) The maximum demand of the consumer in each month shall be reckoned as four times the largest amount of kilovolt ampere hours delivered at the point of supply of the consumer during any continuous fifteen minutes in that month.
- (b) Any consumer may opt for demand based tariff, however for the consumers having connected load **above 25 HP** , demand based tariff is mandatory and the licensee shall provide Tri vector/ Bi vector Meter capable of recording Demand in kVA/ kW, kWh, kVAh and Time of Use consumption
- (c) Demand based tariff for contract demand above 100 HP & up to 150 HP is for **existing consumers** only under LV 4.1 c category. No new connection under this category be released.
- (d) **Minimum Consumption:** Shall be as per following:

(d.1) For connected load up to 100HP

- i. **For LT Industries in rural areas:** The consumer shall guarantee a minimum annual consumption (kWH) based on 180 units per HP or part thereof of contract demand irrespective of whether any energy is consumed or not during the year.
- ii. **For LT Industries in urban areas: The consumer** shall guarantee a minimum annual consumption (kWH) based on 360 units per HP or part thereof of contract demand irrespective of whether any energy is consumed or not during the year.
- iii. **The consumer shall be billed monthly** minimum 15 units per HP per month in rural area and 30 units per HP per month in urban area in case the actual consumption is less than above specified units.
- iv. **Method of billing of minimum consumption** shall be as given in the General Terms and Conditions of Low Tension tariff.

(d.2) For connected load more than 100HP up to 150HP

- i. **For LT Industries in rural areas:** The consumer shall guarantee a minimum annual consumption (kWH) based on 240 units per HP or part thereof of contract demand irrespective of whether any energy is consumed or not during the year.
 - ii. **For LT Industries in urban areas:** The consumer shall guarantee a minimum annual consumption (kWH) based on 480 units per HP or part thereof of contract demand irrespective of whether any energy is consumed or not during the year.
 - iii. The consumer shall be billed monthly minimum 20 units per HP per month or part thereof of contract demand in rural area and 40 units per HP per month or part thereof of contract demand in urban area in case the actual consumption is less than above specified units.
 - iv. **Method of billing of minimum consumption** shall be as given in the General Terms and Conditions of Low Tension tariff.
- (e) **Additional Charge for Excess Demand:** Shall be billed as given in the General Terms and Conditions of Low Tension tariff.
- (f) Other terms and conditions shall be as specified under General Terms and Conditions.
- (g) Other Terms and conditions for **seasonal consumers:**

- i.** The consumer has to declare months of season and off season for the financial year 2011-12 within 60 days of issue of tariff order and inform the same to the licensee. Since almost two months of the financial year 2011-12 are over, therefore if the consumer has already declared the period of season and off-season during this financial year prior to issue of this order, same shall be taken into cognizance for the purpose and accepted by the Licensee.
 - ii.** The seasonal period once declared by the consumer cannot be changed during the financial year.
 - iii.** This tariff is not applicable to composite units having seasonal and other category of loads.
 - iv.** The consumer will be required to restrict his monthly off season consumption to 15% of the highest of average monthly consumption during the preceding three seasons. In case this limit is exceeded in any off season month, the consumer will be billed under Non seasonal tariff for the whole financial year as per the tariff in force.
 - v.** The consumer will be required to restrict his maximum demand during off season up to 30 % of the contract demand. In case the maximum demand recorded in any month of the declared off season exceeds this limit, the consumer will be billed under Non seasonal tariff for the whole financial year as per the tariff in force.
-

Tariff Schedule – LV - 5

AGRICULTURAL AND OTHER THAN AGRICULTURAL

Applicability:

The tariff **LV-5.1** shall apply to agricultural pump connections, chaff cutters, threshers, winnowing machines, seeding machines and irrigation pumps of lift irrigation schemes including water drawn by agriculture pumps for use by cattle.

The tariff **LV-5.2** shall apply to connection for nurseries growing flowers/ plants/ saplings/ fruits, fisheries ponds, aquaculture, sericulture, hatcheries, poultry farms, cattle breeding farms, grasslands and mushroom growing farms and those dairy units only where extraction of milk and its processing such as chilling, pasteurization etc. is done .

Tariff:

S. No.	Sub-Category	Monthly Fixed charges (in Rs.)	Energy charges (paise per unit)
5.1	For agricultural use		
a)	First 300 units per month	NIL	300
b)	Rest of the units in the month	NIL	350
c)	Temporary connections	NIL	385
d)	DTR metered group consumers	NIL	270
5.2	For other than agricultural use		
a)	Up to 25 HP in urban areas	55 per HP	350
b)	Up to 25 HP in rural areas	20 per HP	350
c)	Demand based tariff (Contract demand and connected load up to 100 HP) in urban areas	170 per kW or 136 per kVA of billing demand	425
d)	Demand based tariff (Contract demand and connected load up to 100 HP) in rural areas	80 per kW or 64 per kVA of billing demand	425

Basis of billing of energy of un-metered consumption:

Billing of un-metered consumers shall be done in the following manner as this order is issued in May'11 and is effective from 1st June,2011, therefore the billing on new tariff will be June,11 onwards.

Assessed consumption for billing of un-metered agriculture consumers shall be as under:

Particulars		No. of units per HP of sanctioned load per month					
		Urban Area			Rural Area		
Type of Pump Motor	Nature of connection	April & May 2011	June to September 2011	Oct ,2011 to March 2012	April & May 2011	June to September 2011	Oct ,2011 to March 2012
Three Phase	Permanent	70	100	170	40	55	150
	Temporary	175	175	175	155	155	155
Single Phase	Permanent	70	100	180	50	65	160
	Temporary	190	190	190	170	170	170

3.1 Terms and conditions:

3.1.1 Consumers opting for temporary supply shall have to pay the charges in advance for three months including those who request to avail connection for one month only subject to replenishment from time to time for extended period and adjustment as per final bill after disconnection. Regarding temporary connection for the purpose of thrashing the crops, temporary connection for a period of one month can be served at the end of Rabi and Kharif seasons only with payment of one month's charges in advance.

3.1.2 Following **incentive*** shall be given to the metered agricultural consumers on installation of energy saving devices --

S. No.	Particulars of Energy Saving Devices	Rate of rebate
1.	ISI / BEE star labelled motors for pump sets	15 paise per unit
2.	ISI / BEE star labelled motors for pump sets and use of frictionless PVC pipes and foot valve	30 paise per unit
3.	ISI / BEE star labelled motors for pump sets and use of frictionless PVC pipes and foot valves along with installation of shunt capacitor of appropriate rating	45 paise per unit

* Incentive shall be allowed on the consumer's contribution part of the normal tariff (full tariff minus amount of Govt. subsidy per unit, if any) for installation of energy saving

devices under demand side management. This incentive will be admissible only if full bill is paid within due dates failing which all consumed units will be charged at normal rates. Incentive will be admissible from the month following the month in which Energy Saving Devices are put to use and its verification by a person authorized by the licensee. The licensee is required to arrange wide publicity to above incentive in rural areas. The licensee is required to place quarterly information regarding incentives provided on its web site.

3.1.3 Minimum consumption

- (i) **For Metered agricultural consumers (LV-5.1) :** The consumer shall guarantee a minimum consumption of 25 units per HP or part thereof of connected load per month for the months from June to September and 75 units per HP or part thereof of connected load per month for the months from October to March irrespective of whether any energy is consumed or not during the year.
- (ii) **For other than agricultural use (LV-5.2) :**
 - a) The consumer will guarantee a minimum annual consumption (kWH) based on 180 units/HP or part thereof of contract demand in notified rural areas and 360 units/HP or part thereof of contract demand in urban areas irrespective of whether any energy is consumed or not during the year.
 - b) The consumer shall be billed monthly minimum 15 units per HP per month in rural area and 30 units per HP per month in urban area in case the actual consumption is less than monthly minimum consumption (kWH).
 - c) **Method of billing of minimum consumption** shall be as given in the General Terms and Conditions of Low Tension tariff.

