MADHYA PRADESH ELECTRICITY REGULATORY COMMISSION

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



AGGREGATE REVENUE REQUIREMENT AND RETAIL SUPPLY TARIFF ORDER FOR FY 2012-13

72/2011 (East Discom) **73/2011** (West Discom) **74/2011** (Central Discom)

PRESENT:

Rakesh Sahni, Chairman

C. S. Sharma, Member

IN THE MATTER OF:

Determination of Aggregate Revenue Requirement (ARR) and Retail Supply Tariff for FY 2012-13 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).

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A1: ORDER

(Passed on this 31st Day of March, 2012)

- 1.1 This Order relates to the petition numbers 72/2011, 73/2011 and 74/2011 filed by Madhya Pradesh Poorv Kshetra Vidyut Vitaran Company Limited, Jabalpur, Madhya Pradesh Paschim Kshetra Vidyut Vitaran Company Limited, Indore and Madhya Pradesh Madhya Kshetra Vidyut Vitaran Company Limited, Bhopal (hereinafter individually referred to as East Discom, West and Central 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 Wheelling of electricity and methods and principles for fixation of charges) Regulations, 2009 (hereinafter referred to as the 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 2012-13 by 31st October, 2011. During the course of meeting with CMDs held in August, 2011, the Commission agreed to the request of the Distribution Companies for filing the appropriate petition by 15 November 2011; the Licensees further requested extension up to 30th Nov, 2011, which the Commission allowed. The petitions were filed on 30th November, 2011 by the East Discom (Petition No. 72/2010), West Discom (Petition No 73/2011) and Central Discom (Petition No 74/2011).
- 1.3 Motion hearing on the petitions was held on 19/12/2011. During the course of hearing, the representatives on behalf of Discoms submitted the salient features of the petitions. The Commission admitted the petitions vide order dated 22.12.2011 requiring that following directives be complied latest by 31.12.2011:
 - i. To furnish the draft of public notice in Hindi and English to be published in the newspapers for obtaining comments from the stakeholders and
 - ii. To furnish the Hindi version of the petition
- 1.4 Public notices comprising the gist of the tariff applications and tariff proposals were published by the Central Discom on 8th and 9th January, 2012, East Discom on 10th January, 2012 and West Discom on 9th January, 2012 in the newspapers. The stakeholders were requested to submit their comments /suggestions / objections by 31st January, 2012.
- 1.5 As the earlier tariff order dated 23rd May, 2011 was valid up to 31.03.2012, 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 23rd May, 2011 would continue to apply and be in force till present Tariff

- Order issued by the Commission for FY 2012-13 takes effect. This Order was issued on 27th March, 2012.
- During the year 2012-13, the new tariff determined through this order shall be applicable from 10th April, 2012 up to 31st March 2013. The Commission has determined the Aggregate Revenue Requirement for the FY 2012-13 in the present Order. Since this Order is applicable from 10th April, 2012, therefore any difference in revenue shall be considered in the true up of this Order.
- 1.7 The gist of the petitions submitted by the Licensees is given below:

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

Particular Particular	East	West	Central
Revenue from sale of power	4446.36	6298.55	4822.39
Non- Tariff Revenue	115.83	127.37	73.97
Aggregate Revenue Requirement	6742.38	10263.8	7244.82
Revenue gap on income and expenditure for FY 2012-13	2180.19	3837.88	2348.46

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

Particular	East	West	Central
Revenue from sale of power	4446.36	6298.55	4822.39
Non- Tariff Revenue	115.83	127.37	73.97
Aggregate Revenue Requirement		10798.45	7919.22
Revenue gap on income and expenditure for FY 2012-13	3043.53	4372.53	3022.86

- In the petitions submitted by the Licensees it was observed that certain information in respect of sales, power purchase, depreciation, interest on loan, return on equity needed to be substantiated, hence the Discoms were directed to submit the relevant data and information. The Commission however carried forward the exercise of finalisation of the ARR/ tariff based on the available data. The Licensees subsequently submitted the data which, however, was not found comprehensive and information on some of the items was either not submitted or was incomplete. The Commission staff subsequently held discussions with the concerned Officers of the Licensees as well as the Madhya Pradesh Power Trading Company (hereinafter referred to as Tradeco) to sort out gaps/deficiencies in the information submitted. Based on the information that could be made available to the Commission by the Licensees and Tradeco as well as the information that could be gathered by the Commission from other sources, the Commission proceeded to determine the ARR/tariff for FY 2012-13.
- 1.9 The Discoms, in their petitions, have projected a revenue gap of Rs. 2180.19 Crore for East Discom, Rs. 3837.88 Crore for West Discom and Rs. 2348.46 Crore for Central Discom for FY 2012-13 in their filing under the head "As per Regulations" and 3043.53 Crore, 4372.53 Crore and 3022.86 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 three years. 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" as also under "additional submission" are shown below:

Table 3: Revenue hike due to proposed tariff (Rs in Crore)

Particulars	East	West	Central
Total Revenue at Current Tariff	4446.36	6298.55	4822.39
Total Revenue at Proposed Tariff	5361.55	8021.26	5891.97
Revenue hike due to proposed Tariff	915.19	1722.71	1069.58

Table 4: Proposed recovery of revenue gap as per Regulations (Rs in Crore)

Discom	Total revenue Gap	Revenue increase due to tariff revision proposed by the Licensees	Regulatory Asset
East	2180.19	915.19	1265.00
West	3837.88	1722.71	2115.17
Central	2348.46	1069.58	1278.88
State	8366.53	3707.48	4659.05

Table 5: Proposed recovery of revenue gap as per additional submission (Rs in Crore)

Discom	Total revenue Gap	Revenue increase due to tariff revision proposed by the Licensees	Regulatory Asset
East	3043.53	915.19	2128.34
West	4372.53	1722.71	2649.82
Central	3022.86	1069.58	1953.28
State	10438.92	3707.48	6731.44

Uniform Retail Tariff across Discoms

1.10 It was conveyed by the GoMP in FY 2011-12 that the tariff for all consumer categories be kept same across the State in foreseeable future. The Commission therefore vide letter dated 26th March, 2012 sought the views of the GoMP and re-allocation of existing and new generating capacities amongst the Discoms and MP Tradeco for financial year 2012-13 so that the aforesaid intent of the GoMP could be given effect. The Secretary, Energy Department, GoMP vide his communication No. 2682/13/2012/02 dated 29th March, 2012 conveyed that the GoMP maintains its view that the tariff for various consumer categories be kept same throughout the State. Accordingly GoMP has revised allocation of generating capacities vide its notification No. 2660/F-3-24/2009/XIII dated 29th March, 2012.

State Advisory Committee

1.11 The Commission convened a meeting of the State Advisory Committee (SAC) on 3rd

Feb., 2012 for seeking its advice on these petitions. SAC members provided several valuable suggestions which have been duly considered by the Commission while determining the ARR/Tariff.

Public Hearing

1.12 Public hearings on the tariff petitions filed by the Discoms were held by the Commission at Indore, Jabalpur and Bhopal. These were conducted on the following dates:

Table 6: Public hearing

Sr. No.	Name of the Distribution Company	Date of Hearing
1	M.P. Paschim Kshetra Vidyut Vitaran Co. Ltd., Indore	February 22, 2012
2	M.P. Poorv Kshetra Vidyut Vitaran Company Ltd., Jabalpur,	February 25, 2012
3	M.P. Madhya Kshetra Vidyut Vitaran Company Ltd., Bhopal	February 28 & 29 th , 2012

1.13 The comments/objections/suggestions received from the stakeholders as also the issues raised by them during the hearings have been duly considered while finalizing this Order.

Distribution Losses

1.14 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 of the Discoms. The loss reduction trajectory specified in the Regulations is given in the following table:

Table 7: Loss reduction trajectory 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%

1.15 As against the above prescribed loss trajectory for FY 2012-13, the Discoms have filed their ARRs based on the following loss levels: –

Table 8: Loss reduction trajectory filed as per additional submission

East Discom	West Discom	Central Discom
26.35 %	22%	26%

1.16 While 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 East Discom has requested that it be allowed higher level of losses as per its additional submission for FY 12-13 on account of merger of RE Societies.
- 1.17 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 its area and did not find it justified or acceptable. Accordingly, power purchase cost in case of that Discom is also is 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 the fact 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 demonstrate a definite improvement in the ensuing period.

Energy Accounting and Meterisation

The Commission in the Tariff Order for FY 11-12 had emphasized the importance of 1.19 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 was also impressed upon so as to provide reliable data about the actual level of distribution losses – technical and other. This was underlined to the Discoms asking them to prepare appropriate loss reduction strategies and schemes. The Commission however has noted with deep concern that not much headway has been made in this direction by the Licensees during FY 11-12. The Licensees have not seem to be giving due attention to this important aspect which is critical to their survival. Meterisation has not progressed at any significant pace particularly in rural area domestic consumers as well as agriculture load DTRs. The progress in fact with regard to meterisation of un-metered domestic connections in rural areas has been dismal. Further the Licensees have continued to release new connections without meters in violation of the spirit of the Electricity Act, 03. The result is that a large number of rural domestic connections remain unmetered. The progress of meterisation of DTRs is also very poor in East Discom. The status as per periodic reports submitted with regard to status of meterisation of un-metered rural domestic connections and agricultural predominant DTRs up to Dec,2011, is as given below:

Table 9: Meterisation status as per periodic reports

Discom		Domestic	Rural		Agricultura	al DTR
	Total no. of connections	No. of un metered connections	Percentage (%) un Metered	Total no. of Predominant Agricultural DTRs	No. of DTRs provided with meters	Percentage (%) of DTRs provided with meters
East	1,677,301	966,790	58%	39,200	387	1%
West	1,451,226	308,128	21%	66,107	13,143	20%
Central	1,030,973	339,080	33%	64,655	10,270	16%
State Total	4,159,500	1,613,998	39%	169,962	23,800	14%

- 1.20 The Commission further recognises that there are issues with 100% meterisation especially in the area of individual meterisation of a very large number of agriculture consumers. The Commission therefore has been repeatedly directing all the Discoms to step up meterisation of agriculture load distribution transformers. The Commission had directed that all DTRs catering to agricultural load be got metered by March, 2012 as an interim arrangement till all individual agricultural connections are provided with meters. The progress is far from the prescribed targets. The Commission is of the firm view that all consumers should be metered individually or in groups 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 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 taken a very serious note of the dismal performance of the Discoms on the issue of meterisation and does not accept the targets proposed by the Discoms which would keep this activity in progress until FY 15-16 in some cases. The Commission directs Discoms to prepare a concrete workable plan and submit it within a month so as to ensure that all the domestic un-metered connections whether in urban or rural area are provided with meters by end of FY 12-13 and no new connections in future are released without meter.
- 1.21 It is also noted that meterisation of 33 kV and 11 kV feeders is not showing any improvement. As a matter of fact, as per progress report received by the Commission, the percentage of unmetered feeders and feeders having defective meters is on the rise.

Details of unmetered/defective meter feeders as on 31.12.2011 are as under:

Table 10: Percentage of unmetered/defective meters

Feeders	Total metering Points	Unmetered/Defective meter feeders	% Unmetered/Defective meter feeders
33 KV	4854	1230	25%
11KV	9808	3770	38%

- 1.22 The Commission is of the view that absence of metering at input points coupled with large number of unmetered consumers would lead to chaotic conditions. During the last meeting with CMDs of Discoms held in August, 2011, CMDs had assured the Commission that 100% feeders metering would be done by March, 2012. The Commission now directs that 100% feeders metering be ensured by June, 2012, necessary inventory be maintained for prompt replacement of failed/defective meters/metering equipments and no new feeders be charged without installation of meters.
- 1.23 The Commission has perused the submissions made by the Licensees in their petitions under the head "As per Regulations" and "As per additional submissions" and has taken due cognizance of the submissions made. The Commission however has considered the submissions under the head "As per Regulations" only allowing costs after prudent check. The Commission is of the opinion that this being the last year of the control period, it may not be appropriate to consider any additional costs on account of the additional submissions made by the Licensees.

Annual 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 2012-13 for the three Discoms are contained in the detailed Order.
- 1.25 The gist of the Aggregate Revenue Requirement for the year FY 2012-13 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	2945.73	4708.36	3398.16	11052.25
PGCIL charges	189.34	249.06	161.60	600.00
Transco Charges (MP TRANSCO)	444.16	501.78	484.24	1430.18
SLDC Charges	2.80	2.86	2.95	8.61
O&M cost	641.72	603.07	579.29	1824.08
Depreciation	50.74	76.27	56.23	183.23
Interest on Project Loans	78.91	74.26	63.82	216.99
Return on Equity	120.74	137.58	102.03	360.35
Interest on Working Capital	0.00	0.32	0.00	0.32
Bad Debts	1.00	1.00	1.00	3.00
Interest on CSD	36.76	56.42	43.29	136.47
MPERC Fees	0.40	0.57	0.44	1.41
Less Other Income - Retail & Wheeling	128.01	177.78	144.21	450.00
ARR for FY 2012-13	4384.29	6233.77	4748.83	15366.89
Add: MP Transco True up FY 2008-09	50.12	59.47	53.35	162.94
Add: Tradeco Charges	8.58	12.19	9.29	30.06
Add: Genco True up FY 2008-09	24.08	43.40	39.29	106.77
Total ARR for FY 2012-13	4467.06	6348.84	4850.75	15666.66
Revenue at existing tariff	4163.90	5934.64	4519.72	14618.26
Revenue Gap	303.16	414.20	331.04	1048.40

- 1.26 The Commission has determined the ARR and the Tariffs for FY 2012-13 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 and MP Transco for FY 2008-09 allowing recovery of true up costs of Rs.106.77 Crore and Rs. 162.94 Crore respectively. These Companies have been allowed to recover these true up costs during FY 2012-13 from Discoms. Accordingly, the recovery of true up costs on this account has been included in the ARR for FY 2012-13.
- 1.28 The table below indicates the approved ARR, revenue and revenue gap at current Tariff and revenue from the new Tariff (Annexure II & III of this Order) being prescribed in this Order.

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

Particular	East	West	Central	State
Total ARR for FY 2012-13 (A)	4,384.29	6,233.77	4,748.83	15,366.89
Add: MP Transco True Up FY 2008-09 (B)	50.12	59.47	53.35	162.94
Add: MP Tradeco (C)	8.58	12.19	9.29	30.06
Add: Genco True up FY 2008-09 (D)	24.08	43.40	39.29	106.77
Total FY 2012-13 ARR as approved (A+B+C+D=E)	4,467.06	6,348.84	4,850.75	15,666.66
Revenue at Current Tariffs (F)	4,163.90	5,934.64	4,519.72	14,618.26
Gap at Current Tariffs (E-F)	303.16	414.20	331.04	1,048.40
Revenue at New Tariffs (G)	4,467.31	6,348.32	4,851.40	15,667.03
Uncovered Gap/Surplus (G-E)	-0.25	0.51	-0.64	-0.37

- 1.29 The Commission has also prescribed the mechanism for recovery of Fuel Charge Adjustment (FCA) on quarterly basis so that uncontrollable costs on account of variation in the variable charges are recovered/adjusted timely in accordance with the spirit of Tariff Policy and as further directed by the Hon'ble APTEL.
- 1.30 The Commission further directs the Distribution Licensees of the State to maintain the minimum assured daily supply hours as given below:

(a) Divisional Commissioner 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.)

Implementation of the Order

1.31 The Distribution Licensees must take immediate steps to implement this 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 10th April, 2012 to 31st March, 2013, unless amended or modified by an Order of this Commission. The previous Tariff Order dated 23rd May2011 shall remain valid till the date of implementation of this Order.

1.32 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 2012-13. 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.

(C. S. Sharma) Member (Rakesh Sahni) Chairman

A2: DETAILED REASONS AND GROUNDS ATTACHED WITH RETAIL SUPPLY TARIFF ORDER ISSUED BY MPERC ON 31ST MARCH, 2012 IN RESPECT OF PETITIONS HAVING NUMBER 72/2011, 74/2011 AND 73/2011

- Shri P.K. Singh (Chief Engineer, Commercial) represented the East Discom
- Shri A.R. Verma G.M. and S.E. (Com.) represented the Central Discom
- Shri S.K.Mohase (Chief Engineer, Commercial) represented the West Discom
- 2.1 Following is the detailed order with grounds and reasons of determining the ARR, the tariff and the charges recoverable during FY 2012-13 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 2012-13 OF MADHYA PRADESH POORV, 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 2012-13 is 35487.80 MUs viz. East Discom 9872.40 MUs, West Discom 14680.05 MUs & Central Discom 10935.35 MUs.
- 3.2 The licensees have submitted that category wise CAGR of past 3 & 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, feeder separation scheme, R-APDRP schemes and normal development works etc. have also been taken into account for additional sales. Impact of proposed increase in supply hours has also been taken in to account. Revised benchmarks for billing to un-metered category of LT connections have been proposed and considered in sale projections. The sale in LT and HT as projected category wise is given below:

Table 13: Sales projection proposed by Discoms (in MUs)

Particulars	East Discom	West Discom	Central Discom	Total for State
LT Sale	6651.44	10407.14	8198.25	25256.83
HT Sale	3220.96	4272.91	2737.13	10231.00
Total Sale	9872.40	14680.05	10935.35	35487.80

3.3 The category wise sale as filed by the Distribution Companies is given in table below:

Table 14: Category wise sales proposed by Discoms (in MUs)

Particulars	Project	ions For FY	Y 2012-13 i	n MUs
Consumer Categories	East Discom	West Discom	Central Discom	Total for the State
LT				
LV-1: Domestic	3308.8	3691.0	3262.4	10262.3
LV-2: Non Domestic	594.8	782.8	679.6	2057.2
LV-3: Public Water Works & Street Light	292.0	264.4	321.0	877.4
LV4: LT Industrial	319.8	506.2	241.6	1067.6
LV 5.1: Irrigation Pumps for Agriculture	2134.8	5154.4	3691.7	10980.9
LV-5.2 Agriculture related use	1.2	8.4	2.0	11.6
LT Sale (MU)	6651.4	10407.1	8198.3	25256.8
HT				
HV-1: Railway Traction	591.5	396.1	744.3	1731.9
HV-2: Coal Mines	497.0	0.0	34.0	531.1
HV-3.1: Industrial	1425.5	3248.5	1429.9	6599.6
HV-3.2: Non-Industrial	230.6	3440.3	265.0	0399.0

Particulars	Projections For FY 2012-13 in MUs				
Consumer Categories	East Discom	West Discom	Central Discom	Total for the State	
HV-4: Seasonal	5.8	10.0	1.0	16.8	
HV-5: Irrigation ,PWW & Others	77.3	441.0	78.0	596.3	
HV-6: Bulk Residential Users	393.2	6.7	184.9	584.9	
HV-7: Bulk Supply to Exemptees	0.0	170.5	0.0	170.5	
HT Sale (MU)	3221.0	4272.9	2737.1	10231.0	
Total LT + HT Sale (MU)	9872.4	14680.1	10935.4	35487.9	

The Distribution Company wise submission is given below:

MP Poorv Kshetra Vidyut Vitaran Company Limited (East Discom):

- 3.4 The Commission vide the Distribution and Retail Supply Tariff Order dated 23rd May 2011 had admitted the sale as 8053 MU against the 8385 MU filed by the East Discom. The Discom, in the filing for the determination of the Tariff for FY 2012-13 has now revised the estimates of sale to the tune of 8226.94 MUs for FY 2011-12 and subsequently proposed the sale as 9872.40 MUs for FY 2012-13. The Discom has estimated sale for the year 2012-13, as 1819.4 MUs more than the admitted sale for previous FY 2011-12 and 1645.46 MUs more than the revised estimates for FY 2011-12, which is 20% higher than revised sale & 23% higher than approved sale for FY2011-12. The Discom has revised the sale estimates marginally upwards (i.e. nearly 2%) from the admitted sale for FY 2011-12. The projections of the sale for the year 2012-13 have been made on the basis of the Cumulative Annual Growth Rate for all the categories. The effect of RGGVY, meterisation plan of domestic consumers, separation of feeders of agricultural and other categories of consumer and increase in supply hours in rural areas have been further added to project the sale.
- 3.5 It is also indicated in the petition that for FY 2012-13 the consumption for the category of domestic consumers would be about 763 MUs more than sale as accepted by the Commission in Tariff Order for FY 2011-12 and 862 MU more than the sale envisaged in the revised estimates. It is requested in the petition that it would be appropriate that billing of un-metered domestic connections be revised on the basis of the average monthly consumption of metered categories in respective urban and rural areas. It is further submitted that due to anticipated increase in supply hours in FY2012-13, the assessed consumption would also increase and thus projections of consumption of unmetered domestic connections have been considered as 111 units and 61 units/month/connection in urban and rural areas respectively in place of 77 units and 30 units/month/connection.
- 3.6 It is also submitted by the Discom that impact of implementation of the RGGVY has also been taken into account for future Consumer/Load/Consumption projections. It is indicated that connected load per consumer for consumers added under the RGGVY has been taken as 300 watts per consumer and consumption of the consumers has been assumed at par with the metered consumption per consumer per month of rural consumers. Under RGGVY the Company has targeted 3.68 Lakh consumers to be

added in FY12-13 as compared to 1.80 Lakh in FY2011-12. It is further submitted that during 2012-13, it intends to maintain an average 3-phase supply for 8 Hrs to the agricultural consumers and thus due to anticipated increase in supply hours, actual consumption is likely to increase. It is requested by the petitioner that projections of annual consumption of un-metered agricultural connections need to be reviewed and revised and have proposed this as 1760 and 1420 units/HP/Annum in urban and rural areas respectively. It is indicated in the petition that the above projections are based on the ideal condition of correctness of the sanctioned load of the consumer.