3.1.4 Additional Charge for Excess Demand: Shall be billed as given in the General Terms and Conditions of Low Tension tariff.

3.1.5 Specific conditions for DTR metered consumers:

- a. All the consumers connected to the DTR shall pay the energy charges for the units worked out based on their actual connected load.
- b. The Licensee will obtain consent of such connected consumers for billing as per procedure specified in (a) above.

3.1.6 One lamp up to 40 W is permitted at or near the pump in the power circuit.

3.1.7 The use of three phase agriculture pump by installing external device during the period when the supply is available on single phase, shall be treated as illegal

extraction of energy and action as per prevailing rules and Regulations shall be taken against the defaulting consumer.

3.1.8 Other terms and conditions shall be as specified under General Terms and Conditions.

GENERAL TERMS AND CONDITIONS OF LOW TENSION TARIFF

1. **Rural Areas** mean those areas notified by GoMP vide notification no. 2010/F13 /05/13/2006 dated 25th March 2006 as may be amended from time to time. **Urban areas** mean all areas other than those notified by GoMP as Rural areas.
2. Rounding off: All bills will be rounded off to the nearest rupee i.e. up to 49 paise shall be ignored and 50 paise upwards shall be rounded of to next Rupee.
3. Billing Demand: In case of demand based tariff, the billing demand for the month shall be the actual maximum kVA demand of the consumer during the month or 90% of the contract demand, whichever is higher. The billing demand shall be rounded off to the nearest integer number i.e. fraction of 0.5 or above will be rounded to next higher integer and the fraction of less than 0.5 shall be ignored.
4. Fixed charges billing: Fractional load for the purposes of billing of fixed charges shall be rounded off to nearest integer i.e. fraction of 0.5 or above will be rounded to next higher integer and the fraction of less than 0.5 shall be ignored.
5. **Method of billing of minimum consumption:**
 - a. The consumer shall be billed one twelfth of guaranteed annual minimum consumption (KWH) specified for his category each month in case the actual consumption is less than above mentioned minimum consumption.
 - b. During the month in which actual cumulative consumption equals or greater than the annual minimum guaranteed consumption, no further billing of monthly minimum consumption shall be done in subsequent months of the financial year and only actual recorded consumption shall be billed.
 - c. The month in which cumulative actual or billed monthly consumption of the consumer exceeds the cumulative monthly prorated minimum annual guaranteed consumption and if the consumer was charged in earlier months for tariff minimum difference consumption on account of his actual consumption being less , then such tariff minimum consumption shall be adjusted in the month in which cumulative actual or billed monthly consumption exceeds cumulative monthly prorated minimum annual guaranteed consumption. If such tariff difference consumption does not get fully adjusted in that month, such adjustment shall continue to be done in subsequent months of the financial year. The following example illustrates the procedure for monthly billing of consumption where prorated monthly minimum consumption is 100 kWH based on annual consumption of 1200 kWH.

Month	Actual cumulative consumption (kwh)	Cumulative minimum consumption (kwh)	Higher of 2 and 3 (kwh)	Already billed in the year (kwh)	To be billed in the month = (4-5) (kwh)
1	2	3	4	5	6
April	95	100	100	0	100
May	215	200	215	100	115
June	315	300	315	215	100
July	395	400	400	315	85
Aug	530	500	530	400	130
Sept	650	600	650	530	120
Oct	725	700	725	650	75
Nov	805	800	805	725	80
Dec	945	900	945	805	140
Jan	1045	1000	1045	945	100
feb	1135	1100	1135	1045	90
March	1195	1200	1200	1135	65

6. Additional Charge for Excess Demand: Shall be billed as per following procedure:

- a) **Consumers opting for demand based tariff:** The consumers availing supply at demand based tariff shall restrict their actual maximum demand within the contract demand. However, in case the actual maximum demand recorded in any month exceeds 105% of the contract demand, the tariff in this schedule shall apply to the extent of 105 % of the contract demand only. The consumer shall be charged for demand recorded in excess of 105% of contract demand (termed as Excess Demand) and consumption corresponding thereto at the following rates:-
- b) **Energy charges for Excess Demand:** The consumer shall pay charges @ 1.3 times the tariff for energy charges for consumption corresponding to excess demand in case the maximum demand recorded exceeds the 105% of the contract demand.

Example: If a consumer having a contract demand of 50 kVA records a maximum demand of 60 kVA, the billing of energy charges for excess demand of (60 kVA- 52.5 kVA)= 7.5 kVA shall be = (total consumption recorded during the month* 7.5 kVA/maximum recorded demand)*1.3* energy charge unit rate.

- c) **Fixed charges for Excess Demand:** These charges shall be billed as per following:

1. **Fixed charges for Excess Demand when the recorded maximum demand is up to 115% of the contract demand:-** fixed charges for Excess Demand over and above the 105 % of contract demand shall be charged at 1.3 times the normal rate of fixed charges
 2. **Fixed charges for Excess Demand when the recorded maximum demand exceeds 115% of contract demand :-** In addition to fixed charges in 1 above, recorded demand over and above 15 % of the contract demand shall be charged at 2 times the normal rate of fixed charges
- d) The above billing for Excess Demand, applicable to consumers is without prejudice to the licensee's right to ask for revision of agreement and other such rights that are provided under the Regulations notified by the Commission or under any other law.
- e) The maximum demand of the consumer in each month shall be reckoned as four times the largest amount of kilovolt ampere hours delivered at the point of supply of the consumer during any continuous fifteen minutes in that month.

7. Other Terms and Conditions:

- (a) For **advance payment** made before commencement of consumption period for which bill is prepared, a rebate of 1 % per month on the amount (excluding security deposit) which remains with the licensee at the end of calendar month shall be credited to the account of the consumer after adjusting any amount payable to the licensee.
- (b) **Incentive for prompt payment:** An incentive for prompt payment @0.25% of the bill amount (excluding electricity duty and Cess) shall be given in case the payment is made at least 7 days in advance of the due date of payment where the current month billing amount is equal to or greater than Rs. One lac. The consumers in arrears shall not be entitled for this incentive.
- (c) The Sanctioned load or Connected load or Contract Demand should not exceed 75 kW / 100 HP except where a higher limit is specified. If the consumer exceeds his load / demand beyond this ceiling on more than two occasions in two billing months during the tariff period, the Licensee may insist on the consumer to avail HT supply.
- (d) Metering Charges shall be billed as per schedule of Metering and Other Charges as prescribed in MPERC (Recovery of expenses and other charges for providing electric line or plant used for the purpose of giving supply), Regulations (Revision-I),2009. Part of a month will be reckoned as full month for purpose of billing.