MP Paschim Kshetra Vidyut Vitaran Company Limited (West Discom):

- 3.7 For the year 2011-12, the Commission vide the Distribution and Retail Supply Tariff Order dated 23rd May 2011 had admitted the sale as 11270 MU against the 11481 MU filed by the West Discom. The West Discom in the filing for the determination of the Tariff for FY 2012-13 has revised the estimates of sale to the tune of 11807 MUs for FY 2011-12 and subsequently proposed the sale as 14680 MUs for FY 2012-13. The Discom has revised the sale estimates upwards from the admitted sale for FY 2011-12 to the extent of nearly 4.8 %. The Discom has estimated sale for the year 2012-13, which is 3410 MUs more than the admitted sale for FY 2011-12 and 2872 MUs more than the revised estimates for FY 2011-12. The sale for LT is projected as 71% of the total sale and as 29% for HT. Total projected sale for FY12-13 for LT categories is 42% higher than allowed sale in FY11-12. In respect of HT categories, total projected sale for FY 12-13 is higher to the extent of 8% from allowed sale for FY11-12.
- 3.8 It is further submitted in the petition that in respect of domestic category, in addition to normal growth, schemes such as R-APDRP and Feeder segregation, which are under process of execution across area of operation of Discom, would further contribute to the growth of sale. This has not been adequately covered by the historical growth trend. Hence, over and above the historical trend, the Discom has estimated that more domestic consumers would be added in the year FY2012-13. It is indicated that new domestic consumers added due to effect of various schemes are estimated at nearly 2.79 Lakh with likely consumption of nearly 321.71 MUs in FY2012-13. Further, on account of RGGVY scheme, 75000 new consumers, with a monthly consumption of 59 units/month/consumer, would also be added during the year 2012-2013 in addition to the normal growth which translates into additional consumption of 123.90 MUs.
- 3.9 It is also requested in the petition that it would be appropriate that billing of un-metered domestic connections be revised on the basis of the average monthly consumption of metered categories in respective urban and rural areas. It is further submitted that due to anticipated increase in supply hours in FY 2012-13, the assessed consumption would also increase and thus for making projections of consumption of un-metered domestic connections have been considered as 145 units and 59 units/month/connection in urban and rural areas respectively in place of prescribed 77 units and 30 units/month/connection. It is also submitted by the petitioner that during 2012-13, it intends to maintain an average 3-phase supply of 8 Hrs to the agricultural consumers and thus due to anticipated increase in supply hours, actual consumption is likely to increase. It is requested by the petitioner that projections of annual consumption of un-metered agricultural connections need to be reviewed and revised. Accordingly it has been

proposed as 1760 and 1420 units/HP in urban and rural areas respectively. These estimations are based on the ideal condition of correctness of the sanctioned load of the consumer.

MP Madhya Kshetra Vidyut Vitaran Company Limited (Central Discom):

- 3.10 For the year 2011-12 the Commission vide Distribution and Retail Supply Tariff Order dated 23rd May, 2011 had admitted the sale as 8416 MU against the 8983 MU filed by the Central Discom. The Discom, in the filing for the determination of the Tariff for FY 2012-13, has revised the estimates of sale to the tune of 8805.96 MUs for FY 2011-12 and subsequently proposed the sale as 10935.39 MUs for FY 2012-13. The Discom has submitted the revised estimates of sale for FY2011-12 upwards to the extent of 5% from the admitted sale for FY 2011-12. It is stated in the Petition that the projections of the sale for the year 2012-13 have been made on the basis of the Cumulative Annual Growth Rate for all the categories. The effect of RGGVY, R-APDRP and Feeder Separation schemes has been further added to project the sale for the domestic and agriculture categories of consumers. Total LT sale as admitted by the Commission for FY 2011-12 was 5890 MUs. The Discom has revised the estimates to 6192.41 MUs and subsequently projected 8198.26 MUs for FY 2012-13, i.e. about 2308.26 MUs (39%) more than that of Tariff Order for FY 2011-12. For HT sale is projected as 2737.14 MUs (8%) as against 2525 MUs as admitted in the Tariff Order for FY 2011-12.
- 3.11 It is submitted in the petition that in respect of LT categories, the growth in the year 2012-13 for low tension consumers will be over and above the past growth rates (CAGR) due to factors such as major thrust of electrification schemes in rural areas, increased supply hours which would be to the extent of 24 hours from 01.01.2013 onwards to all Divisional, District, Tehsil HQs and Rural DL&F. It is requested in the petition that it would be appropriate that billing of un-metered domestic connections be revised on the basis of the average monthly consumption of metered categories respectively in urban and rural areas. In the year 2010-11, the units per month consumed by a metered consumer in Urban area was 96 units and in rural area 34 units whereas in the year 2011-12 (up to August 2011), the consumption has increased to 142 & 52 units respectively. It is further submitted that due to anticipated increase in supply hours in FY12 -13, the assessed consumption will further increase and therefore projections of consumption of un-metered domestic connections have been considered as 145 units and 60 units/month/connection in urban and rural areas respectively in place of 77 units & 30 units/month/connection. In the year 2012-13, the petitioner intends to maintain an average supply of 8 Hrs. to the agricultural consumers. Thus, due to anticipated increase in supply hours in FY2012-13, the assessed consumption to the agricultural consumers would also increase. Therefore, the projections of annual consumption of un-metered agricultural connections need to be revised and considered as 1760 & 1420 units /HP in urban and rural areas respectively. It has been further submitted in the petition that agricultural activities in the Licensee's area do not end in March but extend up to the month of May and hence April and May months may be treated as the months in which consumption is more than Rainy Season. Month-wise segregation of Agriculture assessment of units for un-metered agricultural connections as proposed by the petitioner is similar to that of East Discom.

Commission's Analysis of Sale

- 3.12 In the past, the Commission had normally accepted the sale as filed by the Distribution Companies except for FY 2011-12 wherein the projected sale of domestic and LT agricultural categories was moderated on the basis of the billing benchmarks for unmetered consumers. In the present filing, the Distribution Companies have requested to consider the revised norms for projecting the energy sale to un-metered consumers of domestic and agricultural categories and have also projected a steep increase in sale to LT consumers which is inconsistent with the historical trends. The Discoms have stated that LT sale would increase during the year on account of implementation of development schemes such as RGGVY scheme, Feeder Separation Scheme and R-APDRP Scheme and due to proposed increase in supply hours.
- 3.13 Sale to Domestic Consumers: Scrutiny of the data as furnished in their petitions and sale models by the Distribution Companies for consumer category 'LV-1 Domestic Consumers' has revealed that:
 - a. The **East Discom** has requested for revision in the billing benchmarks for the consumption of un-metered **urban** domestic consumers @ 111 units /connection/month and for **rural** un-metered domestic consumers @ 61 units /connection/month. Similarly, the **West Discom** has requested the revision in the norms for un-metered **urban** domestic consumers @ 145 units /connection/month and for **rural** un-metered domestic consumers @ 59 units /connection/month. The **Central Discom** has requested the revision in the norms for the consumption of un-metered **urban** domestic consumers @ 145 units /connection/month and for **rural** un-metered domestic consumers @ 60 units /connection/month. The existing norms for billing of un-metered consumers in the State are 77 units /connection /month for urban area and 30 units /connection /month for rural area. However, the Distribution Companies have submitted that by the end of 2011-12 all the urban un-metered domestic consumers would be metered.
 - b. The average projected consumption for the year 2012-13 for metered urban domestic consumers is projected by the East Discom @ 110.90 Units per consumer per month, West Discom @ 140.47 Units per consumer per month, Central Discom 144.03 Units per consumer per month and for the state it is @ 132.71 Units per consumer per month
 - c. With regard to the projections of rural un-metered domestic consumers the East Discom has considered 60.52 Units per month per consumer. The West Discom has made the projections by considering 59 Units per month per consumers. The Central Discom has projected sale by considering 42.06 units per month per consumer while it has requested for revision in billing norms @ 60 units /consumer/month.
- 3.14 It has been observed that the Discoms have made ambitious projections of sales for FY 12-13 in metered as well as unmetered categories of LT consumers. An overall rise in the sales have been projected to the extent of 23% by East Discom, 30% by West

Discom and 30% by Central Discom as compared to the sale as admitted for FY 2011-12. The Commission has considered the sale projections filed by the Discoms. 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 Commission has considered the projected numbers of consumers as well as the load filed by the Discoms in these two un-metered categories of consumers. However the consumption projected for these categories has been moderated in accordance with the existing benchmarks except in case of rural un-metered domestic consumers. In case of rural unmetered domestic consumers, actual level of consumption per connection has been found to be of the order of 44 units/ connection in the year FY 10-11. The Commission therefore has considered it prudent to allow billing for rural unmetered domestic consumers @ of 42 units/ connection, keeping it in view that largely unmetered consumers are lower end consumers. The Commission has further not considered any revision in the benchmark for urban unmetered domestic connections as the number of such connections is low and should have been brought to zero by now. The proposal for revision of benchmarks for unmetered agriculture connections filed by the Discoms has not been found acceptable in absence of submission of comprehensive, cohesive and quality data. The licensees, in spite of repeated directions of the Commission, to ensure prescribed adequate level of DTR meterisation in this case and compile their data in the requisite manner, have failed to respond to the desired level. It has been further observed in case of metered urban and rural domestic connections that the projections of sale have been made disregarding past trend. An abnormal projection of growth in number of connections has been made for FY 12-13 which does not seem to be realistic. The Commission has, therefore, moderated sale projections for metered urban and rural domestic connections based on the actual past trends of FY 10-11 and FY 11-12. The Commission has reviewed the sale as filed in the following subcategories of domestic and agricultural consumers:

- (i) Domestic metered urban and rural consumers.
- (ii) Domestic un-metered urban and rural consumers
- (iii) Agricultural un-metered permanent consumers.
- (iv) Agricultural un-metered temporary consumers.
- 3.15 **Domestic metered urban and rural consumers:** The month-wise profile of the growth of metered consumers for the year 2010-11 and for the period from April to December, 2011 for the year 2011-12 as available in the R-15 statement of the Distribution Companies has been reviewed. The profile has further been extended for estimation of the number of consumers in the Distribution Companies as in March, 2012 and the same growth is further considered for estimation of number of consumers for the year 2012-13. The Commission has observed that the projections as filed by the Distribution Companies are very much higher. Therefore, on the basis of normal growth, the number of consumers for the year 2012-13 month-wise is derived for estimation of the consumption. The average consumption per month per consumer as filed by the respective Distribution Companies which takes into account the impact of proposed increase in supply hours, has been considered for estimation of sale to the metered rural and metered urban domestic consumers.

- 3.16 **Domestic un-metered urban and rural consumers**: With regard to estimation of sale to domestic un-metered consumers, the Commission has decided to keep the existing norm of 77 units per consumer per month for urban area without any change and to increase the norm for rural areas from 30 units per consumer per month to 42 units per consumer per month. The numbers of consumers as filed for the year 2012-13 by the Distribution Companies have been considered for estimation of moderated sale for this sub-category of consumers.
- 3.17 **Agricultural un-metered permanent consumers**: It has been observed in the petitions filed by the Distribution Companies that the Distribution Companies have estimated the sale in this sub-category on the basis of the proposed norms of benchmarks of 1760 units per HP per annum for urban area and 1420 units per HP per annum for rural areas. The moderated sale has been worked out on the basis of the existing benchmarks of 1560 units per HP per annum for urban consumer and 1200 units per HP per annum for rural consumers.
- 3.18 **Agricultural un-metered temporary consumers**: It has been observed in the filing of the Distribution Companies that the Distribution Companies have requested for revision in the norms for un-metered temporary agricultural consumers. The existing norms are 175 units per HP per month for urban area and 155 units per HP per month for rural area. The Distribution Companies have proposed 190 units per HP per month for urban area and 175 units per HP per month for rural areas. Scrutiny of the data filed for this particular sub-category of the consumers has revealed that although East Discom and Central Discom have requested in their petitions to enhance the norms as indicated above, the estimation of sale in the filing has been made on the basis of existing norms only. In case of West Discom, it has been observed that the filing of the sale has neither been made on the basis of existing benchmarks nor on the basis of proposed benchmarks. Therefore the sale in this particular sub-category of consumers has been moderated for West Discom only on the basis of existing benchmarks and in case of East Discom and Central Discom, the sale as filed has been admitted.
- 3.19 The details of sales as filed and admitted is given below (Sales in MUs):

Table 15: Domestic and agriculture sales as filed and admitted (MUs)

Sl. No.	Category	Distribution Company	Sale projections as filed	Sale as admitted by the Commission	Difference
		Central Discom	2,266.65	1,789.41	-477.24
	Domestic -	West Discom	2,311.73	2,073.68	-238.05
	Metered –	East Discom	1,518.33	1,360.48	-157.85
1	Urban	State	6,096.71	5,223.57	-873.14
		Central Discom	568.520	153.10	-415.42
	Domestic -	West Discom	1,062.02	701.10	-360.92
	Metered –	East Discom	1,030.61	566.21	-464.40
2	Rural	State	2,661.15	1,420.41	-1,240.74

Sl. No.	Category	Distribution Company	Sale projections as filed	Sale as admitted by the Commission	Difference
		Central Discom	16.76	23.37	6.61
	.	West Discom	2.70	1.43	-1.27
	Domestic - Unmetered -	East Discom	26.01	18.05	-7.96
3	Urban	State	45.47	42.85	-2.62
		Central Discom	205.19	224.81	19.62
	.	West Discom	161.03	114.63	-46.40
	Domestic - Unmetered –	East Discom	718.25	498.47	-219.78
4	Rural	State	1,084.47	837.91	-246.56
		Central Discom	3,247.19	2,380.77	-866.43
		West Discom	3,646.21	2,999.57	-646.64
	Domestic -	East Discom	3,293.20	2,443.21	-849.99
5	Total	State	10,186.60	7,823.55	-2,363.06
		Central Discom	137.36	121.75	-15.61
	Agricultural -	West Discom	150.30	133.22	-17.08
	Unmetered - Permanent -	East Discom	75.43	66.88	-8.55
6	Urban	State	363.09	321.85	-41.24
		Central Discom	1,868.00	1,578.60	-289.40
	Agricultural - Unmetered -	West Discom	3,582.94	3,027.84	-555.10
	Permanent -	East Discom	728.87	615.94	-112.93
7	Rural	State	6,179.81	5,222.38	-957.43
		Central Discom	30.50	30.50	0.00
	Agricultural - Unmetered -	West Discom	42.35	37.05	-5.30
	Temporary -	East Discom	26.84	26.84	0.00
8	Urban	State	99.69	94.39	-5.30
	A ami analtumal	Central Discom	969.37	969.37	0.00
	Agricultural - Unmetered -	West Discom	1,249.39	1,106.60	-142.79
	Temporary -	East Discom	584.30	584.30	0.00
9	Rural	State	2,803.06	2,660.27	-142.79
		Central Discom	3005.23	2700.22	-305.01
		West Discom	5024.98	4304.71	-720.27
	Agricultural -	East Discom	1415.44	1293.96	-121.48
10	Total	State	9,445.65	8,298.89	-1,146.76
		Central Discom	6,252.42	5,080.99	-1,171.44
		West Discom	8,671.19	7,304.28	-1,366.91
		East Discom	4,708.64	3,737.17	-971.47
11	Grand Total	State	19,632.25	16,122.44	-3,509.85

3.20 Accordingly, the moderated sale for domestic and agricultural categories of consumers is given in the table below:

Table 16: Domestic and agriculture sale as filed and admitted (In MUs)

Discom	Dom	estic	Agricultural		
	As filed As admitted A		As filed	As admitted	
East Discom	3,293.20	2,443.21	1415.44	1293.96	
West Discom	3,646.21	2,999.57	5024.98	4304.71	
Central Discom	3,247.19	2,380.77	3005.23	2700.22	
State Total	10,186.60	7,823.55	9445.65	8298.89	

3.21 The Commission has admitted the sale after moderation on account of reasons mentioned in the preceding paragraphs in case of domestic and agricultural categories. The Commission has admitted the sale as filed in the other categories by the Distribution Companies. Accordingly, the Commission admits projected sales as 8900.92 MUs for East Discom, 13313.12 MUs for West Discom and 9763.94 MUs for Central Discom. The total sale admitted is 31977.98 MUs as against the filing of the Distribution Companies of 35487.83 MUs. The category wise sale as admitted is given in the table below:

Table 17 : Sales as admitted (In MUs)

Consumer Categories	2012-13				
	East	West	Central	Total	
LT					
LV-1: Domestic Consumers	2458.8	3044.4	2396.0	7899.2	
LV-2: Non Domestic	594.8	782.8	679.6	2057.2	
LV-3: Public Water Works and Street Light	292.0	264.4	321.0	877.4	
LV-4: Industrial	319.8	506.2	241.6	1067.6	
LV-5.1: Irrigation Pumps for Agriculture	2013.3	4434.1	3386.7	9834.1	
LV-5.2 Agriculture related use in Rural Areas	1.2	8.4	2.0	11.6	
LT Units (MU)	5680.0	9040.2	7026.8	21747.0	
HT					
HV-1: Railway Traction	591.5	396.1	744.3	1731.9	
HV-2: Coal Mines	497.0	0.0	34.0	531.1	
HV-3.1: Industrial	1425.5	3248.5	1429.9	6599.6	
HV-3.2: Non-Industrial	230.6	3240.3	265.0	0399.0	
HV-4: Seasonal	5.8	10.0	1.0	16.8	
HV-5: Irrigation, PWW & Others	77.3	441.0	78.0	596.3	
HV-6: Bulk Residential Users	393.2	6.7	184.9	584.9	
HV-7: Bulk Supply to Exemptees	0.0	170.5	0.0	170.5	
HT Units (MU)	3221.0	4272.9	2737.1	10231.0	
Total LT + HT Units (MU)	8900.9	13313.1	9764.0	31978.0	

3.22 The Commission has considered the sale projections after moderation explained above. The Commission has taken into consideration projected increase in per capita sale due to proposed increase in supply hours by the Licensees. The Commission directs the Distribution Licensees that they should not unduly restrict supply to any category of consumers during the tariff period. Therefore in the event that the actual requirement of supply of power in excess of the quantum admitted by the Commission for sale or power procurement projections in this tariff Order, the Licensees shall take immediate steps to arrange the supply of required power from all available sources including medium or short term purchase. The Licensees shall have to make all possible efforts to provide adequate supply at all times to all the categories of the consumers of the State. However, the Licensees while procuring such power shall ensure compliance with the requirements of relevant Regulations/ guidelines.

Energy Balance and Power Purchase as Proposed by the Licensees

- 3.23 The Licensees claim that they have considered available information from the key sector participants for computation of power purchase cost for arriving at their Revenue Requirement. The Licensees have requested the Commission to take due cognizance of this fact while computing their allowable power purchase cost. The Commission has been further requested to give opportunity to the licensees to submit updated information, if such information becomes subsequently available to them from MP Genco, MP Transco or MP Tradeco.
- 3.24 The Licensees have considered the percentage allocation of capacity (weighted average of 30.51% to the East Discom, 37.33% to the West Discom and 32.15% to the Central Discom) as per the Government's letter dated 16th May, 2011 for the year 2012-13 including 200 MW power share allocation to the East Discom 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:
 - o Monthly energy available from all Sources
 - o Annual fixed charge and energy charge payable to Generators
 - Estimated payment to Generators on account of incentives, income tax, duties, etc.
 - o Estimated Inter-state transmission charges to be paid.
- 3.25 The requirement for procurement of energy for projected sale of 35488 MUs as filed by the three Discoms is 49358 MUs. The Discom-wise break-up is shown in the table below:

Table 18: Energy balance for FY 2012-13 as proposed by Discoms

Particulars	East	West	Central		
Total Units sold to LT category (MU)	6,651	10,407	8,198		
Total Units sold to HT category (MU)	3,221	4,273	2,737		
Total Units Sold by Discom (MU)	9,872	14,680	10,935		
Distribution loss (%)	24.00%	22.00%	26.00%		
Units Input at Distribution Interface (MU)	12,990	19,042	14,801		

Particulars	East	West	Central
Transmission loss (%)	3.74%	3.74%	3.74%
Input at G-T interface (MU)	13,495	19,782	15,377
External Loss (MU)	252	234	217
Total Units Purchased (MU)	13,747	20,016	15,594

3.26 The Distribution Companies have projected the requirement on the basis of the month wise grossing up of the projected distribution losses which is not commensurate with the annual loss trajectory specified by the Commission for FY 2012-13. The details filed are as given under:

Table 19: Monthly loss percentage as filed

		FY 2012-13		
SR. No.	Month	East	West	Central
		Discom	Discom	Discom
1	April	24.44%	25.23%	25.92%
2	May	23.83%	25.85%	25.13%
3	June	19.81%	19.40%	24.54%
4	July	21.76%	11.20%	24.38%
5	August	24.39%	9.44%	25.98%
6	September	24.32%	13.54%	25.93%
7	October	25.79%	29.60%	27.19%
8	November	25.26%	31.42%	27.42%
9	December	25.87%	25.67%	26.98%
10	January	25.33%	27.48%	27.63%
11	February	21.78%	23.89%	26.06%
12	March	25.43%	21.38%	24.83%
	Average losses for the year as filed			
13	(Arithmetic average)	24.00%	22.00%	26.00%
	Losses for the year worked out on filed			
14	month wise % losses	24.14%	22.91%	26.12%
15	As specified in Regulations	24.00%	22.00%	26.00%

- 3.27 The total losses filed by each Discom on a month wise basis and the arithmetic average have been shown to fit into the norms prescribed by the Commission. This approach is not logical as would be clear from the table above.
- 3.28 The normative loss of the East Discom as per the existing Regulation is 24%. 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 26.35% in place of 24%. An identical claim was made by the Licensee in its petition for FY 2011-12 and had been rejected by the Commission after due consideration. The Commission sees no merit in this claim at this stage.

Assessment of Energy Availability by Discoms

- 3.29 The Licensees have claimed that assessment of availability of energy from various sources is based on discussions with Tradeco. and future projections have been done on the basis of average availability of the past three years. Licensees have further claimed that they have also considered availability from new Stations expected to be commissioned in FY 2012-13. 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 forecast based on the month of operation in a particular year and the past trend of energy availability from the plants.
- 3.30 Annual availability from each of the Sources as filed is shown in the table below:

Table 20: Firm energy availability ex-bus as filed by Discoms for FY 2012-13

S.No	Generating Stations	Installed Capacity	Total Allocation to State	Allocati on to State	Monthly Availability - Ex-Bus (in MU)
		MW	MW	%	Total FY 13
	CGS				
1	WR – KSTPS	2100.00	484.45	23.07%	3,646.2
2	WR - VSTPS-I	1260.00	441.10	35.01%	3,203.7
3	WR - VSTPS-II	1000.00	317.72	31.77%	2,387.9
4	WR - KAWAS GPP	656.20	140.00	21.33%	721.4
5	WR - GANDHAR GPP	657.39	117.00	17.80%	640.6
6	WR - KAKRAPAR APS	440.00	110.34	25.08%	323.0
7	WR - TARAPUR APS	1080.00	229.87	21.28%	1,120.0
8	WR - VSTPS – III	1000.00	246.19	24.62%	1,907.8
9	WR - SIPAT –II	1000.00	189.19	18.92%	1,374.7
10	ER - FARAKKA STPS	1600.00	0.00	0.00%	-
11	ER - KAHALGAON STPS	840.00	0.00	0.00%	-
12	ER - KAHALGAON STPS-II	1500.00	74.98	5.00%	328.9
13	ER - TALCHER STPS	1000.00	0.00	0.00%	-
14	DVC (MTPS)	500.00	200.00	40.00%	559.7
	Sub Total	14633.59	2550.83	17.43%	16214.0

	Generating Stations	Installed Capacity	Total Allocation to State	Allocati on to State	Monthly Availability - Ex-Bus (in MU)
		MW	MW	%	Total FY 13
	SGS				
	Thermal				
1	AMARKANTAK COM	240.00	240.00	100.00%	501.6
2	AMARKANTAK EXT	210.00	210.00	100.00%	1,128.2
3	SATPURA TPS PH I & II &III	1142.50	1017.51	89.06%	4,985.1
4	SGTPS EXT	500.00	500.00	100.00%	3,324.5
5	SGTPS	840.00	840.00	100.00%	3,790.8
	SUB TOTAL	2932.50	2807.51	95.74%	13730.2
	HYDEL				
	INTERSTATE				
1	GANDHI SAGAR	115.00	57.50	50.00%	50.1
	RANAPRATAP SAGAR &				
2	JAWAHAR SAGAR	271.00	135.50	50.00%	151.8
3	PENCH	160.00	106.67	66.67%	223.8
4	RAJGHAT	45.00	22.50	50.00%	40.6
	SUB TOTAL	591.00	322.17	54.51%	466.3
	FULL MP ALLOCATION				
1	BARGI	100.00	100.00	100.00%	322.0
2	BIRISINGHPUR	20.00	20.00	100.00%	29.6
3	BANSAGAR – I	315.00	315.00	100.00%	820.8
4	BAN SAGAR II	30.00	30.00	100.00%	-
5	BAN SAGAR III	60.00	60.00	100.00%	-
6	BAN SAGAR IV	20.00	20.00	100.00%	14.1
7	MARIKHEDA	60.00	60.00	100.00%	37.6
	SUB TOTAL	605.00	605.00	100.00%	1224.1
	BILATERAL AND OTHERS				
1	INDIRA SAGAR	1000.00	1000.00	100.00%	2,193.2
2	NCE- WIND GENERATION	0.00	0.00		156.7
3	CAPTIVE	0.00	0.00		-
4	SARDAR SAROVAR	1450.00	826.50	57.00%	1,743.8
5	OMKARESHWAR	520.00	520.00	100.00%	1,028.4
6	RSEB (CHAMBAL,SATPURA)	0.00	0.00	100.0070	517.9
7	RIHAND,MATATILA,UPPCL	0.00	0.00		125.5
,	SUB TOTAL	2970.00	2346.50	79.01%	5765.6
	GRAND TOTAL	21732.09	8632.01	39.72%	37400.0

^{3.31} The infirm energy to the extent of 6883 MUs would be available from the Generating Stations presently allocated to the MP Power Trading Company Limited. The details of projected availability are given below:

Table 21: Generating Stations allocated to MP Tradeco

Generating Station	Availability in MUs
SIPAT STAGE - 1, BILASPUR	1422
DVC EXT. CHANDRAPUR, BOKARO, JHARKHAND	1056
DVC DURGAPUR STEEL TPS, WEST BENGAL	341
BINA POWER, SAGAR*	1257
BLA POWER, NARSINGHPUR	139
NTPC KORBA III	557
IPP TORRENT	652
SINGAJI TPP PHASE -1, KHANDWA (SHARE = 100%)	275
RENEWABLE ENERGY	292
SATPURA TPP EXTENSION, BETUL (SHARE = 100%)	891
Total	6883

^{*}The Licensees through additional submission have revised the energy availability of Bina Power Station to 800 MUs as against earlier filing of 1257MUs.

- 3.32 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 no. WRPC/Comm-I/6/Alloc./2011 dated Oct17, 2011
 - 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 Stations 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

- 3.33 The Licensees state that Fixed Costs of MP Genco stations for FY 2012-13 have been kept in accordance with the Tariff Order issued by the MPERC from time-to-time. The Licensees in their petitions have further submitted that the fixed costs of Central Generation Stations and NHDC Indira sagar & Omkareshwer HPS have been considered from the latest available orders of CERC.
- 3.34 Variable costs (including FPA) for MP Genco & Central Generating Stations have been adopted from the bills for FY-11 and FY-12 (as per the July'11 bill). These costs have been than escalated at annual rates specified by the CERC in its notification dated 31st March' 2011. Fuel Price Adjustment (FPA) and other variable charges have been taken from bills of FY-11 and have been escalated in the same manner as that of variable cost per unit. For FY-11, these costs have been taken as base value since these costs are typically paid at the end of financial year. Since data for FY-12 is not available, therefore the data of FY'11 has been considered as the base. The variable charges of CPP/Wind generators have been taken as per the actual bills of FY-11

- 3.35 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 cost has been adopted as per CERC provisional tariff order dated 03.11.2011 and variable cost as per average bills for April to November 2011. Also, the variable cost has been escalated at the rate of 6.66%.
 - b) For DVC Chandrapur and Durgapur, single part tariff of DVC Mejia has been adopted since there were no means to assume this cost for this particular Station.
 - c) For Singaji TPP Phase -1, Khandwa and Satpura extension ,tariff for these Stations have not been determined till now and for the present these have been assumed as a single part tariff as per projections in business plan of MPPGCL.
 - d) For Bina Power and BLA power, since the tariff of these plants are not notified therefore the same have been taken as single part tariff of Rs. 3.50 per unit; in addition cess @ 8 paise /unit has also been considered.
 - e) For Torrent (Gas), fixed charges have been taken as per CERC order dated 11.01.2010 and Variable Cost as per average bills for April to November 2011. Also, the variable cost has been escalated at the rate of 6.66%.
- 3.36 Fixed and variable costs of each of the Stations 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 Tradeco will supply power to each individual Discom.
- 3.37 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 22: Fixed cost & variable cost as filed for the state for FY 2012-13

	For FY 2012-13 for the State		
POWER STATIONS	Total Fixed Cost (Rs Crore)	Variable Charge (Rs / kWh)	
WR – KSTPS	215.53	101.41	
WR - VSTPS-I	210.03	205.50	
WR - VSTPS-II	197.24	182.33	
WR - KAWAS GPP	78.17	266.07	
WR - GANDHAR GPP	84.76	254.06	

	For FY 2012-13 for the State		
POWER STATIONS	Total Fixed Cost (Rs Crore)	Variable Charge (Rs / kWh)	
WR - KAKRAPAR APS	0.00	242.41	
WR - TARAPUR APS	0.00	309.17	
WR - VSTPS – III	227.24	188.19	
WR - SIPAT –II	171.20	103.71	
ER - KAHALGAON STPS-II	35.50	277.37	
DVC (MTPS)	122.00	294.00	
SGS			
Thermal			
AMARKANTAK COM	34.66	149.20	
AMARKANTAK EXT	171.61	123.00	
SATPURA TPS PH I & II &III	281.73	179.40	
SGTPS EXT	407.95	250.90	
SGTPS	293.43	273.80	
HYDEL			
INTERSTATE			
GANDHI SAGAR	1.38	127.39	
RANAPRATAP SAGAR & JAWAHAR		161.06	
SAGAR	0.00		
PENCH	5.92	31.54	
RAJGHAT	3.08	137.84	
FULL MP ALLOCATION			
BARGI	7.46	44.58	
BIRISINGHPUR	1.48	145.55	
BANSAGAR – I	57.39	101.07	
BAN SAGAR II	0.00	0.00	
BAN SAGAR III	0.00	0.00	
BAN SAGAR IV	0.00	292.80	
MARIKHEDA	4.29	265.58	
BILATERAL AND OTHERS			
INDIRA SAGAR	545.32	54.34	
NCE- WIND GENERATION	0.00	435.00	
CAPTIVE	0.00	245.00	
SARDAR SAROVAR	159.71	96.37	
OMKARESHWAR	286.22	52.73	
RSEB (CHAMBAL,SATPURA)	0	443.00	

Details of Costs for future capacities

3.38 For all capacities which are proposed to be commissioned in the future, the rates as per the table below have been considered. The table below indicates rates and other details as filed in the subsequent submissions by the Discoms.

Table 23: Cost for future capacities

Particulars	Fixed Costs (Rs. Cr.)	Energy Charges Rs./kWh Escalated for Future years	Basis
			As per CERC Provisional Tariff
			Order dated 3.11.11.and variable
NITTO Chart Chart	170 10	0.00	cost as per bills, average for APR to
NTPC Sipat - Stage I	179.19	0.96	
			The variable charges are inclusive
DVC (Chandrapur TPS			of fixed charges and have been
Extn.)	232.95	2.94	taken from actual bills
PTC - Torrent Surat			
(Gas)	68.68	2.63	As per CERC order
			The variable charges are inclusive
DVC Durgapur steel			of fixed charges and have been taken
TPS, West	75.22	2.94	from actual bills
			These rates have been assumed as a
			single part tariff as per projections in
BINA power, Sagar	0.00	3.58	Business Plan of MPPGCL.

Assessment of Other Elements of Power Purchase Cost by the Discoms

Inter State Transmission Charges associated with existing capacities:

3.39 The inter-state transmission charge (PGCIL cost) to be paid by MP consists of charges to be paid for transmission system of (Western Region) & (Eastern Regional). The estimation of Inter-state transmission cost has been provided by Tradeco as Rs. 625 Cr. for FY-13. 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 2012-13.

Table 24: Inter-State transmission charges as filed (Rs in Crore)

Discom	FY 2012-13	FY 2012-13
	(Regulation)	(Addl. Submission)
MP Madhya KVVCL	188.41	188.41
MP Paschim KVVCL	223.34	223.34
MP Poorv KVVCL	213.25	213.25
Total	625.00	625.00

Inter State Transmission Charges associated with new and upcoming capacities:

3.40 Transmission Charges for the new and upcoming capacities are projected on estimation basis. These are to be paid by Tradeco. Based on the capacity additions in the Central

sector, PGCIL Charges payable by Tradeco are as follows, which have been included in the bulk supply rate at which Tradeco will sell power to Discoms if required by the Discoms.

Table 25 : PGCIL charges payable by Tradeco (Rs in Crore)

PGCIL Charges payable by MP Tradeco	FY 2012-13
PGCIL Charges for new & upcoming central sector stations	47.73

Intra - State Transmission Charges

3.41 At present there is no tariff order for MP Transco cost for FY2012-13 and therefore the Intra-state transmission cost i.e. MP Transco cost has been taken as the same as allowed in the retail supply tariff order for FY2011-12. Filing details are given below:

Table 26: Intra-State transmission charges filed by Discoms for FY 2012-13 (Rs in Crore)

Annual MPPTCL Charges as payable by the Discoms	FY 2012-13 (Regulation)	FY 2012-13 (Additional Submission)
MP Poorv KVVCL	371	702
MP Madhya KVVCL	400	765
MP Paschim KVVCL	448	792
Total	1219	2259

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

Table 27: Total power cost as filed (Rs in Crore)

Comparison of Power purchase cost		EAST DISCOM		WEST DISCOM		CENTRAL DISCOM	
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)	13,772	14,202	20,016.05	20,016.05	15,594	15,594
В	Fixed Cost (Rs. Crore)	1,079	1,079	1,286.28	1,286.28	1115.08	1115.08
С	Variable Cost (Rs. Crore)	2,953	3,174	5,948.34	5,903.39	3,655	3,635
D	MP Tradeco Trading Margin (@ 4p/unit in additional)	30	57	36.87	80.06	31.75	62.38
E=B+C +D	Total Power Purchase Cost - Ex Bus (Rs. Crore)	4,062	4,310	7,271	7,270	4,802	4,812
E/A	Rate of Power Purchase	2.95	3.03	3.63	3.63	3.08	3.09
	(Rs. / kWh)						
Н	External Losses (MU)	252	252	234.49	234.49	217.48	217.48
I	Inter State Transmission Cost (Rs. Crore)	213	213	223.34	223.34	188.41	188.41
J=(A-H)	Units Purchased at State Periphery (MU)	13,519	13,952	19,781.56	19,781.56	15,377	15,377
K=(I-E)	Total Power Purchase Cost at State Boundary (Rs. Crore)	4,275	4,523	7,494.83	7,493.07	4,990	5,001
K/J	Rate of Power Purchase at State Boundary (Rs. / kWh)	3.16	3.24	3.79	3.79	3.25	3.25

3.43 In addition to the above power purchase cost, the Licensees have also claimed the Tradeco charges comprising of LC charges, annual fees, open access, interest and bank charges, salary, administrative and general expenses, rebate on sale of power and trading margin on banking of Rs. 98.75 Crore.

Commission's Analysis of Energy Balance and Power Purchase

Distribution Losses

3.44 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 28: Loss targets as per Regulations (in %)

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

3.45 The Commission has considered the distribution losses for the FY 2012-13 as indicated in the table above. The Commission has noted 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 12-13 under the head of "Additional submission" and has claimed loss levels of 26.35% as against the normative level of 24%. The petitioner in its ARR petition for the year FY 2011-12 had also submitted for the re-consideration of normative distribution loss level notified in the Regulation by increasing to the level of 29.35%. The Commission in its Tariff Order dated 23rd May '2011 for FY-12 had stated that it does not consider proposed increase as justified. The Commission would like to make it clear that any proposal for increase in the loss trajectory as compared to that of the trajectory specified by the Commission for the control period is not acceptable. Any changes in the area of Discoms having consequential effect of increase in losses may be compensated by the Discom by bringing in more efficient measures in their operations so that the consumers in other area of that Discom do not get burdened.

External (PGCIL) Losses

3.46 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 22nd Jan 2012) as available on the PGCIL website has been taken and an average loss level of 3.61% has been used. Similarly, for Eastern Region transmission line losses, an average loss level (14 weeks of FY 2011-12) of 2.69% has been considered.

3.47 The Commission has considered provisional intra-State transmission losses at 3.74% for FY 2012-13 as filed by the Licensees. The energy balance / power purchase requirement on the basis of the moderated sale for all the three Discoms for FY 2012-13 is presented in the following table:

Table 29: Power purchase requirement as worked out

Particulars	State	Central Discom	West Discom	East Discom
Total Sales (MU)	31,978	9,764	13,313	8,901
Distribution loss (%)	23.82%	26.00%	22.00%	24.00%
Distribution loss (MU)	9,996	3,431	3,755	2,811
Input at T-D interface (MU)	41,974	13,195	17,068	11,712
Transmission loss (%)	3.74%	3.74%	3.74%	3.74%
Transmission loss (MU)	1,631	513	663	455
Input at G-T interface (MU)	43,605	13,707	17,731	12,167
PGCIL Losses %				
WR- PGCIL Losses %	3.61%	3.61%	3.61%	3.61%
ER- PGCIL Losses %	2.69%	2.69%	2.69%	2.69%
PGCIL Losses (MU)	985	296	362	327
Power Purchase Requirement (MU)	44,590	14,003	18,093	12,494

- 3.48 The Government of Madhya Pradesh vide its Energy Deptt. Govt. of MP Notification No. 2660/F-3-24/2009/XIII dated 29th March, 2012, 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 2012-13 to the MP Tradeco.
- 3.49 The table below presents the allocation of generation capacities to the East, West & Central Discoms as per the Energy Deptt. Govt. of MP Notification No. 2660/F-3-24/2009/XIII dated 29th March, 2012 including specific allocation of 200 MW to Bundelkhand Region and others.