- (e) In case the cheque presented by the consumer is dishonoured, without prejudice to Licensee's rights to take recourse to such other action as may be available under the relevant law, a service charge of Rs. 150 per cheque shall be levied in addition to delayed payment surcharge
- (f) Other charges as stated in schedule of miscellaneous charges shall also be applicable.
- (g) **Welding surcharge** is applicable to installations with welding transformers, where the connected load of welding transformers exceeds 25% of the total connected load and where suitable capacitors of prescribed capacity have not been installed to ensure power factor of not less than 0.8 (80%) lagging. Welding Surcharge of 75 (seventy five) paise per unit shall be levied for the consumption of the entire installation during the month.
- (h) For purposes of computing the connected load in kW of the welding transformers, a power factor of 0.6 (60%) shall be applied to the maximum current or kVA rating of such welding transformers.
- (i) Existing LT power consumer shall ensure that LT capacitor of proper rating is provided. In this regard, Madhya Pradesh Electricity Supply Code 2004 may be referred for guidance. It shall be the responsibility of the consumer to ensure that overall average power factor during any month is not less than 0.8 (80%) failing which the consumer shall be liable to pay low power factor surcharge on the entire billed amount against energy charges during the month at the rates given below:

1. For the consumer whose meter is capable of recording average power factor:

a. Surcharge @ 1 % of energy charges for every 1% fall in power factor below 80% up to 75 %.

b. Surcharge of 5% plus 1.25% of energy charges for every 1% fall in power factor below 75% up to 70%.

The maximum limit of surcharge will be 10 % of the energy charges billed during the month.

2. For LT consumer having meter not capable of recording average power factor: The consumer shall ensure that LT capacitors of proper rating are provided and are in good working condition. In this regard, Madhya Pradesh Electricity Supply Code, 2004 may be referred for guidance. In case of failure to meet the above criteria, the consumer would be levied a low power factor surcharge of 10% on the entire billed amount against energy charges during

the month and would be continued to be billed till such time the consumer meets the above criteria .

- (j) Levy of welding / power factor surcharge as indicated hereinabove shall be without prejudice to the rights of the Licensee to disconnect the consumer's installation, if steps are not taken to improve the power factor by installing suitable shunt capacitors.
- (k) Load Factor incentive: Following slabs of incentive shall be allowed for consumers billed under demand based tariff:

Load factor	Concession in energy charges
For load factor above 25% and up to 30 % load factor on contract demand	12 paise per unit concession on the normal energy charges for all energy consumption over and above 25% load factor during the billing month
For load factor above 30% and up to 40 % load factor on contract demand	In addition to load factor concession available up to 30% load factor , concession at the rate of 24 paise per unit on the normal energy charges for all energy consumption over and above 30 % load factor during the billing month
For load factor above 40% load factor on contract demand	In addition to load factor concession available up to 40% load factor, concession at the rate of 36 paise per unit on the normal energy charges for all energy consumption over and above 40% load factor during the billing month

The **load factor** shall be calculated as per the following formula:

$$\text{Load factor (\%)} = \frac{\text{Monthly consumption X 100}}{\text{No. of hours in the billing month X Demand_PF}}$$

- i. Monthly consumption shall be units (kwh) consumed in the month excluding those received from sources other than Licensee.
- ii. No. of Hours in billing month excluding period of scheduled outages in hours.
- iii. Demand_PF in the denominator of the above formula shall be taken as higher of either
 - (i) the product of maximum demand recorded or contract demand whichever is more and 0.8 power factor.

OR

- (ii) the product of maximum demand recorded and 0.8 or actual average monthly power factor whichever is higher.

Note: The load factor (%) shall be rounded off to the nearest lower integer. The billing month shall be the period in number of days between the two consecutive dates of meter readings taken for the purpose of billing to the consumer for the period under consideration as a month.

- (l) In case of any dispute on applicability of tariff on a particular LT category, the decision of the Commission shall be final.
- (m) The tariff does not include any tax, cess or duty, etc. on electrical energy that may be payable at any time in accordance with any law then in force. Such charges, if any, shall also be payable by the consumer in addition to the tariff charges and applicable miscellaneous charges.
- (n) **Delayed payment Surcharge for all categories:** Surcharge at the rate of 1.25 % per month or part thereof on the amount outstanding (including arrears) will be payable if the bills are not paid up to due date subject to a minimum of Rs.5/- per month for total outstanding bill amount up to Rs. 500/- and Rs 10/ per month for amount of bill more than Rs.500/. The part of a month will be reckoned as full month for the purpose of calculation of delayed payment surcharge. The delayed payment surcharge will not be levied for the period after supply to the consumer is permanently disconnected.
- (o) In case of conversion of LT connection into HT connection, it is mandatory on the part of both the consumer and the licensee to get the HT agreement executed before availing supply at HT.
- (p) **Power Factor Incentive:**

If the average monthly power factor of the consumer is equal to or more than 85%, incentive shall be payable as follows:

Power Factor	Percentage incentive payable on billed energy charges

Above 85% up to 86%	0.5
Above 86% up to 87%	1.0
Above 87% up to 88%	1.5
Above 88% up to 89%	2.0
Above 89% up to 90%	2.5
Above 90% up to 91%	3.0
Above 91% up to 92%	3.5
Above 92% up to 93%	4.0
Above 93% up to 94%	4.5
Above 94% up to 95%	5.0
Above 95% up to 96%	6.0
Above 96% up to 97%	7.0
Above 97% up to 98%	8.0
Above 98% up to 99%	9.0
Above 99%	10.0

For this purpose, the “average monthly power factor” is defined as the ratio in percentage of total Kilo Watt hours to the total kilo volt Ampere hours recorded during the month.

- (q) Use of mix loads in one connection: Unless otherwise permitted specifically in the tariff category, the consumer requesting for use of mix loads for different purposes shall be billed for the purpose for which the tariff is higher. However, pursuant to interim order dated 13-05-08 in W.P.no.6006/2008 by the Hon’ble High Court of MP, LV-1 domestic tariff shall be applicable to the houses of advocates having professional chambers until further orders of Hon’ble High court of M.P.
- (r) Consumers in the notified Industrial Growth Centres area receiving supply under urban discipline shall be billed urban tariff.
- (s) No changes in the tariff or the tariff structure including minimum charges for any category of consumer is permitted except with prior written permission from the Commission. Any action taken without such written permission of the Commission shall be treated as null and void and shall also be liable for action under relevant provisions of the Electricity Act, 2003.
- (t) All conditions prescribed herein shall be applicable to the consumer notwithstanding if any contrary provisions exist in the agreement entered into by the consumer with the licensee.

8. Additional conditions for Temporary Supply at LT:

- (a) Temporary supply cannot be demanded by a prospective/ existing consumer as a matter of right but will normally be arranged by the licensee when a requisition giving due notice is made. The temporary additional supply to an existing

consumer also shall be treated as a separate service and charged subject to following conditions. However service under Tatkal Scheme shall be made available within 24 hours according to the charges specified in the order of the Commission regarding Schedule of Miscellaneous Charges.

- (b) Fixed Charge and energy charge for temporary supply shall be billed at **1.3** times the normal charges as applicable to relevant category if not specified otherwise specifically.
- (c) Estimated bill amount is payable in advance before serving the temporary connection subject to replenishment from time to time and adjustment as per final bill after disconnection. No interest shall be given to consumers for this advance payment.
- (d) The Sanctioned load or connected load shall not exceed 75 kW / 100 HP.
- (e) The month for the purpose of billing of charges for temporary supply shall mean 30 days from the date of connection. Any period less than 30 days shall be treated as full month for the purpose of billing.
- (f) Connection and Disconnection Charges and other Miscellaneous charges shall be paid separately as may be specified in the Schedule of Miscellaneous Charges.
- (g) Load factor concession shall not be allowed on the consumption for temporary connection.
- (h) Power factor incentive/penalty shall be applicable at the same rate as applicable for permanent connection.

Annexure-3 (Tariff Schedules for High Tension Consumers)

**ANNEXURE TO THE TARIFF ORDER PASSED BY MPERC FOR
FINANCIAL YEAR 2011-12**

**MADHYA PRADESH ELECTRICITY REGULATORY COMMISSION
TARIFF SCHEDULES FOR HIGH TENSION CONSUMERS**

Table of Contents

Tariff Schedules	Page No.
HV – 1 Railway Traction	177 - 178
HV – 2 Coal Mines	179 - 180
HV – 3 Industrial and Non Industrial	181 - 183
HV – 4 Seasonal	184 - 185
HV – 5 Irrigation, Public Water Works and Other than agricultural	186 - 187
HV – 6 Bulk Residential Users	188 - 189
HV – 7 Bulk Supply to Exemptees	190 - 190
General Terms and Conditions of High Tension Tariff	191 - 202

Tariff Schedule-- HV-1

RAILWAY TRACTION: ---

Applicability:

This Tariff shall apply to the Railways for Traction loads only.

Tariff:

S. No.	Category of consumer	Monthly Fixed charges (Rs. per kVA of billing demand per month)	Energy charges (Paise / unit)
1	Railway Traction on 132kV / 220 kV	220	470

Specific Terms and Conditions:

- (a) In order to give impetus to electrification of Railway network in the State, a rebate of 10% in energy charges for new Railway traction projects shall be allowed for a period of five years from the date of connection for such new projects for which agreements for availing supply from licensee are finalized during 2011-12. The rebate provided in earlier orders shall remain in force at the rate and for the duration as mentioned in those tariff orders.
- (b) The dedicated feeder maintenance charges shall **not** be applicable.
- (c) Guaranteed Annual Minimum Consumption shall be 1500 units (Kwh) per kVA of contract demand. The method of billing of minimum consumption shall be as given in General Terms and Conditions of High Tension tariff.
- (d) Power Factor Penalty:
 - i. If the average monthly power factor of the consumer falls below 90 percent, penalty will be levied at the rate of one percent of total energy charges for the month for each one percent fall in the average monthly power factor below 90 percent. **For determination of power factor, lag only logic shall be used and no power factor penalty shall be levied if leading power factor is recorded.**
 - ii. If the average monthly power factor of the consumer falls below 85 percent, the consumer shall be levied a penalty of 5% (five percent) plus @ 2% (two percent) for each one percent fall in his average monthly power factor below

85 percent. , on the total amount of bill under the head of “Energy Charges”. This penalty shall be subject to the condition that overall penalty on account of low power factor does not exceed 35%.

- iii. For this purpose, the “average monthly power factor” is defined as the ratio expressed in percentage of total Kilo Watt hours recorded to the total kilo volt Ampere hours recorded during the billing month. This ratio (%) shall be rounded off to the nearest integer figure and the fraction of 0.5 or above will be rounded to next higher integer and the fraction of less than 0.5 shall be ignored.
 - iv. Notwithstanding what has been stated above, if the average power factor of a new connection of the consumer is found to be less than 90% in any month during the first 6 (six) months from the date of connection, the consumer shall be entitled to a maximum period of six months to improve it to not less than 90% subject to following conditions:
 - This period of six months shall be reckoned from the month in which the average power factor was found for the first time to be less than 90%.
 - In all cases, the consumer will be billed penal charges for low power factor, but in case the consumer maintains the average power factor in subsequent three months (thus in all four months) to not less than 90%, the charges on account of low power factor billed during the said six months period, shall be withdrawn and credited in next monthly bills.
 - The facility, as mentioned herein, shall be available not more than once to new consumer whose average power factor is less than 90% at any time during 6 months from the date of connection. Thereafter, the charges on account of low average power factor, if found less than 90%, shall be payable as by any other consumer.
- (e) Other terms and conditions shall be as mentioned in the General Terms and Conditions of High Tension Tariff.

Tariff Schedule – HV - 2

COAL MINES: ---

Applicability:

This Tariff shall apply to the Coal Mines for power, ventilation, lights, fans, coolers, etc. which shall mean and include all energy consumed for coal mines and lighting in the offices, stores, canteen, compound lighting etc and the consumption for residential use therein.

Tariff:

S. No.	Sub category	Monthly Fixed charges (Rs. / kVA of billing demand per month)	Energy charges for consumption up to 50% load factor (Paise / unit)	Energy charges for consumption in excess of 50% load factor (Paise / unit)
	Coal Mines			
	11 kV supply	450	510	425
	33 kV supply	460	490	405
	132 kV supply	470	480	395
	220 kV supply	480	470	385

Specific Terms and Conditions:

- a. **Guaranteed Minimum Consumption** shall be on the following basis :

Supply Voltage	Guaranteed annual minimum consumption in units(KWH) per kVA of contract demand
<i>For supply at 220 / 132 kV</i>	1620
<i>For supply at 33 / 11 kV</i>	1200

Note: The method of billing of minimum consumption shall be as given in General Terms and Conditions of High Tension tariff

- b. Load Factor Incentive:** The consumer shall be eligible for Load Factor incentive on energy charges as per the scheme given in General Terms and Conditions of High Tension Tariff.
 - c. Time of Day Surcharge / Rebate:** This surcharge/ rebate shall be as specified in General Terms and Conditions of High Tension tariff
 - d.** Other terms and conditions shall be as specified under General Terms and Conditions of High Tension Tariff.
-

Tariff Schedule – HV - 3

INDUSTRIAL, NON-INDUSTRIAL AND SHOPPING MALLS

Applicability:

The **tariff HV-3.1(Industrial)** shall apply to all HT industrial consumers including mines (other than coal mines) for power, light and fan etc. which shall mean and include all energy consumed for factory and lighting in the offices, main factory building, stores, canteen, residential colonies of industries, compound lighting and Dairy units where milk is processed (other than chilling, pasteurization etc.) to produce other end products of milk.

The **tariff HV-3.2 (Non Industrial)** shall apply to establishments like Railway Stations, Offices, Hotels, Government Hospitals, Institutions etc. (excluding group of consumers) having mixed load for power, light and fan etc. which shall mean and include all energy consumed for lighting in the offices, stores, canteen, compound lighting etc. This shall also cover all other categories of consumers, defined in LT non-domestic category subject to the condition that the HT consumer shall not redistribute/sub-let the energy in any way to other person.

The **tariff HV-3.3 (Shopping malls)** shall apply to establishments of shopping malls having group of non-industrial consumers subject to the specific terms and conditions specified in (e) of this schedule.

Shopping Mall shall be a multi-storeyed shopping centre in an urban area having a system of enclosed walkways with collection of independent retail stores, services and parking areas constructed and maintained by a management firm/ developer as a unit.

The **tariff HV-3.4 (Power intensive industries)** shall apply to Mini Steel Plants (MSP), MSP with rolling mills/ sponge iron plants in the same premises, electro chemical/ electro thermal industry, Ferro alloy industry which shall mean and include all energy consumed for factory and lighting in the offices, main factory building, stores, canteen, residential colonies of industries, compound lighting etc.

Tariff:

S. No.	Sub-Category of consumer	Monthly Fixed Charges (Rs./kVA of billing demand per month)	Energy charges for consumption up to 50% load factor (Paise / unit)	Energy charges for consumption in excess of 50% load factor (Paise / unit)
3.1	Industrial			
	11 KV supply	210	480	410

	33 KV supply	335	470	350
	132 KV supply	435	430	326
	220/400 KV supply	450	415	320
3.2	Non-Industrial			
	11 KV supply	165	510	425
	33 KV supply	265	480	410
	132 KV supply	380	440	375
3.3	Shopping Malls			
	11 KV supply	165	510	435
	33 KV supply	250	490	420
	132 KV	370	450	380
3.4	Power intensive industries			
	33 KV supply	400	380*	380
	132 KV supply	525	355*	355

*Category HV 3.4 shall not be entitled to load factor incentive. Further energy charges for this category shall be same for entire consumption irrespective of load factor.