Table 30 : Station wise capacity allocation to Discoms (%)

S.No	Generating Stations	Installed Capacity	Allocati on to State	Specific Allocati on to	Allocation to state(excl uding	Discom wise Allocation			
	oviioniiniig siiniionii		MW	Bunelkh end Region	specific allocation)	in % including specific allocation			
	CGS					Central West East		East	
1	WR – KSTPS	2100	484.45	52.63	431.82	28%	33%	39%	
2	WR - VSTPS-I	1260	441.10	32.26	408.84	34% 30% 3		36%	
3	WR - VSTPS-II	1000	317.72	25.47	292.25	32% 32%		36%	

	Generating Stations	Installed Capacity	Allocati on to State	Specific Allocati on to Bunelkh	Allocation to state(excl uding specific allocation	in % ir	Discom wise Allocation in % including specificallocation		
4	WR - KAWAS GPP	656	140.00	Region 0.00	140.00	25%	40%	35%	
5	WR - GANDHAR GPP	657	117.00	0.00	117.00	30%	38%	32%	
6	WR - KAKRAPAR APS	440	110.34	11.21	99.13	31%	36%	33%	
7	WR - TARAPUR APS	1080	229.87	27.50	202.37	31%	35%	34%	
8	WR - VSTPS – III	1000	246.19	25.47	220.72	31%	36%	33%	
9	WR - SIPAT –II	1000	189.19	25.47	163.72	26%	35%	39%	
10	ER - KAHALGAON STPS-II	1500	74.98	0.00	74.98	20%	53%	27%	
11	DVC (MTPS)	500	200.00	0.00	200.00	14%	53%	33%	
Sub Total	,	11193.59	2550.83	200.01	2350.82				
SGS									
Thermal									
1	AMARKANTAK COM	240	240.00	0.00	240.00	40%	33%	27%	
2	AMARKANTAK EXT	210	210.00	0.00	210.00	40%	33%	27%	
_	SATPURA TPS PH I & II								
3	&III	1143	1017.51	0.00	1017.51	39%	32%	29%	
4	SGTPS EXT	500	500.00	0.00	500.00	40%	32%	28%	
5	SGTPS	840	840.00	0.00	840.00	40%	32%	28%	
Sub Total		2933	2807.51	0.00	2807.51				
Hydel									
Interstate									
1	GANDHI SAGAR RANAPRATAP SAGAR &	115	57.50	0.00	57.50	50%	27%	23%	
2	JAWAHAR SAGAR	271	135.50	0.00	135.50	50%	30%	20%	
3	PENCH	160	106.67	0.00	106.67	40%	40%	20%	
4	RAJGHAT	45	22.50	0.00	22.50	40%	40%	20%	
Sub Total		591	322.17	0.00	322.17				
Full MP A	llocation					I.	L		
1	BARGI	100	100.00	0.00	100.00	25%	50%	25%	
2	BIRISINGHPUR	20	20.00	0.00	20.00	20%	50%	30%	
3	BANSAGAR – I	315	315.00	0.00	315.00	30%	40%	30%	
4	BAN SAGAR II	30	30.00	0.00	30.00	30%	40%	30%	
5	BAN SAGAR III	60	60.00	0.00	60.00	30%	40%	30%	
6	BAN SAGAR IV	20	20.00	0.00	20.00	30%	40%	30%	
7	MARIKHEDA	60	60.00	0.00	60.00	20%	50%	30%	
Sub Total		605	605.00	0.00	605.00				
BILATER	AL AND OTHERS								
1	INDIRA SAGAR	1000	1000.00	0.00	1000.00	25%	53%	22%	
2	NCE- WIND GENERATION	0	0.00	0.00	0.00	30%	40%	30%	
3	CAPTIVE	0	0.00	0.00	0.00	30%	40%	30%	
4	SARDAR SAROVAR	1450	826.50	0.00	826.50	25%	43%	32%	
5	OMKARESHWAR	520	520.00	0.00	520.00	25%	45%	30%	

Generating Stations		Installed on to Capacity State		Allocati		Discom wise Allocation			
		MW	MW	Bunelkh end Region	uding specific allocation)	in % including specific allocation			
	RSEB								
6	(CHAMBAL,SATPURA)	-	-	-	-	-	ı	-	
	RIHAND,MATATILA,								
7	(UPPCL)	-	-	-	-	-	-	-	
Sub Total		2970	2346.50	0.00	2346.50				
Grand To	tal	18292.09	8632.01	200.01	8432.00	31.84%	38.27%	29.89%	

3.50 Generation capacities which have come up and are assigned to the Tradeco and those which are expected to come-up during FY 2012-13 includes the following plants:-

Table 31: New generation capacities in FY 2012-13

Table 31. New generation capacities in F1 2012-13	
Particulars Particulars	Allocation to Tradeco (MW)
NTPC SIPAT - STAGE I	188
DVC (CHANDRAPUR TPS EXTN.)	200
DVC (DURGPUR)	100
KORBA STAGE III	75
PTC – TORRENT	100
SINGAJI TPP PHASE -1, KHANDWA (SHARE =	
100%)	600
SATPURA TPP EXTENSION, BETUL (SHARE =	
100%)	500
BINA POWER , SAGAR	350
BLA POWER , NARSINGHPUR	32
Total Capacity (MW)	2145

- 3.51 In order to ascertain the availability of the energy individually from each station, the availability as filed by the Distribution Companies in consultation with the M.P. Power Trading Co. Ltd. has been compared with the availability as worked out on the basis of past 3 years' performance of the Generating Stations.
- 3.52 A meeting was convened by the Commissions' staff with the Officers of the Discoms and M.P. Power Trading Co. Ltd. on 25.01.2012, so as to ascertain the availability from each of the Generating Stations for the year 2012-13. Availability as worked out by the Commission's staff was shared with the Officers of Discoms and the M.P. Power Trading Co. Ltd. for their response. In response, vide letter dated 04.02.2012, it has been confirmed by the M.P. Power Trading Co. Ltd. that the availability as worked out by the Commission's staff is acceptable to them except in the case of Indira Sagar and Omkareshwar Hydel Power Stations where the generation targets for 2012-13 were revised as per CEA letter dated 28.10.2011. It is further indicated in the letter that due to delay in achieving the COD, schedule of Bina Power has been extended further and therefore, the availability from this Station would be reduced from 1257 MUs to 800

MUs. Similarly, the availability from captive and wind has also been revised by M.P. Power Trading Co. Ltd. The availability indicated against Solar Plants will not be actually available but due to Renewable Purchase Obligation, the indicated quantum would be required to be purchased by M.P. Tradeco. Taking into account the response of M.P. Power Trading Co. Ltd. in the meeting of 25.01.2012 and as per their letter dated 04.02.2012, the availability of all the Stations have been worked out on the basis of their month-wise performance in the last 3 years and also as proposed by MP Tradeco.

- 3.53 Further while going through the Station wise projections of availability, it has been observed by the Commission that the annual availability quantum of Amarkantak Complex (2X120 MW) and Amarkantak Extension (1X210MW) is low. A clarification in the matter was sought from MP Power Generating Company Limited. Accordingly, the availability has been revised for Amarkantak Complex and Amarkantak Extension as furnished by MP Genco through fax dated 7th March, 2012.
- 3.54 The Licensees have also projected availability from the shared Stations with other States. In this they have also projected firm availability from their share as well as the share of other States. The Commission has considered firm availability against MP share only.

3.55 Month wise details are indicated in the table below:-

Table 32: Month wise MUs projection for FY 2012-13

	de 32 . Wionth wish						ojection)							
	Generating Stations	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Total
	CGS													
1	WR - KSTPS	290	284	282	311	311	243	298	300	289	316	287	319	3,529
2	WR - VSTPS-I	247	253	268	292	262	205	247	260	286	296	260	295	3,170
3	WR - VSTPS-II	205	223	211	190	144	143	202	208	217	214	194	214	2,365
4	WR - KAWAS GPP	59	68	52	60	57	37	73	46	70	61	45	64	691
5	WR - GANDHAR GPP	53	65	52	59	54	27	55	52	61	47	42	51	618
	WR - KAKRAPAR													
6	APS	36	35	35	37	32	30	35	30	18	33	32	42	396
7	WR - TARAPUR APS	94	95	74	83	108	110	107	91	95	102	96	112	1,165
8	WR - VSTPS - III	165	167	125	136	165	148	162	158	167	171	155	176	1,896
9	WR - SIPAT -II	94	116	116	126	125	126	121	108	118	126	114	131	1,421
	ER - KAHALGAON													
10	STPS-II	31	31	24	13	18	17	25	29	32	32	31	39	322
11	DVC (MTPS)	57	49	28	47	54	34	45	54	39	63	58	62	590
	Sub Total	1,330	1,385	1,267	1,354	1,331	1,119	1,370	1,337	1,391	1,461	1,316	1,503	16,164
	SGS													ļ
	Thermal													
1	Amrkantak com	95	95	95	95	95	95	95	95	95	95	95	95	1,140
2	Amrkantak Ext	122	133	127	116	117	66	128	121	135	137	121	99	1,422
	Satapura TPS PH I & II													l
3	&III	429	385	289	317	372	321	420	437	493	494	411	424	4,791
4	SGTPS Ext	251	271	277	256	191	213	315	315	330	326	291	330	3,363
5	SGTPS	378	321	302	246	259	165	206	338	398	411	357	395	3,777
	Sub Total	1,274	1,205	1,090	1,030	1,034	859	1,164	1,306	1,451	1,462	1,275	1,343	14,493
	Hydel - Interstate													
1	Gandhi Sagar	2	2	2	0	2	2	7	19	13	9	2	2	63
	Ranapratap Sagar &	_				_	_					_		
2	Jawahar Sagar	1	1	2	2	5	5	11	42	42	46	6	0	162
3	Pench	15	11	14	12	18	39	40	22	9	22	16	14	231
4	Rajghat	0	0	0	3	4	5	4	5	8	9	5	2	44
	Sub Total	18	14	18	17	29	50	62	88	71	86	30	19	500
	Full MP Allocation													
1	Bargi	39	28	21	24	31	43	36	31	29	26	31	25	366

	FY 2012-13 (Projection)													
	Generating Stations	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Total
	CGS	Ŷ	·			J	•							
2	Birisinghpur	0	0	1	8	11	11	2	0	0	0	0	0	33
3	Bansagar - I	78	76	73	74	79	112	116	80	54	49	31	46	867
4	Ban Sagar II	8	7	7	7	4	1	6	5	6	5	4	5	67
5	Ban Sagar III	0	0	2	0	5	8	23	0	0	15	6	0	58
6	Ban Sagar IV	0	0	0	0	1	4	7	6	3	2	1	0	24
7	Marikheda	0	0	3	11	16	9	3	7	2	2	2	2	57
	Sub Total	126	111	107	124	147	189	193	129	94	100	74	78	1,471
	Bilateral and Others													
1	Indira Sagar	110	94	115	100	195	270	220	220	224	205	172	215	2,140
2	NCE- Wind Generation	22	30	34	25	15	12	8	5	10	13	14	18	206
3	Captive	3	1	2	2	4	10	4	5	8	7	7	4	56
4	Sardar Sarovar	118	96	124	138	246	451	178	95	116	164	100	126	1,951
5	Omkareshwar	50	45	78	70	113	154	126	114	116	107	91	120	1,184
	Sub Total	302	267	352	335	572	898	536	439	474	495	384	483	5,537
	RSEB													
1	(Chambal,Satpura)	0	0	0	0	0	0	0	0	0	0	0	0	0
_	Rihand, Matatila,	_	_		•		4.0	4.0	4.0	20	4.0		4.0	
2	(UPPCL)	6	7	2	2	8	10	18	18	20	18	14	12	135
-	Sub Total	6	7	2	2	8	10	18	18	20	18	14	12	135
	Grand Total	3,099	3,030	2,863	2,892	3,160	3,166	3,386	3,361	3,557	3,638	3,142	3,484	38,300
	New Stations –	-,	-,	_,,,,,,	_,-,	-,	-,	-,	-,	-,	-,	-,	-,	
	Attached with Tradeco													
	Sipat Stage - 1,													
1	Bilaspur	91	94	91	94	134	130	134	130	134	134	121	134	1,422
	DVC Ext.													
	Chandrapur, Bokaro,													
2	Jharkhand	48	93	90	93	93	90	93	90	93	93	84	93	1,056
2	DVC Durgapur Steel		22	21	22	22	21	22	40	4.4	4.4	20	4.4	241
3	TPS, West Bengal	-	22	21	22	22 80	21 80	22 80	42 80	44 80	44 80	39 160	44 160	341 800
4	Bina Power, Sagar BLA Power,	-				80	80	80	80	80	80	100	100	800
5	Narsinghpur	8	9	8	9	9	8	9	16	16	16	15	16	139
6	NTPC Korba III	47	46	46	46	46	46	46	46	46	46	46	46	557
7	IPP Torrent	72	74	23	27	17	65	62	62	62	62	62	63	652
	Renewble Energy	12	/ -	23	21	1/	0.5	02	02	02	02	02	0.5	052
8	(Solar)													0
	Singaji TPP Phase -1,										1			-
	Khandwa (Share =													
9	100%)	-	-	-	-	-	-	-	-	-	-	-	275	275
	Satpura TPP]			
	Extension, Betul													
10	(Share = 100%)	-	-	-	-		-	115	111	115	115	207	229	891
	Sub Total	266	338	280	291	402	441	561	578	591	591	735	1,061	6,134
	Grand Total	3,365	3,367	3,143	3,183	3,562	3,607	3,947	3,938	4,147	4,228	3,877	4,545	44,434

3.56 The firm availability from the long term sources works out to 38300 MUs and from the sources allocated to Tradeco i.e. infirm availability of 6134 MUs. The firm availability has been distributed among the Distribution Companies as per the GoMP Capacity Allocation Notification for FY 2012-13 dated 29th March 2012. Subsequently, the infirm availability on the basis of the ratio of balance requirement of the Distribution Companies has been considered. Thereafter the remaining requirement has been estimated to be met through availability from the medium term sources as proposed from October, 2012 then from short term sources for the whole year. Accordingly the month wise Distribution Company wise requirement and the estimated availability are given below:

Table 33: Availability and requirement

Table 33 . Av	Table 55: Availability and requirement												
					FY 2012	2-13 (Pro	jections)						
			Pov	ver Purcha	se Requir	ement – E	x Generat	ing Bus(N	IUs)				
Particulars	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Total
Central Discom	1108	1087	1064	1028	1030	1062	1174	1370	1399	1346	1197	1124	13991
West Discom	1458	1531	1493	1473	1465	1458	1461	1654	1729	1585	1449	1354	18108
East Discom	985	995	956	933	930	960	1015	1204	1206	1152	1061	1095	12492
Total for State	3551	3613	3513	3434	3424	3481	3650	4228	4334	4082	3707	3573	44590
Availability from all	Sources -	- Ex Gener	rating Bus	(MUs)									
Requirement to be met from Long term sources	3,055	2,989	2,835	2,862	3,122	3,126	3,342	3,316	3,501	3,622	3,092	3,437	38,300
Balance	3,033	2,505	2,000	2,002	3,122	3,120	3,342	3,310	3,301	3,022	3,072	3,137	30,300
Requirement after Long Term	495	624	678	571	302	355	308	912	832	460	615	136	6,290
TradeCo sources As Available	266	338	280	291	402	441	561	578	591	591	735	1,061	6,134
Requirement to be met from TradeCo sources	266	338	280	291	302	355	308	578	591	460	615	136	4,519
Balance Requirement After Long Term					302	333	308				013		
and TradeCo.	230	287	398	280	-	-	-	335	242	(0)	-	(0)	1,771
Medium Term As Available (500MW round the clock fro													
Oct.2012)	-	-	-	-	-	-	372	360	372	372	336	372	2,184
Requirement to be met from medium							_	335	242				577
purchase Balance to be met	-	-	-	-	-	-	-	333	242	-	-	-	311
from Short Term purchase	230	287	398	280	-	1							1,195
Total Availability	3,551	3,613	3,513	3,434	3,424	3,481	3,650	4,228	4,334	4,082	3,707	3,573	44,590

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

Table 34: Station wise capacity allocation to Discoms (in MW)

S.No	Generating Stations	Installed Capacity	Total	Allocation to State	Allocation to Discoms (MV (including specific allocation)		
		MW	MW	%	East Discom	Central Discom	
	CGS						
	WR – KSTPS	2100.00	484.45	23.07%	190.81	159.77	133.86
	WR - VSTPS-I	1260.00	441.10	35.01%	159.00	130.83	151.27
3	WR - VSTPS-II	1000.00	317.72	31.77%	113.14	102.29	102.29
4	WR - KAWAS GPP	656.20	140.00	21.33%	49.00	56.00	35.00
4	WR - GANDHAR GPP	657.39	117.00	17.80%	37.44	44.46	35.10
(WR - KAKRAPAR APS	440.00	110.34	25.08%	35.99	39.65	34.69
	WR - TARAPUR APS	1080.00	229.87	21.28%	78.09	80.95	70.83

	Generating Stations	Installed Capacity	Total	Allocation to State		on to Disco cluding spe allocation)	ecific
		MW	MW	%	East Discom	West Discom	Central Discom
8	WR - VSTPS – III	1000.00	246.19	24.62%	80.65	88.29	77.25
9	WR - SIPAT –II	1000.00	189.19	18.92%	74.59	65.49	49.12
10	ER - KAHALGAON STPS-II	1500.00	74.98	5.00%	20.24	39.74	15.00
11	DVC (MTPS)	500.00	200.00	40.00%	66.00	106.00	28.00
	SUB TOTAL	11193	2550.83	17.43%	904.96	913.46	732.41
	SGS						
	THERMAL						
1	AMARKANTAK COM	240.00	240.00	100.00%	64.80	79.20	96.00
2	AMARKANTAK EXT	210.00	210.00	100.00%	56.70	69.30	84.00
3	SATPURA TPS PH I & II &III	1142.50	1017.51	89.06%	295.08	325.60	396.83
4	SGTPS EXT	500.00	500.00	100.00%	140.00	160.00	200.00
5	SGTPS	840.00	840.00	100.00%	235.20	268.80	336.00
	SUB TOTAL	2932.50	2807.51	95.74%	791.78	902.90	1112.83
	HYDEL						
	INTERSTATE						
1	GANDHI SAGAR	115.00	57.50	50.00%	13.23	15.53	28.75
2	RANAPRATAP SAGAR & JAWAHAR SAGAR	271.00	135.50	50.00%	27.10	40.65	67.75
3	PENCH	160.00	106.67	66.67%	21.33	42.67	42.67
4	RAJGHAT	45.00	22.50	50.00%	4.50	9.00	9.00
	SUB TOTAL	591.00	322.17	54.51%	66.16	107.84	148.17
	FULL MP ALLOCATION						
1	BARGI	100.00	100.00	100.00%	25.00	50.00	25.00
2	BIRISINGHPUR	20.00	20.00	100.00%	6.00	10.00	4.00
3	BANSAGAR – I	315.00	315.00	100.00%	94.50	126.00	94.50
4	BAN SAGAR II	30.00	30.00	100.00%	9.00	12.00	9.00
5	BAN SAGAR III	60.00	60.00	100.00%	18.00	24.00	18.00
6	BAN SAGAR IV	20.00	20.00	100.00%	6.00	8.00	6.00
7	MARIKHEDA	60.00	60.00	100.00%	18.00	30.00	12.00
	SUB TOTAL	605.00	605.00	100.00%	176.50	260.00	168.50
	BILATERAL AND OTHERS						
1	INDIRA SAGAR	1000.00	1000.00	100.00%	220.00	530.00	250.00
2	NCE- WIND GENERATION	0.00	0.00		0.00	0.00	0.00
3	CAPTIVE	0.00	0.00		0.00	0.00	0.00
4	SARDAR SAROVAR	1450.00	826.50	57.00%	264.48	355.40	206.63
5	OMKARESHWAR	520.00	520.00	100.00%	156.00	234.00	130.00
6	RSEB (CHAMBAL,SATPURA)						
7	RIHAND,MATATILA (UPPCL),						
	SUB TOTAL	2970.00	2346.50		640.48	1119.40	586.63
	GRAND TOTAL	18292.09	8632.01		2579.88	3303.60	2748.53

3.58 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 2012-13 is shown in table below:

Table 35: Station wise availability in MUs Discoms

Table 35: Station wise availability in		ability (Ex	-Bus)		ability (Ex- Periphery)	
Name of the Station	East	West	Central	East	West	Central
CGS						
WR - KSTPS	1,390	1,164	975	1,340	1,122	940
WR - VSTPS-I	1,143	940	1,087	1,101	906	1,048
WR - VSTPS-II	842	762	762	812	734	734
WR - KAWAS GPP	242	277	173	233	267	167
WR - GANDHAR GPP	198	235	185	190	226	179
WR - KAKRAPAR APS	129	142	125	125	137	120
WR - TARAPUR APS	396	410	359	382	396	346
WR - VSTPS - III	621	680	595	599	655	573
WR - SIPAT -II	560	492	369	540	474	356
ER - KAHALGAON STPS-II	87	171	64	81	160	60
DVC (MTPS)	195	313	83	183	293	77
SGS						
AMARKANTAK COM	308	376	456	308	376	456
AMARKANTAK EXT	384	469	569	384	469	569
SATPURA TPS PH I & II &III	1,390	1,533	1,869	1,390	1,533	1,869
SGTPS EXT	942	1,076	1,345	942	1,076	1,345
SGTPS	1,057	1,208	1,511	1,057	1,208	1,511
HYDEL						
INTERSTATE						
GANDHI SAGAR	14	17	31	14	17	31
RANAPRATAP SAGAR & JAWAHAR SAGAR	32	48	81	32	48	81
PENCH	46	93	93	46	93	93
RAJGHAT	9	18	18	9	18	18
SUB TOTAL						
FULL MP ALLOCATION						
BARGI	91	183	91	91	183	91
BIRISINGHPUR	10	16	7	10	16	7
BANSAGAR - I	260	347	260	260	347	260
BAN SAGAR II	20	27	20	20	27	20
BAN SAGAR III	17	23	17	17	23	17
BAN SAGAR IV	7	10	7	7	10	7

	Availa	ability (Ex	-Bus)	Availability (Ex-State Periphery)				
Name of the Station	East	West	Central	East	West	Central		
MARIKHEDA	17	28	11	17	28	11		
BILATERAL AND OTHERS								
INDIRA SAGAR	471	1,134	535	454	1,093	516		
NCE- WIND GENERATION	62	82	62	62	82	62		
CAPTIVE	17	22	17	17	22	17		
SARDAR SAROVAR	624	839	488	602	809	470		
OMKARESHWAR	355	533	296	342	514	285		
RSEB (CHAMBAL,SATPURA)	0	0	0	0	0	0		
RIHAND,MATATILA (UPPCL)	39	51	44	39	51	44		
Total	11,976	13,720	12,604	11,706	13,415	12,380		

3.59 The month-wise Discom-wise requirement and month wise Ex-Bus energy availability for FY 2012-13 is shown in table below:

Table 36: Month wise requirement and availability of Discoms

Month	Discom Requirement Ex- Bus			Energy Availability Ex Bus		
	East	West	Central	East	West	Central
April-12	985	1,458	1,108	960	1,077	1,019
May-12	995	1,531	1,087	946	1,048	996
June-12	956	1,493	1,064	896	999	940
July-12	933	1,473	1,028	914	1,011	938
August-12	930	1,465	1,030	982	1,140	1,000
September-12	960	1,458	1,062	970	1,182	974
October-12	1,015	1,461	1,174	1,040	1,214	1,088
November-12	1,204	1,654	1,370	1,024	1,186	1,106
December-12	1,206	1,729	1,399	1,081	1,245	1,175
January-13	1,152	1,585	1,346	1,123	1,290	1,209
February-13	1,061	1,449	1,197	965	1,099	1,028
March-13	1,095	1,354	1,124	1,076	1,230	1,130
Total	12,492	18,108	13,991	11,976	13,720	12,604

3.60 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 merit order amongst the stations and their variable energy rates.