Specific Terms and Conditions:

(a) **Guaranteed Minimum Consumption** for all the above categories shall be on following basis :

Supply Voltage	Sub- category	Guaranteed annual minimum consumption in units(KWH) per kVA of contract demand
For supply at 220/132 kV	Rolling Mills	1200
	Educational institutions	720
	Others	1800
For supply at 33 / 11	Educational institutions	600

<i>kV</i>	Contract demand up to 100 kVA	900
	Others	1200

Note: The method of billing of minimum consumption shall be as given in General Terms and Conditions of High Tension tariff.

- (b) **Load Factor Incentive:** The consumer shall be eligible for Load Factor incentive on energy charges as per the scheme given in General Terms and Conditions of High Tension tariff. However consumers under category HV 3.4 shall not be entitled to load factor incentive.
- (c) **Time of Day Surcharge / Rebate:** This surcharge/ rebate shall be as specified in General Terms and Conditions of High Tension tariff.
- (d) **Rebate for supply through feeders feeding supply to predominantly to rural areas :** HT consumers of this category receiving supply through rural feeders shall be entitled to 10% rebate on Fixed Charges and 20 % reduction in Minimum Consumption (kWh) as specified above for respective voltage levels.
- (e) **Additional specific terms and conditions for shopping mall**
- (i) Individual end user shall not be levied a rate which is exceeding non-domestic- commercial tariff (LV 2.2) in case of LT connection and HT non-industrial tariff (HV 3.2) in case of HT connection, as determined by the Commission.
- (ii) All end-users shall enter into a tripartite agreement with the Management Firm /developer of the shopping mall and the licensee for availing supply of electricity in the shopping mall in order to get the benefit of the tariff under this category.
- (f) Other terms and conditions shall be as specified under General Terms and Conditions of High Tension Tariff.

Tariff Schedule – HV - 4

SEASONAL:-

Applicability:

This tariff shall be applicable to such seasonal industries / consumers requiring energy for the production purposes for maximum continuous one hundred eighty days and for a minimum period of three months. **If the declared season/off-season spreads over two tariff periods, then the tariff for the respective period shall be applicable.**

The licensee shall allow this tariff to any industry having seasonal use only.

Tariff:

Category of consumers	Monthly Fixed Charges (Rs./kVA of billing demand per month)	Energy charges for consumption up to 50% load factor (Paise / unit)	Energy charges for consumption in excess of 50% load factor (Paise / unit)
During Season			
11 KV supply	225	465	395
33 KV supply	250	450	380
During Off-Season			
11 KV supply	Rs. 225 on 10% of contract demand or actual recorded demand during the season, whichever is higher	558 i.e. 120% of seasonal energy charges	Not applicable
33 KV supply	Rs. 250 on 10% of contract demand or actual recorded demand during the season, whichever is higher	540 i.e. 120% of seasonal energy charges	Not applicable

Specific Terms and Conditions:

- a) **Guaranteed Annual Minimum Consumption** shall be 900 units (KWH) per kVA of contract demand. The method of billing of minimum consumption shall be as given in General Terms and Conditions of High Tension tariff

- b) Load Factor Incentive:** The consumer shall be eligible for Load Factor incentive on energy charges as per the scheme given in general terms and conditions of high tension tariff.
- c) Time of Day Surcharge / Rebate:** This surcharge/ rebate shall be as specified in General Terms and Conditions of High Tension tariff.
- d)** The consumer has to declare months of season and off season for the tariff year 2011-12 within 60 days of issue of tariff order and inform the same to the licensee. Since almost two months of the financial year 2011-12 are almost over, if the consumer has already informed the Licensee of his season/off-season months during this financial year prior to issue of this order, same shall be accepted and shall be valid for this tariff order.
- e)** The seasonal period once declared by the consumer cannot be changed during the year.
- f)** This tariff schedule is not applicable to composite units having seasonal and other category loads.
- g)** The consumer will be required to restrict his monthly off season consumption to 15% of highest of the average monthly consumption of the preceding three seasons. In case this limit is exceeded in any off season month, the consumer will be billed under HV-3.1 Industrial Schedule for the whole tariff year.
- h)** The consumer will be required to restrict his maximum demand during off season to 30 % of the contract demand. In case the maximum demand recorded in any month during the declared off- season exceeds this limit, the consumer will be billed under HV-3.1 Industrial Schedule for the whole year.
- i)** Other terms and conditions shall be as per the General Terms and Conditions of High Tension Tariff.
-

Tariff Schedule – HV - 5

IRRIGATION, PUBLIC WATER WORKS AND OTHER THAN AGRICULTURAL

Applicability:

The Tariff Category HV-5.1 shall apply to supply of power to lift irrigation schemes, group irrigation, Public Utility Water Supply schemes, sewage treatment plants /sewage pumping plants and for energy used in lighting pump house.

Note: Private water supply scheme, water supply schemes run by institutions for their own use/employees/townships etc. will not fall in this category but billed under the appropriate tariff category to which such institution belongs. In case water supply is being used for two or more different purposes then the highest tariff shall be applicable.

The tariff category HV-5.2 shall apply to supply of power to other than agriculture pump connections i.e. the connection for hatcheries, fisheries ponds, poultry farms, cattle breeding farms, grasslands, vegetables/ fruits/ floriculture/ mushroom growing units etc. and dairy (for those dairy units where only extraction of milk and its processing such as chilling, pasteurization etc. is done). However, in units where milk is processed to produce other end products of milk, billing shall be done under HV-3.1 (industrial) category.

Tariff:

No.	Sub-Category	Monthly Fixed charges (Rs. / kVA of billing demand per month)	Energy Charges (paise per unit)
5.1	Public Water Works, Group Irrigation and Lift Irrigation Schemes		
	11 kV supply	155	385
	33 kV supply	175	365
	132 kV supply	195	345
5.2	Other than agricultural use		
	11 kV supply	175	390
	33 kV supply	195	370
	132 kV supply	215	355

Specific Terms and Conditions:

(a) **Guaranteed Annual Minimum Consumption** shall be 720 units(KWH) per kVA of contract demand. The method of billing of minimum consumption shall be as given in General Terms and Conditions of High Tension tariff

(b) **Time of Day Surcharge / Rebate:** This surcharge/ rebate shall be as specified in General Terms and Conditions of High Tension tariff.

(c) **Incentive for adopting Demand Side Management**

An **incentive** equal to 5 % energy charges shall be given on installation and use of energy saving devices (such as ISI energy efficient motors for pump sets). **Incentive** will only be admissible if full bill is paid within due dates failing which all consumed units will be charged at normal rates as the case may be. Such incentive will be admissible from the month following the month in which energy saving devices are put to use and its verification by a person authorized by the licensee. The incentive will continue to be allowed till such time these energy saving devices remain in service. The licensee is required to arrange wide publicity for above incentive. The licensee is required to place quarterly information regarding incentives provided on its web site.

(d) Other terms and conditions shall be per the General Terms and Conditions of High Tension Tariff.

Tariff Schedule – HV - 6

BULK RESIDENTIAL USERS

Applicability:

The tariff category **HV-6.1** is applicable for supply to industrial or any other township (e.g. University or academic institutions, , hospitals, MES and Border villages etc.) for domestic purpose only such as lighting, fans, heating etc. provided that the connected load for essential common facilities such as Non-domestic supply in residential area, street lighting shall be within the limits specified hereunder :-

- (i) Water supply & Sewage pumping, Hospital - **No limit**
- (ii) Non-domestic/Commercial and other General purpose put together -**10 % of total connected load.**

The tariff category **HV-6.2** is applicable for supply to Registered Cooperative Group Housing Societies as per MOP notification no. S.O.798 (E) dated 9th June 2005 and also to other Registered Group Housing Societies and individual domestic user. The terms and conditions for this category of consumers shall be applicable as per the provisions in section 4.77 to 4.95 (both inclusive) of the Electricity Supply Code, 2004 as amended from time to time.