Table 37: Merit order

Table 37 : Merit order	Type	
	(Must Run=1,	Variable Charges (Paise /
Generating Stations	Others=0)	kWH)
CAPTIVE	1	245.00
WR - KAKRAPAR APS	1	227.50
WR - TARAPUR APS	1	279.53
NCE- WIND GENERATION	1	435.00
BAN SAGAR II	0	0.00
BAN SAGAR III	0	0.00
BAN SAGAR IV	0	0.00
BANSAGAR – I	0	0.00
BARGI	0	0.00
BIRISINGHPUR	0	0.00
GANDHI SAGAR	0	0.00
INDIRA SAGAR	0	0.00
MARIKHEDA	0	0.00
OMKARESHWAR	0	0.00
PENCH	0	0.00
RAJGHAT	0	0.00
RANAPRATAP SAGAR & JAWAHAR		
SAGAR	0	0.00
SARDAR SAROVAR	0	0.00
UPPCL (RIHAND,MATATILA)		80.00
WR - KSTPS	0	95.07
WR - SIPAT -II	0	97.23
AMARKANTAK EXT	0	111.40
AMARKANTAK COM	0	125.16
SATPURA TPS PH I & II &III	0	170.23
WR - VSTPS-II	0	170.95
SGTPS EXT	0	176.06
WR - VSTPS - III	0	176.44
WR - VSTPS-I	0	192.67
SGTPS	0	195.09
WR - GANDHAR GPP	0	238.19
WR - KAWAS GPP	0	249.46
ER - KAHALGAON STPS-II	0	260.05
DVC (MTPS)	0	379.15

^{3.61} The total Station wise availability after application of the merit order dispatch principle on monthly availability is given in the following table:

Table 38 : Station wise availability after considering MOD (MUs)

Name of the Station		ability (Ex-E	Bus - MOD	
	State	East	West	Central
CGS				
WR - KSTPS	3,529	1,390	1,164	975
WR - VSTPS-I	3,170	1,143	940	1,087
WR - VSTPS-II	2,365	842	762	762
WR - KAWAS GPP	691	219	297	176
WR - GANDHAR GPP	618	188	243	186
WR - KAKRAPAR APS	396	129	142	125
WR - TARAPUR APS	1,165	396	410	359
WR - VSTPS - III	1,896	621	680	595
WR - SIPAT -II	1,421	560	492	369
ER - KAHALGAON STPS-II	322	75	180	67
DVC (MTPS)	590	154	353	84
SGS				
AMARKANTAK COM	1,140	308	376	456
AMARKANTAK EXT	1,422	384	469	569
SATPURA TPS PH I & II &III	4,791	1,390	1,533	1,869
SGTPS EXT	3,363	942	1,076	1,345
SGTPS	3,777	1,057	1,208	1,511
HYDEL				
INTERSTATE				
GANDHI SAGAR	63	14	17	31
RANAPRATAP SAGAR & JAWAHAR	162	32	48	81
SAGAR	221	1.0	02	02
PENCH	231	46	93	93
RAJGHAT	44	9	18	18
FULL MP ALLOCATION	266	0.1	102	0.1
BARGI	366	91	183	91
BIRISINGHPUR		10	16	·
BANSAGAR H	867	260	347	260
BAN SAGAR II	67	20	27	20
BAN SAGAR III	58	17	23	17
BAN SAGAR IV	24	7	10	7
MARIKHEDA BILATERAL AND OTHERS	57	17	28	11
	2 140	471	1 124	525
INDIRA SAGAR	2,140	471	1,134	535
NCE- WIND GENERATION	206	62	82	62

Name of the Station	Availability (Ex-Bus - MOD)				
	State	East	West	Central	
CAPTIVE	56	17	22	17	
SARDAR SAROVAR	1,951	624	839	488	
OMKARESHWAR	1,184	355	533	296	
RIHAND,MATATILA, (UPPCL)	135	39	51	44	
Total	38,300	11,890	13,798	12,611	

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

Table 39: Intra Discom trading in MUs

Month	Intra	-Discom Pure	chases	Intra-Discom Sales		
	East	West	Central	East	West	Central
April-12	-	-	-	-	-	-
May-12	-	-	-	-	-	-
June-12	-	-	-	-	-	-
July-12	-	-	-	-	-	-
August-12	-	47.2	5.1	52.3	-	-
September-12	-	7.1	2.3	9.4	-	-
October-12	-	18.4	6.4	24.8	-	-
November-12	-	-	-	-	-	-
December-12	-	-	-	-	-	-
January-13	-	-	-	-	-	-
February-13	-	-	-	-	-	-
March-13	0.9	5.7	-	-	-	6.6
Total	0.9	78.4	13.8	86.5	-	6.6

- 3.63 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 not 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 the seller Discom. Since the month-wise requirement of the Licensees is more than the availability, hence the same would be further met from the availability of the Stations assigned to Tradeco. The balance requirement would be met from Medium Term power procurement and Short Term power procurement as estimated.
- 3.64 As mentioned in the above paragraph, the Discom wise Ex- Bus power purchase required, availability after MOD, purchase from Tradeco and short term sources is as below:

Table 40: Requirement, availability and shortfall (In MUs)

Particulars	East	West	Central	State
Total Required Ex-Bus	12,492	18,108	13,991	44,590
Total available Ex-Bus After MOD	11,890	13,798	12,611	38,300
Difference	602	4,309	1,380	6,290
Purchase from Tradeco	420	3,082	1,017	4,519
Balance required	181	1,227	363	1,771
Medium Term power Purchase	102	312	162	577
Balance through Short Term power Purchase	79	915	201	1195

- 3.65 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.
- 3.66 In some months, the availability from Tradeco stations would remain partly unutilized by the Discoms. The Commission suggests that the unutilized power should be used 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.
- 3.67 As per GoMP vide letter no. 2682/13/2012/02 dated 29th, March 2012, the Commission has decided to follow a uniform tariff in the State during FY 2012-13, 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 41: Monthly pooled cost for intra Discom trading

Sr. No.	Month	Rs./kWh
1	April	2.36
2	May	2.38
3	June	2.37
4	July	2.35
5	August	2.32
6	September	2.24
7	October	2.31
8	November	2.34
9	December	2.37
10	January	2.35
11	February	2.38
12	March	2.41

Power Purchase Costs

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

Central Generating Stations (Thermal)

3.69 For NTPC's Stations in Western Region and Eastern Region, for the purpose of fixed cost determination of individual Stations, the Commission has considered latest available tariff orders issued by CERC, which are given below in the table-

Sl.No.	Name of Station	Fixed Cost Order Reference
		CERC (provisional tariff) date of order: 06.07.2011
1	WR – KSTPS	Petition No. 246/2009 from 01.04.2009 to 31.03.2014.
		CERC (provisional tariff) date of order: 06.07.2011
2	WR - VSTPS-I	Petition No. 227/2009 from 01.04.2009 to 31.03.2014.
		CERC date of order 26.12.2011 Petition No.258/2009
3	WR - VSTPS-II	from 01.04.2009 to 31.03.2014.
		CERC date of order: 30.12.2011 Petition No. 285/2009
4	WR - KAWAS GPP	from 01.04.2009 to 31.03.2014.
		CERC date of order: 30.12.2011 Petition No. 226/2009
5	WR - GANDHAR GPP	from 01.04.2009 to 31.03.2014.
		CERC (provisional tariff) date of order: 06.07.2011
6	WR - VSTPS - III	Petition No. 260/2009 FOR THE PERIOD 2012-13
		CERC date of order: 20.01.2012, Petition no. 316/2009
7	WR - SIPAT –II	from 01.04.2009 to 31.03.2014.
		CERC date of order 23rd December 2009 Petition
		No.32/2007 Revision of fixed charges for the period
8	ER - FARAKKA STPS	2004-09
		CERC date of order: 22.02.2011 Petition No. 204/2010
9	ER - KAHALGAON STPS	for the period from 1.4.2004 to 31.3.2009.
		CERC date of order: 12.08.2011 Petition No. 282/2009
		Approval of provisional tariff from 01.04.2009 to
10	ER - KAHALGAON STPS-II	31.03.2014
		CERC (provisional tariff) date of order: 06.07.2011
11	ER - TALCHER STPS	Petition No.228/2009 from 01.04.2009 to 31.03.2014.
		The variable charges inclusive of fixed charges have
12	DVC (MTPS)	been taken from actual bills provided till Nov. 2011

- 3.70 Fixed costs of thermal power stations have been computed as per recovery of fixed cost Regulations in CERC (Terms and Conditions of Tariff) Regulations, 2009.
- 3.71 However, to determine the energy cost for FY 2012-13, the Commission has considered variable cost as charged in actual bills raised by NTPC to MP Tradeco till November/December 2011, for individual stations except for SGTPS which is explained in subsequent section of this Order.

3.72 Other charges have been taken as per the latest bills available with the Commission till November, 2011. The same have been considered for FY 2012-13.

Central & State Generating Stations (Hydel)

3.73 For computation of fixed charges of Hydel Stations, the Commission has considered latest available tariff orders issued by CERC for individual stations. Further the fixed costs have been computed as per recovery of fixed charges Regulations in CERC (Terms and Conditions of Tariff) Regulations 2009 and Madhya Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Generation Tariff) (Revision – I) Regulations, 2009. In case of Hydel Stations, Plant Availability factor has been calculated on the basis of average of three years (09-10,10-11,and up to Jan.12) cumulative PAF based on declared capacity.

Indira Sagar (NHDC)

3.74 For FY 2012-13 charges for Indira Sagar Hydel Power Plant are admitted as per the CERC Tariff Order, dated 20th October, 2009 and income tax as per actual bills till Nov., 2011 has been admitted which has actually been claimed in the bills for difference between pre tax ROE and grossed up ROE as per Clause 15 of the CERC (Terms and Conditions of Tariff) Regulations.

Sardar-Sarovar

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

Omkareshwar:

3.76 Commission has allowed annual fixed charges for Omkareshwar as per the provisional tariff order passed by CERC on 30th October 2007. and income tax as per actual bills till Nov., 2011 has been admitted which has actually been claimed in the bills for difference between pre tax ROE and grossed up ROE as per clause 15 of the CERC (Terms and Conditions of Tariff) Regulations.

Renewable Sources

3.77 The minimum purchase requirement by the Disoms for Solar and Non-Solar energy from different sources as per relevant Regulations for FY 2012-13 is shown in the following table:

Table 42: Minimum Purchase Obligation

Renewable Source	Minimum Purchase Requirements for FY 12-13
Solar	0.60%
Non-Solar	3.40%
Total	4%

- 3.78 **Captive Generation and other Sources**: The Discoms have filed a total availability of 262 MUs from Captive Power Plants and Wind Generation during FY 2012-13. Rate for wind generation of Rs. 4.35/kWh and for Captive Power Plant Rs. 2.45/kWh has been used to arrive at the costs for FY 2012-13. 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.
- 3.79 **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:

Table 43: Basis of Tradeco plants

Table 45: Dasis of Ti	aueco pi	ants	
Station	Fixed Costs	Energy Charges Rs./kWh	
	(Rs.	Escalated for	
	Cr.)	Future years	Basis
			As per CERC Provisional Tariff Order
			dated 3.11.11 and variable cost as per
NTPC Sipat - Stage I	180.07	0.95	Bills, average for April to Nov, 2011
			The variable charges inclusive of fixed
DVC (Chandrapur			charges have been taken from actual bills
TPS Extn.)		4.04	of DVC Mejia
PTC - Torrent Surat			-
(Gas)	68.64	2.63	As per CERC order
			The variable charges inclusive of fixed
DVC Durgapur steel			charges have been taken from actual bills
TPS		4.04	of DVC Mejia
BINA Power, Sagar	0.00	3.58	
BLA Power,			
Narsinghpur	0.00	3.58	As filed by the Discoms
Singaji TPP Phase -			
1, Khandwa (Share =			
100%)		2.15	As filed by the Discoms
Satpura TPP			
Extension, Betul			
(Share = 100%)		1.88	As filed by the Discoms
Korba West-III	77.18	0.89	As per CERC order

MP Power generating Stations

3.80 The Fixed Cost of the MP Genco Stations has been taken from MYT Tariff order of FY 2011-12 as filed by the Discoms. 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.

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

Table 44: Allocation of fixed cost among Discoms (Rs in Crore)

Table 44. Amocation of fixed cost among Discoms	Fixed Cost (Rs.Crore)			
Name of the Station	Total	East	West	Central
CGS				
WR – KSTPS	191.04	75.25	63.01	52.79
WR - VSTPS-I	175.04	63.10	51.92	60.03
WR - VSTPS-II	166.27	59.21	53.53	53.53
WR - KAWAS GPP	60.12	21.04	24.05	15.03
WR - GANDHAR GPP	66.01	21.12	25.08	19.80
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	192.44	63.04	69.01	60.39
WR - SIPAT –II	165.64	65.30	57.33	43.00
ER - KAHALGAON STPS-II	38.73	10.46	20.53	7.75
DVC (MTPS)	0.00	0.00	0.00	0.00
SGS				
AMARKANTAK COM	66.65	18.00	21.99	26.66
AMARKANTAK EXT	159.73	43.13	52.71	63.89
SATPURA TPS PH I & II &III	242.77	70.40	77.69	94.68
SGTPS EXT	333.98	93.52	106.88	133.59
SGTPS	242.91	68.01	77.73	97.16
HYDEL				
INTERSTATE				
GANDHI SAGAR	4.80	1.10	1.30	2.40
RANAPRATAP SAGAR & JAWAHAR SAGAR	8.42	1.68	2.52	4.21
PENCH	19.10	3.82	7.64	7.64
RAJGHAT	7.00	1.40	2.80	2.80
FULL MP ALLOCATION				
BARGI	8.47	2.12	4.24	2.12
BIRISINGHPUR	4.32	1.30	2.16	0.86
BANSAGAR - I	109.98	32.99	43.99	32.99
BAN SAGAR II	5.37	1.61	2.15	1.61

	Fixed Cost (Rs.Crore)				
Name of the Station	Total	East	West	Central	
BAN SAGAR III	6.59	1.98	2.63	1.98	
BAN SAGAR IV	3.87	1.16	1.55	1.16	
MARIKHEDA	15.82	4.75	7.91	3.16	
BILATERAL AND OTHERS					
INDIRA SAGAR	574.15	126.31	304.30	143.54	
NCE- WIND GENERATION	0.00	0.00	0.00	0.00	
CAPTIVE	0.00	0.00	0.00	0.00	
SARDAR SAROVAR	309.23	98.95	132.97	77.31	
OMKARESHWAR	388.59	116.58	174.87	97.15	
RSEB (CHAMBAL,SATPURA)	0.00	0.00	0.00	0.00	
RIHAND,MATATILA (UPPCL)	0.00	0.00	0.00	0.00	
Total	3567.04	1067.33	1392.48	1107.23	

Variable Cost

3.82 Based on the above discussions, the Variable Energy Charges as computed on the basis of the availability considered for purchase after applying the Principle of Merit Order Dispatch at Ex-Bus and are shown below:

Table 45: Station wise admitted variable cost (Rs in Crore)

Name of the Station	East	West	Central	Total(A)
CGS				
WR – KSTPS	132.16	110.66	92.71	335.53
WR - VSTPS-I	220.15	181.14	209.45	610.74
WR - VSTPS-II	144.00	130.18	130.18	404.37
WR - KAWAS GPP	54.55	74.09	43.83	172.47
WR - GANDHAR GPP	44.81	57.88	44.41	147.10
WR - KAKRAPAR APS	29.39	32.38	28.33	90.10
WR - TARAPUR APS	110.67	114.72	100.38	325.77
WR - VSTPS – III	109.56	119.94	104.95	334.45
WR - SIPAT –II	54.48	47.84	35.88	138.19
ER - KAHALGAON STPS-II	19.60	46.79	17.31	83.69
DVC (MTPS)	58.21	133.88	31.70	223.79
SGS				
AMARKANTAK COM	38.52	47.08	57.07	142.68
AMARKANTAK EXT	42.77	52.28	63.36	158.41
SATPURA TPS PH I & II &III	236.53	261.00	318.10	815.63
SGTPS EXT	165.80	189.48	236.85	592.14

Name of the Station	East	West	Central	Total(A)
SGTPS	206.29	235.76	294.70	736.74
HYDEL				
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
BIRISINGHPUR	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
BILATERAL AND OTHERS				
INDIRA SAGAR	0.00	0.00	0.00	0.00
NCE- WIND GENERATION	26.87	35.83	26.87	89.57
CAPTIVE	4.11	5.48	4.11	13.71
SARDAR SAROVAR	0.00	0.00	0.00	0.00
OMKARESHWAR	0.00	0.00	0.00	0.00
RSEB (CHAMBAL,SATPURA)	0.00	0.00	0.00	0.00
RIHAND,MATATILA, (UPPCL)	3.11	4.12	3.54	10.77
Total	1,702	1,881	1,844	5,426

- 3.83 The Commission while examining the variable costs observed that the variable charges as per bills in FY 11-12 show abnormal increase in case of SGTPS and SGTPS Extn. It was further gathered that this increase is on account of receipt of higher percentage of A&B grade Coal from Coal Companies. Efforts are on to persuade Coal Companies to restrict or discontinue A&B grade Coal for which the matter has already been taken up by the Genco. with appropriate authorities. The Commission expects that the rates as found in FY 11-12 would then get reduced. In order that unnecessary burden is not passed on to the consumers, the Commission in the present Order has considered an average variable charge based on the rates as per FY 11-12 Tariff Order and as per actual bills of FY 11-12. The Commission has further taken into consideration the fact that if the increase in the actual rates is sustained, the Licensees can recover it through FCA to meet the expenses on this account.
- 3.84 After allowing Long Term purchases as per Merit Order Dispatch, 6290 MUs remains to be arranged in various months of FY 2012-13. Of this balance requirement, 4519 MUs would be met, at a weighted average rate of 285.7 Paise per unit, from Generating Stations allocated to Tradeco. This leaves a balance requirement of 1771 MUs, out of

- which 577 MUs would be met through Medium term Sources @ 4.00 Rs. /KWH which would be available from October, 2012 to March, 2013 and remaining 1195 MUs would be met through Short Term power Sources @ 4.50 Rs. /KWH.
- 3.85 **Trading Margin**: The Discoms have claimed trading margin @ 4 paise per unit for MP Tradeco. The trading margin is yet to be determined by the Commission hence has not been considered in this Order.

Inter-State and Inter-Regional Transmission Charges

- 3.86 The PGCIL charges to be paid by MP Discoms consist of charges to be paid for transmission system of Western Region and Eastern Region.
- 3.87 The Commission has projected inter-state transmission charges as per the actual bills of FY 2010-11 for the Tariff Period FY 2012-13. 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 and Central Discoms.

Table 46: PGCIL charges allowed to Discoms (Rs in Crore)

Discom	Share in MW	PGCIL Charges
Central	1319	189.34
West	2033	249.06
East	1545	161.60
Total	4897	600.00

Intra-state Transmission Charges

3.88 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. Since for FY 2012-13, there is no separate order issued by the Commission for MP Transco, the tariffs of FY 2011-12 have been considered for FY 2012-13. Accordingly intra – State transmission charges for FY2012-13 in the power purchase cost of the Discoms have been admitted as given in the table below:

Table 47: MPPTCL charges allowed by the Commission for FY 2012-13 (Rs in Crore)

Annual MPPTCL Charges	FY 2012-13
MP Poorv KVVCL	446.96
MP Madhya KVVCL	504.64
MP Paschim KVVCL	487.18
Total	1438.79

3.89 With regard to the issue of expenses against terminal benefits for MPSEB/ successor entities employees who are to retire in FY 2012-13 as well as pension payments to pensioners in FY 2012-13, the Commission as of now has allowed the terminal benefits and pension expenses for FY 12-13 on provisional basis on "pay as you go" principle payable to MP Transco to the extent of Rs.621.29 Crore based on the claims as filed by

the Transco in their petition for determination Transmission Tariff for FY 2012-13. These are included in total transmission charges of Rs. 1438.79 Crore. The issue regarding finalizing the provisions to be made for payment of terminal benefits as well as payment of pension and funding of terminal benefit trust is under consideration of the Commission. The Commission has recently published draft for specifying separate Regulations on this issue which is under process of inviting comments and public hearings. The provision in this Order therefore has been made to ensure that all those employees who are existing pensioners and those who may retire in FY 2012-13 get their due benefits.

3.90 Since full projected provisions for payments of terminal benefits and pension expenses for FY 12-13 have been separately made in the MP Transco charges as mentioned above, the provision of Rs. 41.63 Cr for future contribution of existing employees of the Transco. for FY 11-12 included in the Transco charges (for FY 11-12 and considered as same for FY 12-13) has not been considered.

SLDC Charges

- 3.91 The Commission has considered the SLDC charges of Rs. 8.61 Crore for FY 2012-13 as per Commission's Order dated 16th March 2012. This has also been included in the aforementioned transmission charges.
- 3.92 The total power purchase cost as admitted by the Commission is summarized in the following table:

Table 48 : Total power purchase cost admitted (Rs in Crore)

Particulars	East	West	Central	Total for
	Discom	Discom	Discom	State
For Firm Availability				
Fixed Charges	1067.33	1392.48	1107.23	3567.04
Variable Charges	1701.58	1880.54	1843.74	5425.86
Intra Discom Trading	-19.76	18.17	1.59	0.00
Availability from Tradeco	120.088	880.547	290.531	1291.17
Availability from Medium Term	40.878	124.938	64.785	230.60
Availability from Short Term	35.616	411.684	90.278	537.58
PGCIL Charges	189.34	249.06	161.60	600.00
MPPTCL Charges (Including Terminal Benefits	446.96	504.64	487.18	1438.79
and SLDC Charges)				
Grand Total	3582.04	5462.06	4046.94	13091.04

3.93 In addition to power purchase cost admitted as mentioned above, the Commission has also admitted an amount of Rs. 30.06 Crore as Tradeco expenses for FY 2012-13 against the claim of Rs 98.75 Crore claimed by the Licensees. While admitting these expenses, the Commission has reviewed expenses incurred as indicated in Tradeco Balance Sheet for FY 2010-11.

Network Cost

Capital Expenditure Plans/ Capitalization of Assets

Licensees' submissions

Investments

- 3.94 The Licensees have claimed in their petitions that they have developed extensive investment plans under various schemes like Feeder Segregation, ADB, R-APDRP, STN, TSP, SCSP, PFC, RGGVY, Kisan Maha Panchayat (New AG Pump Sets), Grant for Simhastha (West Discom) and ERP DFID and HUDCO(System Integration / Energy Savings / Measurement / Auditing / Accounting, etc.)(Central Discom). 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, Capacity Building
 - ➤ Voltage improvement, Consumer Service and
 - > Meterisation of unmetered connections
- 3.95 The Discom wise investment plan under various schemes for FY 2011-12 and FY 2012-13 as filed is indicated below:

Table 49: Investment plan (Rs in Crore)

Distribution Company	FY-2011-12	FY-2012-13
East Discom	1,063.01	2,207.88
West Discom	1,468.03	1,473.60
Central Discom	1,324.54	1,724.45
Total for the State	3,855.58	5,405.93

Capitalization and CWIP

3.96 The Discom wise capitalization plan and the status of CWIP as filed by the Discoms for FY 2011-12 and FY 2012-13 are indicated below:

Table 50: Discom wise year wise capitalisation and bifurcation of CWIP (Rs in Crore)

Particulars	FY-2011-12y	FY-2012-13
East Discom		
Opening Balance of CWIP	745.6	1471.04
Fresh investment During the year	1,063.01	2,207.88
Total Capitalisation during the year	386.82	1585.7
Closing Balance of CWIP	1,421.79	2,093.22
West Discom		
Opening Balance of CWIP	863.87	1,525.16
Fresh Investment during the year	1,258.55	1,369.48

Particulars	FY-2011-12y	FY-2012-13
Total Capitalisation during the year	597.26	1,374.57
Investment Capitalised out of opening CWIP	345.55	1,100.68
Investment Capitalised out of fresh investment	251.71	273.90
Closing Balance of CWIP	1,525.16	1,520.07
Central Discom		
Opening Balance of CWIP	890.31	501.82
Fresh Investment during the year	1,171.47	1,729.41
Total Capitalization during the year	1559.95	1674.65
Investment capitalized out of opening CWIP	1559.95	1674.65
Investment capitalized out of fresh investment	0.00	0.00
Closing Balance of CWIP	501.82	556.58

Commission's Analysis

- 3.97 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 prescribes the norms for business plan, investment plan, financial plan and capitalization by the Licensees.
- 3.98 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.
- 3.99 The Capital plan shall show separately ongoing Projects spill over into the year under review and new Projects (along with justification) which may commence but may be completed within or beyond the Tariff Period. The Commission shall consider and approve the Licensees' capital investment plans for which the Licensees shall be required to provide relevant technical and commercial details.
- 3.100 The Licensees have filed the capital investment plan in this petition for FY 2012-13. The progress of asset addition by the Licensees for FY 2008-09, FY 2009-10 and FY 2010-11 reveals that the GFA addition has been as follows:

Table 51: Assets capitalization during the year (2009-11) (Rs in Crore)

Addition during the Year	East Discom	West Discom	Central Discom
FY 2008-09	305.21	180.69	356.76
FY 2009-10	252.38	75.40	173.24
FY 2010-11	405.58	661.40	99.40

3.101 As against the assets addition shown in above table, as per investment plans the assets addition proposed by the Discoms for the FY 2011-12 and FY 2012-13 are as follows:

Table 52 : Assets capitalization during the year (2011-13) (Rs in Crore)

Addition during the Year	East	West	Central
FY 2011-12	386.82	597.26	1559.95
FY 2012-13	1585.70	1,374.57	1674.65

3.102 It can be seen from the above tables that the past performance of the distribution licensees in capitalization of assets has been far less compared to the projections made. The Commission therefore is unable to accept the projections made for FY 2012-13. For tariff formulation in FY 2012-13, the Commission has computed assets addition for FY 2012-13 keeping in view actual assets addition in the past three years.

Operations and Maintenance Costs

Licensees' submissions

EAST DISCOM

- 3.103 The Licensee has stated that it has 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 its petition.
- 3.104 The Discom has stated reasons for additional cost occurred for the parts of O & M expenses as given below:
 - i. GoMP has increased DA of employees / Pensioners in the year 2011 by 6% in addition to normal yearly increment. MP Poorv Kshetra Vidyut Vitaran Co. Ltd has started paying DA at the increased rates.
 - ii. 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 it due regard before allowing the employee cost for FY 2012-13.
 - iii. Terminal Benefit has been incorporated under employee cost.
 - iv. MPERC fee has been incorporated under Administrative and General Expenses.
 - v. DA increase in FY 2009-10 was 10 %, in FY 2010-11 it was 13% and for FY 2011-12 it is 16%. This is also well above the escalation factor of 6.14 % provided in the Regulations. Licensee has also started paying DA at the increased rates.
 - vi. In case of Repair & Maintenance Expenses, for determining expenses to be allowed for the control period, trends of repair & maintenance on percentage of opening GFA as per audited figures of 2006-07, 2007-08 & 2008-09 were taken. For administration & general expenses, audited figures for the year 2008-09 were taken

- as base and escalated year-wise at inflation rate of 6.14% to arrive at the amounts allowed for the control period.
- Administrative and General Expenses are incurred by the Petitioner for meeting day vii. to-day expenses relating to administration, tax liability and working of the offices. All these expenses are directly affected by the increase in cost of fuel, consumers', load, sales, assets, initiatives undertaken for the consumers, communication costs, as well as by any changes in the GoI & GoMP policies (such as Sales Tax, Service Tax, etc.) and inflation. The Petitioner has claimed to have taken several steps for enhancing customer care, online bill payment through MP online / Billdesk, online complaint management, payment of bill through ATP machines, system strengthening and computerization for better process control. It has also taken steps to increase the communications network with the field staff so as to reduce the downtime for restoration of power. The benefits from all these initiatives have greater economic/social value and far outweigh the costs associated with these activities, besides generating higher revenue due to loss reduction, etc. These initiatives have helped the Petitioner in the discharge of its obligations in a better way. These steps have been viewed positively by many stakeholders and are in line with the best utility practices.
- viii. In case of Administrative and General Expenses, the rent, rates and taxes have been forecast based on the Gross Fixed Assets. The base figures were calculated by considering the average rent and insurance expenses as a proportion of the GFA. The electricity expenses of the offices have been forecast based on the growth in the GFA of building, actual expenses of FY 2010-11 and have been linked to the inflation rate of 9.80%. Insurance, Revenue Stamp Expenses, Telephone Charges, Legal Expenses, Consultancy Charges, Technical Fees, other Professional fees, Conveyance and Travelling expenses, Printing and Stationery, Books and Periodicals, Advertisement etc. and all other Expenses have also been linked directly with the inflation rate of 9.80% per year. The base figure has been arrived at by taking the average of the expenses of the last three years and applying proper inflation to forecast the future expenses. Allocation of Common Expenditure of MPSEB is based on the average of last 3 years and is linked to the inflation rate of 9.80%.
 - ix. **Other expenses:** The base figures have been arrived at by taking the average of the expenses for last three years and applying inflation rate of 9.80% to forecast the future expenses.
 - x. In addition to the aforementioned expenses, the Discom has also claimed Rs. 162.10 Crore towards the current liabilities (i.e. for FY 2012-13) 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.
 - xi. Allocation of Common Expenditure of MPSEB: This forecast is based on the average of last 3 years and is linked to the inflation rate of 9.80%.

3.105 Accordingly, as per the submission made above the filing of the East Discom in respect of O&M Expenses is indicated below:

Table 53: O&M expenses for FY 2012-13 (Rs in Crore)

Particulars	As per Norms	As per Additional Submission
R&M Expenses	59.74	60.27
A&G Expenses	663.06	882.32
Employee cost	77.07	115.79
TOTAL	799.87	1058.38

WEST Discom

- 3.106 The West Discom has filed the O&M expenses as per norms provided in the Regulations and also on the basis of projected actual O&M expenses. It has been submitted that at the time of submission, Audited accounts of 2009-10 & 2010-11 are available and apart from other items include the full impact of inflation, wage revision and payment of arrears on account of 6th Pay Commission. Therefore, although the Licensee has calculated O&M cost and other items in the tariff petition as per the Commission's Regulation dated January 22, 2010, the Licensee has requested that effect of the changes / additions on account of petition filed by the Licensee on dated 27th October 2011 may be considered in this ARR.
- 3.107 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.

Table 54: Employee cost and provisions as filed (Rs in Crore)

		Particulars	FY12	FY13
A		Employee Cost as per Regulation	413.28	438.65
В		Payment/Contribution To PF Staff Pension And Gratuity		
	1	Terminal Benefits		
		a) Provident Fund Contribution	0.78	0.86
		b) Employer Contribution in New pension Scheme (Actual Payment)	0.94	1.73
		c) Provision for Pension	85.24	92.80
		d) Provision for Gratuity	20.07	22.17
		e) Provision for Earned leave encashment	2.53	2.80
	2	Any Other Items ,Annuity payment, Free electricity to retired	7.15	7.72
		employees etc.(Actual Payment not provision)		
	3	Earned leave encashment (Actual Payment not provision)	7.14	9.53
		Total B	123.84	137.61
C		Arrear	31.31	31.31
D		Total Employee expenses	568.43	607.57

3.108 It has been further submitted that due to all round shortage of staff, the Discom has recently started recruiting in some crucial cadres like Assistant Engineers, Junior Engineers, Line staff etc. Thus the additional expenses on salaries have to be incurred due to fresh recruitment. Discom has claimed Rs. 690.22 crore as per additional submission.

Terminal Benefits:

3.109 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 2012 amounting to Rs.750.24 Crore. The filing is given below:

Table 55 : Terminal benefit liability (Rs in Crore)

Particulars	Leave			Total
	Gratuity	Encashment	Pension	Liability
Past Service Liability Pertaining to West Discom as	52.41	19.95	348.76	421.12
determined by actuary (From 01.06.2005 to 31st March				
2009)				
2009-10	23.4	2.96	101.6	127.96
2010-11	17.48	2.2	73.64	93.32
2011-12	20.07	2.53	85.24	107.84
Total upto 2011-12	113.36	27.64	609.24	750.24
2012-13 (Included in the employee Cost of the FY 2012-13)	22.17	2.8	92.8	117.77
Total	135.53	30.44	702.04	868.01

- 3.110 The Discom has also requested the Commission to allow the cost of Rs.868.01 Crore in the ARR of 2012-13 as Regulatory Assets, for meeting the past service liability in respect of West Discom as per the actuarial valuation report.
- 3.111 The West Discom has filed the Administrative and General Expenditure as per Regulation as Rs.92.56 Crore for FY 2011-12 and Rs. 101.54 Crore for FY 2012-13.

Submission regarding additional expenses on account of R-APDRP (Part-A) project

- 3.112 It is submitted by the Discom that R-APDRP (Part-A) Project is being implemented in the area of West Discom with the financial assistance of the Power Finance Corporation. Therefore networking, GPRS charges and FMS (Facility Management charges) for hardware and software are required to be incurred by the Discom. Therefore, the additional A&G Expenses amounting to Rs. 5.59 Crore on account of this head may be allowed.
- 3.113 Expenses on Rates & Taxes, Incentive & award to employees, MPERC fee and common expenses of MPSEB consider on actual projection basis.
- 3.114 The West Discom has claimed the A&G expenses of Rs 101.54 crore and Rs. 118.27 crore as per Regulations and additional submission respectively.

Repairs and Maintenance Expenditure

- 3.115 The R&M expenses have been specified as 2.3 % of GFA for Central Discom, but only 2 % of GFA for West and East Discom. There is no significant difference among the status of network and network maintenance costs of the three Discoms and there is no rationale for fixing different norms allowing R&M expenses for three Discoms. Various other Regulatory Commissions have allowed the R&M expenses much higher than the percentage allowed as above. DERC has allowed 2.81% and MERC allowed 4%.
- 3.116 It is also pertinent to mention that with increase in supply hours after completion of Feeder Separation Project, massive rural electrification happening under RGGVY scheme, and other Capacity expansion projects currently underway, the R&M expenses of Discoms are set to increase. In fact, in the Financial Year 2010-11 the actual R&M expenses incurred by Discom West are Rs. 47.88 Crore, whereas the Normative R&M expenses as per Tariff Regulation were only Rs. 39.41 Crore.
- 3.117 In view of the foregoing, it is prayed that the norms for allowing the R&M expenses may be fixed as at least 4 % of GFA. Hence, in place of Rs. 66.40 Crore as 2% of GFA Rs. 132.80 Crore may be allowed as 4% of GFA.
- 3.118 The comparison of O&M expenses as per Regulations and as per additional submission are given below:

Table 56: Comparison of O&M expenses for FY2012- 13 (Rs in Crore)

Particulars	As per Regulations	As per additional submission
R&M Expense	66.4	132.8
Employee Expenses	607.57	690.22
A&G Expense	101.54	118.27

CENTRAL DISCOM

3.119 The Central Discom has submitted their claims for O&M expenses as per Regulation and as projected on actual O&M expenses as follows:

Employee Expenses

- 3.120 The Commission had approved the employee cost as Rs.389.69 Crore for the FY 2011-12 and arrears for Rs. 29.52 Crore. For the FY 2012-13 the employee cost has been ascertained after adding the inflation rate of 6.14% on the cost of previous year, which amounts to Rs. 413.61 Crore plus arrears amounting to Rs.29.52 Crore.
- 3.121 Arrears: Using the Sixth Pay-Commission norms, the total arrears are calculated. Further the Normative Arrears as provided in the Regulations have been taken, which

- amount to Rs.29.52 Crore. The arrears have been taken at the same level as per the Regulation without taking effect of the inflation rate.
- 3.122 Pension and Gratuity: Pension has been as 20.15% of Basic and DA as provided in the Actuarial Valuation Report by M/s K A Pandit for FY 2009-10. The gratuity has been taken as 4.56% of Basic and DA as provided in the Actuarial Valuation Report by M/s K A Pandit for FY 2009-10.
- 3.123 As per the additional submission made in the petition, the Licensee has suggested the inflation rate as 9.86% for FY 2011-12 and FY 2012-13 in place of 6.14%.
- 3.124 Further, the breakup of liability pertaining to period upto 01.06.2005 and thereafter is given below:

Table 57: Breakup of past liability as filed (Rs in Crore)

		Leave	Pension		Total
Particulars	Gratuity	Encash.	Employees	Pensioners/Family Pensioners	Liability
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	52.54	21.02	228.93	96.61	399.1

Table 58: Future contribution liability (Rs in Crore)

Year	Gratuity	Pension	Leave Encashment	Total
2009-10		152.15	152.15	
2010-11		99.26	99.26	
2011-12	15.03	58.61	1.78	75.43
2012-13	14.98	56.37	1.77	73.12
Total				399.96

3.125 In the light of above, the Licensee has submitted to the Commission to allow the cost of Rs 799.06 Cr. in the ARR of 2012-13, for meeting the past service liability in respect of MPMKVVCL as per the actuarial valuation report:

Table 59: Terminal benefit liability (Rs in Crore)

Tuble 65 V Terminar benefit habitity (145 in 61016)						
Particulars	Gratuity	Pension	Leave Encashment	Total Liability		
Past service liability Pertaining to MPMKVVCL as determined by Actuary(From 01.06.2005 to 31st march 2009)	52.54	325.54	21.02	399.10		

Particulars	Gratuity	Pension	Leave Encashment	Total Liability
2009-10		152.15		152.15
2010-11		99.26		
2011-12	15.03	58.61	1.78	75.42
2012-13	14.98	56.37	1.77	73.12
Total				799.06

Administrative and General Expenses

3.126 The Central Discom has worked out Administrative and General Expenses by taking only the inflation rate of 6.14% on the cost of previous year. The same has been done as per the norms. The cost of FY 2012-13 has been calculated taking 6.14% addition on the previous year cost, which amount to Rs.78.37 Crore.

As per additional submission

- 3.127 Administrative and General Expenses as per additional submissions are filed as Rs.116.66 Crore which are based on the following:
 - a. Rent: The rent is taken as last 3 years average in proportion to the GFA.
 - **b. Rates and Taxes:** The same is taken in proportion to the GFA and averaging for last 3 years audited figures.
 - **c. Insurance Fund Charges:** The insurance charges are taken as proportionate to the revenue and thereby taking the average of last 3 years audited figures.
 - **d.** Other Expenses: All the other expenses are taken in proportion to the GFA and the Revenue and further averaged out for last 3 years audited financials for making the projections for FY 2011-12 and FY 2012-13 respectively.
 - **e. Allocation of common expenses of MPSEB:** The expenses have been taken as average of last 3 years audited financials and thereby inflated with 9.68% as inflation rate for FY 2011-12 and FY 2012-13 respectively.
 - **f.** Bandwidth charges R-APDRP Part A: Company has implemented R-APDRP Part A project with the financial assistance of the Power Finance Corporation. The Networking, GPRS charges, FMS charges for hardware and software are not included in this funding and are required to be funded through Company's own funds as operational expenses. This cost has not been included in the Investment and Financial plan of the Company for FY 2012-13. In the FY 2012-13, an expenditure amounting to Rs.7.38 Crore will be required for project implementation.

Repair and Maintenance Cost

3.128 The repair and maintenance cost is generally considered to be dependent on the Gross Fixed Assets. Hence, the repair and maintenance cost is forecast as 2.3% of the Gross Fixed Asset which is duly approved by the Regulation in the Tariff Order for the FY 2011-12.

- 3.129 The Licensee has filed the R&M cost for FY 2012-13 as Rs.89.18 Crore as per Regulation.
- 3.130 The Central Discom has claimed the total O&M expenses of Rs 685.79 crore and Rs. 756.54 crore as per Regulation and additional submission for FY 2012-13.

Commissions Analysis on O&M Expenses

- 3.131 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.
- 3.132 The O&M expenses comprise employee cost, repairs & maintenance (R&M) cost and administrative & general (A&G) expenses. The amount of employee expenses, arrears and A&G expenses have been provided in the Regulations for the year FY 2012-13. The R&M expenses are permitted in the Regulations as a percentage of opening GFA @ 2% for East Discom 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.
- 3.133 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 head included in O&M charges at the time of true-up and variation, if any, shall be trued up.
- 3.134 With regard to the issue of expenses against terminal benefits for MPSEB/ successor entities employees who are to retire in FY 2012-13 as well as pension payments to pensioners, the Commission has allowed the terminal benefits and pension expenses for FY 12-13 on provisional basis on "pay as you go" principle under the transmission charges to the extent of Rs. 621.29 Crore based on the claims filed by Transco in their petition for determination of tariff for FY 2012-13. These are included in total transmission charges of Rs. 1438.79 Crore. The issue regarding finalizing the provisions to be made for payment of terminal benefits as well as payment of pension and funding of terminal benefit trust is under consideration of the Commission. The Commission has recently published draft for specifying separate Regulations on this issue which is under process of inviting comments and public hearings. The provision in this Order therefore has been made to ensure that all those employees who are existing pensioners and those who may retire in FY 2012-13 get their due benefits.
- 3.135 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.

- 3.136 The Commission shall allow the taxes payable to the Government and fees to be paid to MPERC separately as per actual.
- 3.137 The norms for O&M expenses are given in following paragraphs.
- 3.138 **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 60 : Repair and Maintenance (Rs in Crore)

Particulars	East	West	Central
Opening GFA as on 1 April 2011	2600.22	2722.70	2317.26
Addition considered during FY-12*	304.86	305.74	194.52
Opening GFA as on 1 April 2012	2905.09	3028.44	2511.78
Allowed % for R & M	2.00%	2.00%	2.30%
Total R&M	58.10	60.57	57.77

^{*}Addition during the FY 12 is taken as average of addition in GFA in preceding three years as per Audited Balance Sheets.