Tariff:

S. No.	Category of consumers	Monthly Fixed Charges (Rs. / kVA of billing demand per month)	Energy charges for consumption up to 50% load factor (Paise / unit)	Energy charges for consumption in excess of 50% load factor (Paise / unit)
1	For Tariff Sub-Category 6.1			
	11 kV supply	185	435	370
	33 kV supply	200	410	350
	132 kV supply	215	395	335
2	For Tariff Sub-Category 6.2			
	11 kV supply	125	450	385
	33 kV supply	130	440	375
	132 kV supply	135	425	360

Specific Terms and Conditions:

- (g) **Guaranteed Annual Minimum Consumption** shall be 780 units (KWH) per kVA of contract demand. The method of billing of minimum consumption shall be as given in General Terms and Conditions of High Tension tariff.
- (h) **Load Factor Incentive:** The consumer shall be eligible for Load Factor incentive on energy charges as per the scheme given in general terms and conditions of high tension tariff.
- (i) All individual end-users shall enter into a tripartite agreement with the Management of the Group Housing Society and the licensee for availing supply of electricity in the Society in order to get the benefit of the tariff under this category. The individual end user shall not be levied a rate exceeding the tariff applicable to the corresponding LT category.
- (j) Other terms and conditions shall be as specified under General Terms and Conditions of High Tension Tariff.

Tariff Schedule – HV - 7

BULK SUPPLY TO EXEMPTTEES

Applicability:

This Tariff shall apply to entities such as Co-operative Societies, any local authority, Panchayat Institution, users' association, Co-operatives, non-government organisations or franchisees who have been granted permission under section 13 of the Electricity Act 2003 (36 of 2003).

Tariff for all voltages:

S. No.	Sub-Category of consumers	Monthly Fixed Charges (Rs. / kVA of billing demand per month)	Energy Charges (paise per unit)
Bulk Supply to Exemptees under section 13 of Electricity Act 2003			
(a)	Co operative Societies having mixed use	200	320
(b)	Mixed domestic and agriculture use in rural areas notified by State Government (maximum 10 % non domestic use permitted)	100	260
(c)	Mixed domestic and non domestic use (limited to 10 % of total) in urban areas	150	320

Specific Terms and Conditions:

- (k) Supply shall be given at 33 KV and above only. **However, the Co-operative Societies may be allowed to avail connections at 11 KV.** The exemptees will have to limit their charges recoverable from individual consumers to the tariff specified for respective category.
- (l) Other terms and conditions shall be as specified under General Terms and Conditions of Tariff.
-

GENERAL TERMS AND CONDITIONS OF HIGH TENSION TARIFF

The following terms and conditions shall be applicable to all HT consumer categories subject to specific terms and conditions for that category as mentioned in the tariff schedule of respective category:

- 1.1 The contract demand shall be expressed in whole number only.
- 1.2 Character of Service: The character of service shall be as per Madhya Pradesh Electricity Supply Code, 2004 as amended from time to time.
- 1.3 Point of Supply:
 - (a) The power will be supplied to the consumer ordinarily at a single point for the entire premises.
 - (b) In case of Railway Traction, the supply at each sub-station shall be separately metered and charged.
 - (c) In case of coal mines, the power will be supplied ordinarily at a single point for the entire premises. The power may, however, be supplied, on the request of the consumer, at more than one point subject to technical feasibility. In such cases, metering and billing will be done for each point of supply separately.
 - (d) In case of consumers under category HV-7, the power will be supplied to the consumer ordinarily at a single point for the entire premises. However, the power may be supplied on the request of the cooperative societies, at more than one point subject to technical feasibility, but in such case, metering and billing will be done for each point of supply separately.
- 1.4 **Determination of Demand:** The **maximum demand** of the supply in each month shall be four times the largest number of kilovolt ampere hours delivered at the point of supply during any continuous 15 minutes during the month as per sliding window principle of measurement of demand.
- 1.5 **Billing demand:** The billing demand for the month shall be the actual maximum kVA demand of the consumer during the month or 90% of the contract demand, whichever is higher. The billing demand shall be rounded off to the nearest integer number i.e. the fraction of 0.5 or above will be rounded off to next integer figure and the fraction of less than 0.5 shall be ignored.

1.6 Tariff minimum consumption shall be billed as follows :

- 1) The consumer shall be billed for guaranteed annual minimum consumption (KWH) based on number of units per kVA of contract demand specified for his category, irrespective of whether any energy is consumed or not during the year.
- 2) The consumer shall be billed one twelfth of guaranteed annual minimum consumption (KWH) specified for his category each month in case the actual consumption is less than above mentioned minimum consumption.
- 3) During the month in which actual cumulative consumption equals or greater than the annual minimum guaranteed consumption, no further billing of monthly minimum consumption shall be done in subsequent months of the financial year.
- 4) In the month which cumulative actual or billed monthly consumption of the consumer exceeds the cumulative monthly prorated minimum annual guaranteed consumption and if the consumer was charged in earlier months for tariff minimum difference consumption on account of his actual consumption being less , then such tariff minimum consumption shall be adjusted in the month in which cumulative actual or billed monthly consumption exceeds cumulative monthly prorated minimum annual guaranteed consumption. If such tariff difference consumption does not get fully adjusted in that month, such adjustment shall continued to be done in subsequent months of the financial year. The following example illustrates the procedure for monthly billing of consumption where prorated monthly minimum consumption is 100 kWH based on annual consumption of 1200 kWH.

Month	Actual cumulative consumption (kwh)	Cumulative minimum consumption * (kwh)	Higher of 2 and 3 (kwh)	Already billed in the year (kwh)	To be billed in the month = (4-5) (kwh)
1	2	3	4	5	6
April	95	100	100	0	100
May	215	200	215	100	115
June	315	300	315	215	100
July	395	400	400	315	85
Aug	530	500	530	400	130
Sept	650	600	650	530	120
Oct	725	700	725	650	75
Nov	805	800	805	725	80
Dec	945	900	945	805	140
Jan	1045	1000	1045	945	100
feb	1135	1100	1135	1045	90
March	1195	1200	1200	1135	65

1.7 **Rounding off:** All bills will be rounded off to the nearest rupee i.e. up to 49 paise shall be ignored and 50 paise upwards shall be rounded of to next Rupee.

Incentive/ Rebate / penalties

1.8 Power Factor Incentive

Power factor incentive shall be payable as follows:

Power Factor	Percentage incentive payable on billed energy charges
Above 95% and up to 96%	1.0 (one percent)
Above 96% and up to 97%	2.0 (two percent)
Above 97% and up to 98%	3.0 (three percent)
Above 98 % up to 99%	4.5(four point five percent)
Above 99 %	6(six percent)

1.9 Load factor calculation and load factor incentive

1)The **load factor** shall be calculated as per the following formula:

$$\text{Load factor (\%)} = \frac{\text{Monthly consumption X 100}}{\text{No. of hours in the billing month X Demand_PF}}$$

- i) Monthly consumption shall be units (kwh) consumed in the month excluding those received from sources other than Licensee.
 - ii) No. of Hours in billing month excluding period of scheduled outages in hours.
 - iii) Demand_PF in the denominator of the above formula shall be taken as higher of either
 - (a) the product of maximum demand recorded or contract demand whichever is more and 0.9 power factor.
- OR**
- (b) the product of maximum demand recorded and 0.9 or actual average monthly power factor whichever is higher.