3.139 **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 61: Employee expenses as per Regulation (Rs in Crore)

Particulars Particulars Particulars	East	West	Central
Employee expenses excluding arrears as per Tariff			
Regulation for FY 2011-12	440.54	413.28	389.69
Add: escalation@ 6.14%	6.14%	6.14%	6.14%
Employee expenses excluding arrears for FY 2012-13	467.59	438.65	413.62
Arrears	33.37	31.31	29.52
Total	500.96	469.96	443.14

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

Table 62: A&G expenses as per Regulations (Rs in Crore)

Particulars	East	West	Central
A&G expenses as per Tariff Regulation For FY 2011-12	77.87	68.34	73.84
Add: escalation@ 6.14%	6.14%	6.14%	6.14%
A&G expenses as per Regulation for FY 2012-13	82.66	72.54	78.38

3.141 **Total O&M Expenses** for financial year 2012-13 of control period allowed by Commission are as under:-

Table 63 : O&M expenses allowed for FY 2012-13 (Rs in Crore)

Particulars	East	West	Central
Repair and Maintenance	58.10	60.57	57.77
Employee Expenses	500.96	469.96	443.14
A&G	82.66	72.54	78.38
Total O&M Allowed	641.72	603.07	579.29

Depreciation

Licensees' submissions

East Discom

3.142 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." The depreciation during the year so worked out for FY 2011-12 to FY 2012-13 is shown below:

Table 64: Depreciation as per Regulation (Rs in Crore)

Particulars	FY-2011-12	FY-2012-13
Buildings	0.81	1.41
Hydraulic Works	0.09	0.09
Other Civil Works	0.05	0.04
Plant & Machinery	22.53	39.57
Lines and Cable Network	52.68	62.73
Vehicles	0.02	0.02
Furnitures & Fixtures	0	0
Office Equipment	0.45	0.52
Total	76.63	104.38

West Discom

3.143 The Licensee has submitted that it has Opening GFA of Rs. 2722.70 Crore as per the Audited Balance Sheet for FY 2011- 12. 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 12 to FY 13 would be Rs. 597.26 Crore and Rs. 1374.57 Crore respectively. Depreciation during FY 2011-12 and FY 2012-13 would be Rs. 111.88 Crore and Rs. 161.67 Crore respectively. The depreciation during the year so worked out for FY 2011-12 & FY 2012-13 is shown below:

Table 65: Depreciation (Rs in Crore)

Depreciation during the Year	FY 2011-12	FY 2012-13
Land & Land Rights	0.02	0.02
Buildings	2.98	4.81
Hydraulic Works	0.30	0.34
Other Civil Works	0.11	0.11
Plant & Machinery	51.34	81.15
Lines and Cable Network	56.58	74.58
Vehicles	0.02	0.02
Furnitures & Fixtures	0.08	0.11
Office Equipment	0.47	0.53
Total	111.88	161.67

Central Discom

- 3.144 The Discom has stated that they have inherited Opening GFA of Rs. 2317.26 Crore as per the Audited Balance Sheet for FY 2010-11. 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 2011-12 and FY 2012-13 would be Rs. 1559.95 Crore and Rs. 1671.08 Crore respectively. Accumulated depreciation during FY 2011-12 to FY 2012-13 would be Rs. 1449.68 Crore and Rs. 1625.55 Crore respectively.
- 3.145 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).
- 3.146 The depreciation has not been charged on the assets which are created out of Consumer contribution for the FY2011-12 to 2012-13
- 3.147 The depreciation rates that have been adopted for 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 the Commission to consider CERC rates applicable for a Transmission Licensee for Distribution Licensee also. The depreciation during the year so worked out for FY 12-13 is shown below:

Table 66 : Depreciation for FY 2012-13 (Rs in Crore)

Depreciation	As per Norms	Additional Submission
Total	175.87	204.94

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

Table 67: Comparison of depreciation for FY 12-13 (Rs in Crore)

Particulars	As per norms	As per additional Submission
East Discom	104.10	104.10
West Discom	161.67	161.67
Central Discom	175.87	204.94

Commission's analysis of Depreciation

- 3.149 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.
- 3.150 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 %.
- 3.151 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 details, depreciation 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:
- 3.152 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 2012-13 as these are not in conformity with the past trend. For FY 2012-13 the Commission, has therefore, computed depreciation taking assets base as closing balance of assets existing as on 31st March 2010 plus the Addition in GFA in Audited Balance Sheet for FY 2010-11, average Addition in GFA in last three years of Audited Balance Sheet for FY 2011-12 and plus half of average addition in GFA in last three years for FY 2012-13. 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 2012-13.
- 3.153 The accumulated consumer contribution, grant and subsidy towards cost of capital assets till 31st March 2010 have been reduced from the gross fixed assets. Consumer

Contribution during the FY 2011-12 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 2012-13 have been considered.

- 3.154 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.
- 3.155 The depreciation admitted in this order for FY12-13 is given in the table below:

Table 68: Depreciation (Rs in Crore)

Particulars	East	West	Central
Opening GFA as on 1 April 2010	2144.63	2056.43	2172.01
Add: Addition During FY-11	403.58	661.40	99.40
Less Consumer Contribution, grant and subsidy towards			
cost of capital assets	623.61	320.09	159.13
Opening GFA as on 1 April 2011	1924.61	2397.74	2112.28
Add: Addition During FY-12	304.86	305.74	194.52
Less: Addition to Consumer Contribution, Grant and			
Subsidy towards cost of capital assets	201.71	94.84	66.47
Opening GFA as on 1 April 2012	2027.76	2608.63	2240.32
Average of addition less addition to Consumer Contribution			
during FY 2012-13	51.58	105.45	64.02
GFA for Deprecation for FY 2012-13	2079.34	2714.08	2304.35
Depreciation Rate (%)	2.44%	2.81%	2.44%
Depreciation Allowed For FY2012-13	50.74	76.27	56.23

^{*}Depreciation Rates percentages taken in the above table are as provided in Tariff Order for FY 11-12 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

- 3.156 The Licensees have stated that the interest costs as filed are based on calculation of Interest and Finance Charges in the following manner:
 - i. 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-cast into separate accounts.
 - ii. The interest and repayment of the loans is based on the respective repayment schedule of the loans and the interest.
 - iii. 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

3.157 The East Discom has filed the following details for working the interest on capital loans:

Table 69: Interest cost as per Regulation (Rs in Crore)

Particulars	FY-2011-12	FY-2012-13
Addition to GFA during the year (1)	386.82	1585.70
Consumer contribution during the year (2)	5.00	5.00
Net addition to GFA during the year (1-2)	381.82	1580.70
30% of addition to net GFA considered as funded through		
equity	114.55	474.21
Balance addition to net GFA during the year funded through		
debts	267.27	1106.49
Debt Repayment due during the year (equal to the		
depreciation claim)	76.63	104.10
Debt associated with GFA as per tariff order FY 10-		
11(Rs.398.76 Crore as on 31 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	775.65	1778.04
Weighted average rate of interest % on all loans	8.53%	8.66%
Total interest on project loans	66.19	153.98
Finance charges	3.00	4.00
Total Interest on Project loans & Finance Charges	69.19	157.98

Additional Submission

- (a) The interest and repayment of the loans is based on the respective repayment schedule of the loans and the interest.
- (b) The additions of the new loans are considered in tandem with the investment plan to reflect the actual cash inflows for the projects.
- (c) Effect of Financial Restructuring Plan intimated to Licensee vide GoMP Letter no. 6054/13/2011 dated 13/07/2011 has been incorporated while projecting Interest on Project Loan. Following are the salient features of FRP:
 - i. Conversion of Capital and working capital loans of GoMP to perpetual loan with moratorium of three years.
 - ii. Electricity duty and cess recoverable from consumers and Payable to GoMP for FY 12, 13 & 14 will be allowed to be retained by the Distribution Companies and will be converted into perpetual loan on monthly basis.

- iii. Power Purchase bill payable under Sardar Sarover projects for FY 12, 13 & 14 shall also be converted to perpetual loan with moratorium of three years.
- (d) From FY 2015 onwards, interest at the SBI advance rate will be applicable on these perpetual loans.
- 3.158 Based on the above assumptions interest and finance charges on project loans are as detailed below:

Table 70: Interest cost as per additional submission (Rs in Crore)

	Particulars	FY12	FY13
I	Interest charges on State Govt. Loans, Bonds and Advances		
	Interest charges on loans Bonds	0.39	0.00
	Interest charges on Foreign Currency Loans/Credits		
	Interest charges on Debentures		
	Total of I	0.39	0.00
II	Interest on Long Term loans / Credit from the FIs/banks/organisation approved by the	ne State	
	Govt.		
	APDRP		
	PM Gramodya Yojana		
	MNP		
	NABARD	2.93	2.93
	ADB		
	Market Loan	1.82	1.44
	REC (MPSEB)	20.64	18.34
	HUDCO	17.25	16.13
	SBI Counter Guarantee loan	4.07	7.06
	REC- JBIC	10.06	10.74
	PFC- RAPDRP	19.25	27.61
	ADB(2324)	2.92	3.62
	ADB (2347)	0.84	1.44
	ADB(2520)	1.85	3.90
	ADB(2732)		0.12
	REC RGGVY		
	REC - Feeder Separation	32.49	72.12
	AEC - Feeder Separation	0.34	3.57
	Feeder Separation - Counterpart funding from GOMP		
	STN	1.02	4.67
	TSP	0.93	4.03
	SCSP	1.47	5.65
	REC-RAPDRP	9.53	30.37
	ED Cess converted in to perpetual loan		
	Sardar Sarover		
	Total of II	127.41	213.74
A	Total of I+II	127.80	213.74
В	Cost of raising finance & Banking Charges	3.00	4.00
С	Less: capitalized	24.47	43.55
	Total (A+B-C)	106.33	174.19

3.159 **West Discom**The West Discom has made the following submission as per the Regulations and as per additional submissions:

Table 71 : Interest on capital loans as per Regulation (Rs in Crore)

Particulars	2011-12	2012-13
FY 06		
Debt identified with GFA as on 1st June 2005 (Allocation of	129.91	129.91
debt and equity to GFA as per the FY 2007-08 Tariff Order)		
70% of addition to net GFA considered as funded		
through Loan net of consumer contribution	35.31	35.31
Debt Repayment	4.41	4.41
Total Debt Associated with GFA as on 31st March 2006.	160.81	160.81
FY 07		
Debt identified with GFA as on 31st March 2006 (Allocation of	160.81	160.81
debt and equity to GFA as per the FY 2007-08 Tariff Order)		
70% of addition to net GFA considered as funded		
through Loan net of consumer contribution	73.78	73.78
Debt Repayment	18.48	18.48
Total Debt Associated with GFA as on 31st March 2008.	216.11	216.11
FY 08		
Debt identified with GFA as on 31st March 2007 as per True	216.11	216.11
UP order of 2006-07	210.11	210.11
70% of addition to net GFA considered as funded		
through Loan net of consumer contribution	78.44	78.44
Debt Repayment	93.61	93.61
Total Debt Associated with GFA as on 31st March 2008.	200.94	200.94
FY 09		
Debt identified with GFA as on 31st March 2008 as per		
True Up order 2007-08	200.94	200.94
70% of addition to net GFA considered as funded		
through Loan net of consumer contribution	65.77	65.77
Debt repayment	74.15	74.15
Total debt associated with GFA as on 31st 2009	192.56	192.56
FY 10		
Debt identified with GFA as on 31st March 2009	192.56	192.56
70% of addition to net GFA considered as funded		
through Loan net of consumer contribution	39.50	39.50
Debt repayment	86.05	86.05
Total debt associated with GFA as on 31 st March 2010	146.01	146.01

	Particulars	2011-12	2012-13
	FY 11		
	Debt identified with GFA as on 31st March 2010	146.01	146.01
	70% of addition to net GFA considered as funded		
	through Loan net of consumer contribution	439.93	439.93
	Debt repayment (Equal to depreciation allowed in the Tariff	54.98	54.98
	order of FY 2010-11)		
	Debt identified with GFA as on 31st March 2011	530.96	530.96
	FY 12		
	Debt identified with GFA as on 1st April 2011	530.96	530.96
	70% of addition to net GFA considered as funded		
	through Loan net of consumer contribution	418.08	418.08
	Debt repayment (Equal to depreciation allowed in the Tariff	61.08	61.08
	order of FY 2011-12)		
	Total debt associated with GFA as on 31st March 2012	887.96	887.96
	FY 13		
	Debt identified with GFA as on 1st April 2012		887.96
	70% of addition to net GFA considered as funded		
	through Loan net of consumer contribution		962.20
	Debt repayment (Equal to depreciation claimed in this ARR		
	petition for FY 2012-13)		161.67
	Total debt associated with GFA as on 31 st March 2013		1688.49
	Average of loan Balance	709.46	1288.22
	Weighted average rate of interest (%) (as per Interest on		
	Project Loans)	10.88%	10.43%
A	Interest and Finance charges on Project Loans	77.19	134.35
В	Cost of Raising finance	4.08	4.48
	Discount to consumer on timely repayment	0.72	1.04
C	Interest and Finance Charges on Working Capital Loans	0.00	0.00
D	Interest on Consumer Security Deposit	32.16	34.68
E	Total interest and finance charges chargeable to revenue		
	account (A+B+C+D)	114.15	174.55

Table 72: Interest on capital loans as per additional submission (Rs in Crore)

Particulars Particulars	2011-12	2012-13
FY 06		
Debt identified with GFA as on 1st June 2005 (Allocation of debt are equity to GFA as per the FY 2007-08 Tariff Order)	nd 129.91	129.91
70% of addition to net GFA considered as funded		
through Loan net of consumer contribution	35.31	35.31
Debt Repayment	4.41	4.41
Total Debt Associated with GFA as on 31st March 2006.	160.81	160.81

	Particulars Particulars	2011-12	2012-13
FY 07	7		
Debt i	identified with GFA as on 31st March 2006 (Allocation of debt	160.81	160.81
	quity to GFA as per the FY 2007-08 Tariff Order)		
70% c	of addition to net GFA considered as funded		
	gh Loan net of consumer contribution	73.78	73.78
	Repayment (Equal to depreciation allowed in the True-up 2006-07)	33.87	33.87
Total	Debt Associated with GFA as on 31st March 2008.	200.72	200.72
FY 08	8		
Debt i	identified with GFA as on 31st March 2007 as per True UP of 2006-07	200.72	200.72
70% c	of addition to net GFA considered as funded		
throus	gh Loan net of consumer contribution	78.44	78.44
	Repayment (Equal to depreciation allowed in the True-up 2007-08)	39.02	39.02
	Debt Associated with GFA as on 31st March 2008.	240.14	240.14
FY 09			
Debt i	identified with GFA as on 31st March 2008 as per		
	Up order 2007-08	240.14	240.14
	of addition to net GFA considered as funded		
throus	gh Loan net of consumer contribution	65.77	65.77
Debt	repayment (Equal to depreciation allowed in the Tariff of FY 2008-09)	36.11	36.11
	debt associated with GFA as on 31st March 2009	269.80	269.80
FY 10			
Debt i	identified with GFA as on 31st March 2009	269.80	269.80
70% c	of addition to net GFA considered as funded		
throus	gh Loan net of consumer contribution	39.50	39.50
Debt	repayment (Equal to depreciation allowed in the Tariff of FY 2009-10)	52.09	52.09
	debt associated with GFA as on 31st March 2010	257.21	257.21
FY 11	1		
Debt i	identified with GFA as on 31st March 2010	257.21	257.21
70% (of addition to net GFA considered as funded		
throus	gh Loan net of consumer contribution	439.93	439.93
Debt	repayment (Equal to depreciation allowed in the Tariff of FY 2010-11)	54.98	54.98
	identified with GFA as on 31st March 2011	642.16	642.16
FY 12			
Debt i	identified with GFA as on 1st April 2011	642.16	642.16
	of addition to net GFA considered as funded		
throus	gh Loan net of consumer contribution	418.08	418.08

	Particulars Particulars	2011-12	2012-13
	Debt repayment (Equal to depreciation allowed in the Tariff	61.08	61.08
	order of FY 2011-12)		
	Total debt associated with GFA as on 31st March 2012	999.16	999.16
	FY 13		
	Debt identified with GFA as on 1st April 2012		999.16
	70% of addition to net GFA considered as funded		
	through Loan net of consumer contribution		962.20
	Debt repayment (Equal to depreciation claimed in this ARR		
	petition for FY 2012-13)		161.67
	Total debt associated with GFA as on 31st March 2013		1799.69
	Average of loan Balance	820.66	1399.42
	Weighted average rate of interest (%) (as per Interest on		
	Project Loans)	10.88%	10.43%
A	Interest and Finance charges on Project Loans	89.29	145.94
В	Cost of Raising finance	4.08	4.48
	Discount to consumer on timely repayment	0.72	1.04
C	Interest and Finance Charges on Working Capital Loans	16.47	14.25
D	Interest on Consumer Security Deposit	32.16	34.68
E	Total interest and finance charges chargeable to revenue account		
	(A+B+C+D)	142.72	200.40

Central Discom

3.160 The Central Discom has made the following submission as per the Regulations and as per additional submissions:

Table 73 : Interest on capital loans as per Regulation (Rs in Crore)

	Particulars	FY12	FY13
Ι	Interest charges on State Govt. Loans, Bonds And Advances	0.00	0.00
	Interest charges on loans from the State Government	3.42	0.00
	Interest charges on Bonds		
	Interest charges on Foreign Currency Loans / Credits		
	Interest charges on debentures		
	Total of I	3.42	0.00
II	Interest on Long Term Loans / Credits from the FIs/banks/	33.11	1.84
	organisations approved by the State Government		
	PFC(including PFC STL)	13.11	11.69
	REC	5.37	5.60

Particulars	FY12	FY13
JBIC	6.39	9.11
ADB-II	14.14	15.92
RAPDRP A	51.02	95.02
RAPDRP B	6.81	5.71
HUDCO	2.25	3.19
SSTD/TSP/SCSP	34.87	83.24
Feeder separation		
Un-secured	0.00	0.00
Total of II	167.08	231.32
Total of A: I + II	170.51	231.32
Cost of raising finance & Bank Charges on project loans		
Grand Total Of Interest & Finance Charges: A + B	170.51	231.32
Less: Interest and Finance Charges	59.99	81.39
chargeable to capital account		
Net Total Of Interest & Finance Charges on Project Loans C-D	110.51	149.93
	ADB-II RAPDRP A RAPDRP B HUDCO SSTD/TSP/SCSP Feeder separation Un-secured Total of II Total of A: I + II Cost of raising finance & Bank Charges on project loans Grand Total Of Interest & Finance Charges: A + B Less: Interest and Finance Charges chargeable to capital account	JBIC ADB-II RAPDRP A 14.14 RAPDRP B 6.81 HUDCO SSTD/TSP/SCSP 34.87 Feeder separation Un-secured 0.00 Total of II 167.08 Total of A: I + II Cost of raising finance & Bank Charges on project loans Grand Total Of Interest & Finance Charges: A + B 170.51 Less: Interest and Finance Charges chargeable to capital account

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

Table 74: Comparison of interest on term loan for FY 2012-13 as filed (Rs in Crore)

Particulars	As per norms	As per additional Submission	Variation
East Discom	157.98	174.19	-16.21
West Discom	139.87	151.47	-11.60
Central Discom	149.93	149.93	0.00

Commission's analysis of Interest and Finance Charges

- 3.162 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.
- 3.163 The latest annual accounts provided to the Commission by the Licensees pertain to FY 2010-11. 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.