Note: The load factor (%) shall be rounded off to the nearest lower integer. In case the consumer is getting power through open access, units set off from other sources, the net energy (after deducting units set off from other sources, from the consumed units) billed to consumer shall only be taken for the purpose of working out load factor. The billing month shall be the period in number of days between the two consecutive dates of meter readings taken for the purpose of billing to the consumer.

2) **Load factor incentive** shall be calculated as per following scheme and shall be given to those categories of consumers where it is specified:

LF Range	Incentive	Computation of % incentive on energy charge (LF=x %)
LF <= 75%	No Incentive	= 0.00
LF > 75%	Incentive of 0.15 % for every 1% increase in LF above 75% on the energy charges for incremental consumption above 75% load factor	= (x-75)*0.15

Example,

- Consumer having 72% load factor would not be getting any incentive on energy charges
- Consumer having 82% load factor will get incentive of $[0.15 * (82-75)\%] = 1.05\%$ on energy charges for incremental consumption above 75% load factor.

Note: For working out **incremental consumption**, consumption corresponding to 75 % load factor shall be deducted from total consumption. The above load factor incentive shall apply only to energy charges corresponding to such incremental consumption for which separate rates have been specified.

1.10 For **advance payment** made before commencement of consumption period for which bill is prepared, an incentive of 1 % per month on the amount which remains with the licensee at the end of calendar month (excluding security deposit) shall be credited to the account of the consumer after adjusting any amount payable to the licensee.

1.11 An incentive for prompt payment @0.25% of the bill amount (excluding electricity duty and Cess) shall be given in case the payment is made at least 7 days in advance of the due date of payment where the current month billing amount is equal to or greater than Rs. One lac. The consumers in arrears shall not be entitled for this incentive.

1.12 **Time of Day Surcharge / Rebate:** This scheme is applicable to the categories of consumers where it is specified. This is applicable for different periods of the day i.e. normal period, peak load and off-peak load period. The surcharge / rebate on energy charges according to the period of consumption shall be as per following table:

S. No.	Peak / Off-peak Period	Surcharge / Rebate on energy charges on energy consumed during the corresponding period
1.	Evening peak load period (6PM to 10 PM)	15% of Normal rate of Energy Charge as Surcharge
2.	Off peak load period (10 PM to 6 AM next day)	7.5 % of Normal rate of Energy Charge as Rebate

Note: Fixed charges shall always be billed at normal rates i.e. ToD Surcharge / Rebate shall not be applied on Fixed Charges

1.13 **Power Factor Penalty (For consumers other than Railway Traction HV-1)**

- (i) If the average monthly power factor of the consumer falls below 90 percent, the consumer shall be levied a penalty @ 1% (one percent), for each one percent fall in his average monthly power factor below 90 percent, on total amount of bill under the head of “Energy Charges”.
- (ii) If the average monthly power factor of the consumer falls below 85 percent, the consumer shall be levied a penalty of 5% (five percent) plus @ 2% (two percent) for each one percent fall in his average monthly

power factor below 85 percent. , on the total amount of bill under the head of “Energy Charges”. This penalty shall be subject to the condition that overall penalty on account of low power factor does not exceed 35%.

- (iii) Should the average monthly power factor fall below 70%, the Licensee reserves the right to disconnect the consumer’s installation till steps are taken to improve the same to the satisfaction of the Licensee. This is, however, without prejudice to the levy of penalty charges for low power factor in the event of supply not being disconnected.
- (iv) For this purpose, the “average monthly power factor” is defined as the ratio expressed in percentage of total Kilo Watt hours to the total kilo volt Ampere hours recorded during the billing month. This ratio (%) shall be rounded off to the nearest integer figure and the fraction of 0.5 or above will be rounded to next higher integer and the fraction of less than 0.5 shall be ignored.
- (v) Notwithstanding what has been stated above, if the average monthly power factor of a new consumer is found to be less than 90% in any month during the first 6 (six) months from the date of connection, the consumer shall be entitled to a maximum period of six months to improve it to not less than 90% subject to following conditions:
 - (a) This period of six months shall be reckoned from the month following the month in which the average power factor was found for the first time to be less than 90%.
 - (b) In all cases, the consumer will be billed the penal charges for low power factor, but in case the consumer maintains the average monthly power factor in subsequent three months (thus in all four months) to not less than 90%, the charges on account of low power factor billed during the said six months period, shall be withdrawn and credited in next monthly bills.
 - (c) The facility, as mentioned herein, shall be available not more than once to new consumer whose average monthly power factor is less than 90% in any month during 6 months from the date of connection. Thereafter, the charges on account of low average power factor, if found less than 90%, shall be payable as applicable to any other consumer.

1.14 Additional Charges for Excess Demand

- i. The consumers shall at all times restrict their actual maximum demand within the contract demand. In case the actual maximum demand in any month exceeds 105% of the contract demand, the tariffs given in various schedules shall apply to the extent of the 105% of the contract demand only. The consumers shall be charged for excess demand computed as difference of recorded maximum demand and 105% of contract demand on energy charges and fixed charges and while doing so, the other terms and conditions of tariff, if any, shall also be applicable on the said excess demand. The excess demand so computed, if any, in any month shall be charged at the following rates from all consumers except Railway Traction
- ii. **Energy charges for excess demand:** The consumer shall pay charges @ 1.3 times the tariff for energy charges for consumption corresponding to excess demand in case the maximum demand recorded exceeds 105% of the contract demand.

Example: If a consumer having a contract demand of 200 kVA records a maximum demand of 250 kVA, the billing of energy charges for excess demand of $(250 \text{ kVA} - 210 \text{ kVA}) = 40 \text{ kVA}$ shall be = (total consumption recorded during the month * 40 kVA / maximum recorded demand) * 1.3 * energy charge unit rate.

- iii. **Fixed charges for excess demand:** - These charges shall be billed as per following:
 1. **Fixed charges for Excess Demand when the recorded maximum demand is up to 115% of the contract demand :-** fixed charges for Excess Demand over and above the 105 % of contract demand shall be charged at 1.3 times the normal fixed charges
 2. **Fixed charges for Excess Demand when the recorded maximum demand exceeds 115% of contract demand :-** In addition to fixed charges in 1 above, recorded demand over and above 15 % of the contract demand shall be charged at 2 times the normal fixed charges

Example for fixed charges billing for excess demand: If the contract demand of a consumer is 100 kVA and the maximum demand recorded in the billing month is 140 kVA, the consumer shall be billed towards fixed charges as under :--

- a) Up to 105 kVA at normal tariff.
- b) Above 105 kVA up to 115 kVA i.e. for 10 kVA at 1.3 times the normal tariff.

- c) Above 115 kVA up to 140 kVA i.e. for 25 kVA at 2 times the normal tariff.
- iv. In case of **Railway Traction** the excess demand so computed as per above, if any, in any month shall be charged at the following rates:
- (a) When the recorded maximum demand is up to 115% of contract demand- Excess Demand over and above 105 % of the contract demand—at the rate of Rs.228 per kVA
- (b) When the recorded maximum demand exceeds 115% of contract demand: - In addition to fixed charges in (a) above, recorded demand over and above 15 % of the contract demand shall be charged—at the rate of Rs.330 per kVA

While doing so, other provisions of electricity tariff (such as tariff minimum charge etc.) will also be applicable on aforesaid excess demand.

- v. The excess demand computed in any month will be charged along with the monthly bill and shall be payable by the consumer.
- vi. The billing of excess demand at higher tariff is without prejudice to the Licensee's right to discontinue the supply in accordance with the provisions contained in the Electricity Supply Code, 2004.
- 1.15 **Delayed Payment Surcharge:** Surcharge at the rate of 1.25 % per month or part thereof on the amount outstanding (including arrears) will be payable if the bills are not paid up to due date. The part of a month will be reckoned as full month for the purpose of calculation of delayed payment surcharge. The delayed payment surcharge will not be applicable after supply to the consumer is permanently disconnected.
- 1.16 **Service Charge for Dishonoured Cheques** In case the cheque(s) presented by the consumer are dishonoured, a service charge at the rate of Rs. 1000/- per cheque shall be levied in addition to delayed payment surcharge as per rules. This is without prejudice to the Licensee's rights to take action in accordance with any other applicable law.
- 1.17 **Temporary supply at HT:** If any consumer requires supply for a temporary period, the temporary supply shall be treated as a separate service and charged subject to the following conditions:
- (a) Fixed Charges and Energy Charges shall be charged at 1.3 times the normal tariff. The fixed charge shall be recovered for the full billing month or part thereof.
- (b) The consumer shall guarantee minimum consumption (KWH) as applicable to the permanent consumers on pro-rata basis based on number of days as detailed below:

$$\text{Minimum consumption for additional supply for temporary period} = \frac{\text{Annual minimum consumption as applicable to permanent supply} \times \text{No. of days of temporary connection}}{\text{No. of days in the year}}$$

- (c) The billing demand shall be the demand requisitioned by the consumer or the highest monthly maximum demand during the period of supply commencing from the month of connection ending with the billing month, whichever is higher. For example:

Month	Recorded Maximum Demand (kVA)	Billing Demand (kVA)
April	100	100
May	90	100
June	80	100
July	110	110
August	100	110
September	80	110
October	90	110
November	92	110
December	95	110
January	120	120
February	90	120
March	80	120

- (d) The consumer shall pay the estimated charges in advance, before serving the Temporary Connection subject to replenishment from time to time and adjustment as per final bill after disconnection. No interest shall be given on such advance payment.
- (e) The consumer shall pay rental for the metering system.

- (f) Connection and Disconnection Charges shall also be paid.
- (g) In case of existing HT consumer, the temporary connection may be given through existing permanent HT connection on following methodology of assessment :

(i) Deemed contract demand for the month to be billed for the fixed charge= C.D.(existing) on normal tariff for permanent connection + C.D. for temporary connection on normal tariff for temporary supply.

(ii) Billing demand for the month shall be as per tariff order for the deemed contract demand for that month.

(iii) Consumption during the month may be billed for Permanent connection (A)

$$A = \frac{\text{Contract demand (Permanent)}}{\text{Deemed contract demand}} \times \text{Total consumption}$$

Consumption of Temporary connection = Total consumption - (A)

- (iv) The consumption worked out above for temporary connection shall be billed at 1.3 times the normal energy charges.
- (v) The demand in excess of deemed contract demand as calculated above at (g) (i) shall be treated as Excess Demand. For billing purposes such Excess demand, if any, in any month shall be treated as pertaining to temporary connection load and shall be charged at 1.5 times the normal fixed charges & energy charges of temporary connection. Additional charges for excess demand recorded during the period of temporary connection shall be calculated as given below :

Fixed charges for excess demand = fixed charges per kVA for temporary connection * excess demand* 1.5 (one and half)

Energy charges for excess demand = energy charges per unit for temporary connection * 1.5(one and half)*(excess demand/deemed contract demand)*total consumption

- (h) Load factor incentive shall not be allowed on the consumption for temporary connection.
- (i) Power factor incentives/penalties and the condition for Time of Day Surcharge/ rebate shall be applicable at the same rate as for permanent connection.

Other Terms and Conditions for permanent connections:

- 1.18 The foregoing tariffs for different supply voltages are applicable for loads with contract demand as below:

Standard Supply Voltage	Minimum Contract Demand	Maximum Contract Demand
11 kV	50 kVA	300 kVA
33 kV	100 kVA	10000 kVA
132 kV	5000 kVA	50000 kVA
220 kV/400 kV	40000 kVA	--

- 1.19 The deviation, if any, in respect of above minimum/maximum contract demand on account of technical reasons may be permitted after obtaining specific approval of the Commission by the consumer.
- 1.20 The existing 11KV consumer with contract demand exceeding 300 kVA who want to continue to avail supply at 11kV at his request, shall be required to pay additional charge at 5 % on the total amount of Fixed Charges and, Energy Charges billed in the month.
- 1.21 The existing 33KV consumer with contract demand exceeding 10000 kVA who want to continue to avail supply at 33kV at his request, shall be required to pay additional charge at 3% on the total amount of Fixed Charges and Energy Charges billed in the month.
- 1.22 The existing 132KV consumer with contract demand exceeding 50000 kVA who want to continue to avail supply at 132kV at his request, shall be required to pay additional charge at 2% on the total amount of Fixed Charges and Energy Charges billed in the month.
- 1.23 Metering Charges shall be billed as per schedule of Metering and Other Charges as prescribed in MPERC (Recovery of expenses and other charges for providing electric line or plant used for the purpose of giving supply), Regulations (Revision-I), 2009. Part of a month will be reckoned as full month for purpose of billing.
- 1.24 The tariff does not include any tax or duty, etc. on electrical energy that may be payable at any time in accordance with any law then in force. Such charges, if any, shall be payable by the consumer in addition to the tariff charges.
- 1.25 In case any dispute arises regarding interpretation of this tariff order and/or applicability of this tariff, the decision of the Commission will be final and binding.

- 1.26 No changes in the tariff or the tariff structure including minimum charges for any category of consumer are permitted except with prior written permission of the Commission. Any order without such written permission of the Commission will be treated as null and void and also shall be liable for action under relevant provisions of the Electricity Act, 2003.
- 1.27 In case a consumer, at his request, avails supply at a voltage higher than the standard supply voltage as specified under relevant category, he shall be billed at the rates applicable for actually availed supply voltage and no extra charges shall be levied on account of higher voltage.
- 1.28 All consumers to whom fixed charges are applicable are required to pay fixed charges in each month irrespective of whether any energy is consumed or not.
- 1.29 All conditions prescribed herein shall be applicable notwithstanding if any contrary provisions, exist in the agreement entered into by the consumer with the licensee.
- 1.30 **Terms and Conditions for Tariff to be made applicable for generators connected to the grid but who are not the consumer of the Licensee and seeks to avail power for synchronization with the grid or start-up power are as under:**
- (i) The tariff for fixed charges and energy charges shall be applicable at temporary rate corresponding to the tariff applicable for HT/EHT industry under relevant voltage category under HV-3.1 schedule.
 - (ii) The supply for synchronization with the grid or for start-up power shall not exceed 15% of the capacity of unit of highest rating in the Power Plant.
 - (iii) The condition for minimum consumption shall not be applicable to the generators including CPP. Billing shall be done for actual demand and energy recorded during the billing month.
 - (iv) The supply shall not be allowed to the CPP for production purpose for which he may avail stand-by support under the relevant Regulations.
 - (v) The synchronization with the grid or the start-up power shall be made available in the event of outages for annual planned maintenance, other maintenance, forced outages of generating units and also in the event of separation of generator from grid for whatsoever reasons.
 - (vi) The synchronization with the grid or start-up power shall be provided for a maximum period of 42 days in a year. On each occasion, the part of the day shall also be counted as one day.
 - (vii) The generator including CPP shall execute an agreement with the Licensee for meeting the requirement of synchronization with the grid or for start-up power incorporating the above terms and conditions.
-