- 3.164 The Commission is aware that the Licensees may have completed some capital works during the course of FY 2011-12 and shall complete some work during FY 2012-13, 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 Licensees have made. The Commission thus finds it appropriate not to consider the estimated capitalisation that is projected for FY 2012-13, 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 Licensees to expedite the completion of works and improve their accounting practices to ensure quick and efficient transfer of assets from CWIP to GFA.
- 3.165 The Commission, therefore, for FY 2012-13 has decided to follow the approach as adopted in its previous Tariff Order (FY 2011-12) to work out the interest cost chargeable to revenue account. This has been done in the following manner:
 - a) Net addition to GFA during FY 2009-10 & FY 2010-11 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, FY 2010-11 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) The total debt in GFA at the end of FY 2007-08 as per the FY 2007-08 True up order has been taken after eliminating the proportionate consumer contribution, grant and subsidy towards cost of capital assets.
 - d) Debt repayments have then been subtracted from the total debt identified with completed assets as computed from above. The repayment for FY 2011-12 and 2012-13 shall be deemed to be equal to the depreciation allowed for that Year.
 - e) Asset addition net of consumer contribution during FY 2011-12 is worked out as average of additions of last three years from audited balance sheets. It is assumed that additions done have been financed 70% through loan and 30% through equity. The Commission has considered the weighted average rate filed by Discoms of 8.66%, 10.43% and 10.50% of East, West and Central Discoms respectively for FY 2012-13.
- 3.166 The cost of raising finance and bank charges for FY 2012-13 as shown in the Balance Sheet of the three Discoms is Rs.12.58 Crore for East Discom, Rs. 3.72 Crore for West Discom and Rs. 12.44 Crore for Central Discom. Therefore, total interest and finance charges allowed for FY 2012-13 are as under:

Table 75: Interest and Finance Charges allowed for FY 2012-13 (Rs in Crore)

Particulars	East	West	Central
	East	west	Central
FY 09 Debt identified with GFA as on 31st March 2008			
as per True Up order 2007-08 proportionate CC, Grant and subsidy towards cost of capital assets	149.19	193.08	253.68
70% of addition to net GFA considered as funded	149.19	193.06	233.08
through Loan net of consumer contribution	161.53	65.77	163.61
Debt repayment	56.17	74.15	54.78
Total debt associated with GFA as on 31st March	30.17	74.13	34.76
2009	254.55	184.70	362.51
FY 10	254.55	104.70	302.31
Debt identified with GFA as on 31st March 2009	254.55	184.70	362.51
70% of addition to net GFA considered as funded	257.55	104.70	302.31
through Loan net of consumer contribution	148.05	39.50	102.57
Debt repayment	64.22	86.05	64.58
Total debt associated with GFA as on 31 st March	07.22	00.03	04.30
2010	338.38	138.15	400.50
FY 11	330.30	130.13	400.50
Debt identified with GFA as on 31st March 2010	338.38	138.15	400.50
70% of addition to net GFA considered as funded	330.30	130.13	100.50
through Loan net of consumer contribution	261.77	439.93	58.49
Debt repayment	49.48	73.30	54.66
Debt identified with GFA as on 31st March 2011	550.68	504.77	404.33
FY 12	330.00	301.77	101.55
Debt identified with GFA as on 1st April 2011	550.68	504.77	404.33
70% of addition to net GFA considered as funded	220.00	201.77	101.55
through Loan net of consumer contribution	190.45	181.73	108.22
Debt repayment	46.96	67.38	51.54
Total debt associated with GFA as on 31st March	10.50	07.50	31.31
2012	694.17	619.13	461.02
FY 13 Interest Cost	0, 1,12,		
70% of addition to net GFA considered as funded			
through Loan net of consumer contribution	190.45	181.73	108.22
Debt repayment	46.96	67.38	51.54
Total debt associated with GFA as on 31st March		0,100	
2013	837.66	733.49	517.70
Average of loan Balance for FY 12-13	765.91	676.31	489.36
Weighted average rate of interest (%) (as per			
Interest on Project Loans)	8.66%	10.43%	10.50%
Interest Charges	66.33	70.54	51.38
Other Charges (Balance Sheet FY 11)	12.58	3.72	12.44
Interest and Finance charges on Project Loans	78.91	74.26	63.82
interest and rinance charges on rivject Loans	/0.91	/4.20	03.84

Interest on Working Capital

Licensees' submissions

3.167 The Licensees have stated that the Working Capital requirement has been estimated based on the norms as per the Regulations. Interest rate of 13.00% by the East and Central Discoms and 14.75% 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 below:

East Discom

Table 76: Interest on Working Capital as per Regulation (Rs in Crore)

Sl. No.	Particulars	FY13
A)	1/6th of annual requirement of inventory for previous year	24.01
B)	O&M expenses	
	R&M expenses	59.74
	A&G expense	77.07
	Employee expenses	663.06
B) i)	Total of O&M expenses	799.88
B) ii)	1/12th of total	66.66
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)))	90.66
E)	Rate of Interest	13.00%
F)	Interest on Working Capital	13.37
	Actual expenditures as per Audited Accounts	NA
	For Retail Activity	
	Particular	FY 13
A)	1/6th of annual requirement of inventory for previous year	0.00
B)	Receivables	0.00
B)i)	Annual Revenue from Tariff and charges	4446.36
B)ii)	Receivables equivalent to 2 months average billing	741.06
C)	Power Purchase Expenses	4646.63
C)i)	1/12 th of Power Purchase Expenses	387.22
D)	Consumer Security Deposit	820.94
E)	Total Working Capital(A+Bii-Ci-D)	-467.10
F)	Rate of Interest	13.00%
G)	Interest on Working Capital	-60.72
	Total Interest on Working Capital from Wheeling Activities	13.37
	Total Interest on Working Capital from Retail Activities	-60.72
	Net Interest from Working Capital	_

As per Additional Submission

Table 77: Interest on Working Capital as per additional submission (Rs in Crore)

Sl. No.	Particulars Particulars	FY13
A)	1/6th of annual requirement of inventory for previous year	
B)	O&M expenses	
	R&M expenses	59.74
	A&G expense	113.34
B) i)	Employee expenses	859.56
B) ii)	Total of O&M expenses	1032.64
C)	1/12th of total	86.05
C) i)	Receivables	
C) ii)	Annual Revenue from wheeling charges	
D)	Receivables equivalent to 2 months average billing of wheeling charges	
E)	Total Working capital	110.06
F)	Rate of Interest	13.00%
	Interest on Working capital	
	Actual expenditures as per Audited Accounts	
	For Retail Activity	
A)	Particular	
B)	1/6th of annual requirement of inventory for previous year	
B)i)	Receivables	
B)ii)	Annual Revenue from Tariff and charges	4446.36
C)	Receivables equivalent to 2 months average billing	471.06
C)i)	Power Purchase Expenses	5224.75
D)	1/12 th of Power Purchase Expenses	435.40
E)	Consumer Security Deposit	136.82
F)	Total Working Capital(A+Bii-Ci-D)	168.84
G)	Rate of Interest	13.00%
	Interest on Working Capital	21.95
	Total Interest on Working Capital from Wheeling Activities	14.31
	Total Interest on Working Capital from Retail Activities	21.95
	Net Interest from Working Capital	36.26

West Discom

Table 78: Interest on Working Capital (Rs in Crore)

Sl. No.	Particulars	2012-13
A)	1/6th of annual requirement of inventory for previous year	4.43
B)	O&M expenses	
	R&M expenses	66.40
	A&G expense	101.54
	Employee expenses	607.57
B) i)	Total of O&M expenses	775.51
B) ii)	1/12th of total	64.63
C)	Receivables	
C) i)	Annual Revenue from wheeling charges	4.72
C) ii)	Receivables equivalent to 2 months average billing of wheeling charges	0.79
D)	Total Working capital	69.84
	(A), B) ii), C) ii))	
E)	Rate of Interest	14.75%
F)	Interest on Working capital	10.30
For Retail Sale activity		
-	D.C. I	EV/12
Sl. No.	Particulars	FY13
A)	1/6th of annual requirement of inventory for previous year	1.11
B)	Receivables	
B) i)	Annual Revenue from Tariff and charges	6,298.55
B) ii)	Receivables equivalent to 2 months average billing	1,049.76
C)	Power Purchase expenses	7,942.42
C) i)	1/12th of power purchase expenses	661.87
D	Consumer Security Deposit	598.91
E)	Total Working capital (A+B ii) - C i) - D)	(209.91)
F)	Rate of Interest	14.75%
G)	Interest on Working capital	-30.96

As per Additional Submission

Table 79: Interest on working capital as per projection

Particulars	2012-13
Interest on working capital	14.25

Central Discom

Table 80: Interest on Working Capital as per Regulation (Rs in Crore)

Sl. No.	Particulars	MYT 2010-11 to 2012-13			
	For Wheeling Activity	FY11	FY12	FY13	
A)	1/6th of annual requirement of inventory for				
	previous year	20.75	31.43	38.15	
B)	O&M expenses				
	R&M expenses	23.39	57.67	89.18	
	A&G expenes	77.96	73.84	78.37	
	Employee expenses	510.29	494.99	518.24	
B) i)	Total of O&M expenses	611.65	626.50	685.79	
B) ii)	1/12th of total	50.97	52.21	57.15	
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)))	71.73	83.64	95.30	
E)	Rate of Interest	12.75%	13.00%	13.00%	
F)	Interest on Working Capital				
		9.15	10.87	12.39	
	For Retail Activity	FY11	FY12	FY13	
A)	1/6th of annual requirement of inventory for previous year				
B)	Receivables				
B)i)	Annual Revenue from Tariff and charges	3102.13	3964.07	4822.38	
B)ii)	Receivables equivalent to 2 months average billing	517.02	660.68	803.73	
C)	Power Purchase Expenses	3063.90	3754.46	5201.62	
C)i)	1/12 th of Power Purchase Expenses	255.33	312.87	433.47	
D)	Consumer Security Deposit	570.98	585.58	630.67	

Sl. No.	Particulars	MYT 2010-11 to 2012-13		
	For Retail Activity	FY11	FY12	FY13
E)	Total Working Capital(A+Bii-Ci-D)	-309.28	-237.77	-260.41
F)	Rate of Interest	12.75%	13.00%	13.00%
G)	Interest on Working Capital	-39.43	-30.91	-33.85

As per Additional Submission

Table 81: Interest on working capital as per projection

Particular	2012-13
Interest on working capital	55.32

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

Table 82 : Comparison of interest on Working Capital as filed for FY 12-13 (Rs in Crore)

Particulars	As per Regulations	As per additional Submission
East Discom	0	36.26
West Discom	0	14.25
Central Discom	0	55.32

Commission's analysis of Interest on Working Capital

- 3.169 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 and its first amendment {AG-35(i) of 2010} 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 Base Rate as on 1st of April of that year plus 4%.
- 3.170 As per the Audited Balance Sheet, Gross block was of Rs. 2600 Crore of East Discom, Rs. 2723 Crore of West Discom and Rs. 2317 Crore of Central Discom at the end of FY 2010-11. One percent of this value pro-rated to two months would work out to Rs. 4.33 Crore for East Discom, Rs. 4.54 Crore for West Discom and Rs. 3.86 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.

- 3.171 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.
- 3.172 The Regulations allow Working Capital interest to the Licensee at the rate equal to the State Bank Base Rate as on 1st of April of that year plus 4%. The SBI Base Rate presently stands at 10%. Therefore, going by the norms, the interest rate for working capital loans to the Licensee would be limited to 14%. The Interest on Working Capital allowed by the Commission for wheeling and retail sale activity combined together is given in the table below:

Table 83: Interest on Working Capital admitted by the Commission (Rs in Crore)

	Months	East	West	Central
Wheeling				
Inventory	2	3.47	3.63	3.09
Approved O&M	1	53.48	50.26	48.27
Total Working Capital Requirement (Rs. Crs.) – Wheeling		56.94	53.89	51.36
Interest Rate (%)		14.00%	14.00%	14.00%
Total Interest on Working Capital (Rs. Crs.)		7.97	7.54	7.19
Retail				
Inventory	2	0.87	0.91	0.77
Approved O&M	1	0.00	0.00	0.00
Revenue	2	693.98	989.11	753.29
Less: Power Purchase Cost	1	298.50	455.17	337.25
Less: Consumer Security Deposit		549.60	571.38	695.32
Total Working Capital Requirement (Rs. Crore) – Retail		-153.25	-36.54	-278.50
Interest Rate (%)		14.00%	14.00%	14.00%
Total Interest on Working Capital (Rs. Crore)		-20.04	-7.23	-38.30
Total interest on Working Capital Requirement (Rs. Crore) – Wheeling		7.97	7.54	7.19
Total interest on Working Capital Requirement (Rs. Crore) – Retail		-20.04	-7.23	-38.30
Net Interest on Working Capital		-12.07	0.32	-31.10
Total Interest on Working Capital (Rs. Crore) admitted		0.00	0.32	0.00

Interest on Consumer Security Deposit

Licensees' submissions & Commission's Analysis

3.173 Licensees have submitted claims of Interest on Consumer Security Deposit for FY 12-13. The Commission has observed from the details of the Audited Balance Sheets that the outgo of annual interest on the Consumer Security Deposit in 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 Deposit as held is not adjusted after the permanent disconnections or on default of payments nor the interest is paid in such cases. The interest on Consumer Security Deposit have been computed at 6% of 1.5 months LT other than agriculture revenue, 3 months LT agriculture revenue and 1.5 months HT categories revenue.

Table 84: Interest on Consumer Security Deposit (CSD) (Rs in Crore)

Particulars	FY 12
East	36.76
West	56.42
Central	43.29
Total	136.47

Return on Equity

Licensees' submissions East Discom

3.174 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 the following tables:

Table 85: Return on Equity (Rs in Crore)

SL. No.	Particulars	FY 11-12	FY 12-13
5201(00	Gross Fixed Assets at the beginning of year(net of		
A	consumer contributions)	2509.96	2891.78
	Opening balance of GFA identified as funded		
A1	through equity	752.99	867.54
	Opening balance of GFA identified as funded		
A2	through debt	1756.97	2024.25
	Proposed capitalization of assets as per the		
В	investment plan(net of consumer contribution)	381.82	1580.7
	Portion of capitalised assets funded out of equity,		
B1	internal reserves	132	132
	Balance portion of capitalised assets funded out of		
B2	project loans(B-B1)	249.82	1448.7
C1	Normative additional equity(30% of B)	114.55	474.21
C2	Normative additional debt(70% of B)	267.27	1106.49
	Excess/shortfall of additional equity over		
D1	normative(B1-C1)	17.45	-342.21
	Excess/shortfall of additional debt over		
D2	normative((B2-C2)	-17.45	342.21
	Equity eligible for Return(A1+(C1/2)) OR		
E	(A1+(B1/2)), whichever is lower	810.26	933.54
	Return on Equity (16% on E)	129.64	149.37

West Discom

Table 86 : Return on Equity (Rs in Crore)

Particulars Particulars		2012-13
FY 06		
Equity identified with GFA as on 1st June 2005 (Allocation of debt and equity to GFA as per the FY 2007-08 Tariff Order)	449.83	449.83
30% of addition to net GFA considered as funded through equity	15.13	15.13
Total Equity Associated with GFA as on 31st March 2006.		464.96
FY 07		
Equity identified with GFA as on 31st March 2006	464.96	464.96
30% of addition to net GFA considered as funded through equity	31.62	31.62
Total Equity Associated with GFA as on 31st March 2007.	496.58	496.58

Particular Particular	2011-12	2012-13
FY 08		
Total Equity Associated with GFA as on 31st March 2007.	496.58	496.58
30% of addition to net GFA considered as funded through equity	33.62	33.62
Total Equity Associated with GFA as on 31st March 2008	530.20	530.20
FY 09		
Total Equity Associated with GFA as on 31st March 2008	530.20	530.20
30% of addition to net GFA considered as funded through equity	28.19	28.19
Total Equity Associated with GFA as on 31st March 2009	558.39	558.39
FY 10		
Total Equity Associated with GFA as on 31st March 2009	558.39	558.39
30% of addition to net GFA considered as funded through equity	16.93	16.93
Total Equity Associated with GFA as on 31st March 2010	575.32	575.32
FY 11		
Total Equity Associated with GFA as on 31st March 2010	575.32	575.32
30% of addition to net GFA considered as funded through equity	188.54	188.54
Total Equity Associated with GFA as on 31st March 2011	763.86	763.86
FY 12		
Total Equity Associated with GFA as on 31st March 2011	763.86	763.86
30% of addition to net GFA considered as funded through equity	89.59	179.18
Total Equity Associated with GFA as on 31st March 2012	853.44	943.03
FY 13		
Total Equity Associated with GFA as on 31st March 2012		943.03
30% of addition to net GFA considered as funded through equity(for		
Half year)		206.19
Total Equity Associated with GFA as on 31st March 2013		1149.22
Rate of Return	16%	16%
Return on Equity	136.55	183.88

Central Discom

Table 87: Return on Equity as per Regulations (Rs in Crore)

	Particulars	FY12	FY13
A	Gross Fixed Assets at the beginning of year (net of consumer contributions)	2317.26	3877.22
A1	Opening balance of GFA identified as funded through equity	695.18	1163.16
A2	Opening balance of GFA identified as funded through debt	1622.08	2714.05
В	Proposed capitalisation of assets as per the investment plan (net of consumer contribution)	1559.95	1673.76
B1	Proportion of caplitalised assets funded out of equity, internal reserves	467.99	502.13
B2	Balance Proportion of capitalised assets funded out of project loans (B - B1)	1091.97	1171.63
C1	Normative additional equity (30% of B)	467.99	502.13

	Particulars Particulars	FY12	FY13
C2	Normative additional debt (70% of B)	1091.97	1171.63
D1	Excess / shortfall of additional equity over normative (B1-C1)	0	0.00
D2	Excess / shortfall of additional debt over normative (B2-C2)	0	0.00
E	Equity eligible for Return (A1+(C1/2)) OR (A1+(B1/2)), whichever is lower	929.17	1414.23
-	Return on Equity (16% on E)	148.67	226.28

Table 88: Return on equity as per additional submission (Rs in Crore)

Sl.No.	Particulars MYT 2010-11 to				
			012-13		
		FY12	FY13		
A	Gross Fixed Assets at the beginning of year (net of consumer	2317.26	3877.22		
	contributions)				
A1	Opening balance of GFA identified as funded through equity	695.18	1163.16		
A2	Opening balance of GFA identified as funded through debt	1622.08	2714.05		
В	Proposed capitalisation of assets as per the investment plan	1559.95	1766.54		
	(net of consumer contribution)				
B1	Proportion of caplitalised assets funded out of equity, internal	467.99	529.96		
	reserves				
B2	Balance Proportion of capitalised assets funded out of project	1091.97	1236.58		
	loans (B - B1)				
C1	Normative additional equity (30% of B)	467.99	529.96		
C2	Normative additional debt (70% of B)	1091.97	1236.58		
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)),	929.17	1428.15		
	whichever is lower				
	Return on Equity (16% on E)	148.67	228.50		

3.175 The Comparison of Return on Equity capital filed as per Regulation and as per additional submission filed by Licensees is as follows:

Table 89 : Comparison of ROE for FY 2012-13 (Rs in Crore)

Particulars	As per Regulations	As per additional Submission
East Discom	149.37	149.37
West Discom	183.88	183.88
Central Discom	226.28	228.50

Commission's analysis of Return on Equity

3.176 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 2012-13. This is presented in the table below. The Return on Equity as allowed for FY 2012-13 ARR is then determined by applying the specified rate of 16% on the total equity identified as allocated to GFA.

Table 90 : Return on Equity (Rs in Crore)

No.	Particulars	East	West	Central
FY 09				
1	Equity identified with GFA (as on 31.03.2008) in	387.30	509.41	428.98
	the True up Order 2007-08 Less: proportionate CC,			
	Grant and subsidy toward cost of capital assets			
2	30% of addition to net GFA considered as funded	69.23	28.19	70.12
	through equity net of consumer contribution			
	Total Equity identified with GFA as on 31st March			
3	2009	456.53	537.60	499.10
FY 10				
1	30% of addition to net GFA considered as funded	63.45	16.93	43.96
	through equity net of consumer contribution			
	Total Equity identified with GFA as on 31st March			
2	2010	519.98	554.53	543.06
FY 11				
1	30% of addition to net GFA considered as funded	112.19	188.54	25.07
	through equity net of consumer contribution			
	Total Equity identified with GFA as on 31st March			
2	2011	632.17	743.07	568.13
FY 12				
	30% of addition to net GFA considered as funded (for			
1	Half year) through equity net of consumer contribution	81.62	77.89	46.38
	Total Equity identified with GFA as on 31st March	712.70	020.05	C1 4 5 1
2	2012	713.79	820.95	614.51
FY 13		40.81	•	20.15
1	1 30% of addition to net GFA considered as funded		38.94	23.19
	Total Equity identified with GFA as on 31st March		0.50, 00	607.70
2	2013	754.60	859.89	637.70
3	RoE @16% of FY 2012-13	120.74	137.58	102.03

Other items of ARR

3.177 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' submissions

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

Table 91 : Comparison of bad and doubtful debts for FY 2012- 13 (Rs in Crore)

Particulars	As per norms	As per additional Submission
East Discom	44.46	44.46
West Discom	65.58	65.58
Central Discom	41.56	173.52

Commission's analysis on Bad and Doubtful debts

- 3.179 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 the Distribution Licensee has actually written off bad debts subject to a maximum limit of 1 % of the yearly revenue.
- 3.180 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 debts is very much on the higher side when compared with the meager amounts actually written off in the past and therefore the Commission provisionally allows the bad & doubtful debts to the tune of Rs 1 Crore for each Discom.

Other Miscellaneous Expenditure

3.181 No other expenditure is forecast by the Licensees. Projection of other miscellaneous expenditure appears merely a provision made without substantiating it properly. The Commission considers it appropriate not to make any provision in this regard and it shall be considered during the true up, if required.

Other Income

Licensees' submissions

- 3.182 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'.
- 3.183 Against the Other Income, the East Discom has filed an amount of Rs. 115.83 Crore; West Discom has filed an amount of Rs. 127.37 Crore and Central Discom has filed an amount of Rs. 73.97 Crore for FY 2012-13. This amount includes, inter-alia, meter rent,

recovery from theft of energy and miscellaneous charges from consumers. The Commission observed from the audited balance sheets of the Discoms for the year 2010-11 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.119.91 Crore for East Discom, Rs. 166.53 Crore for West Discom and Rs.135.09 Crore for Central Discom totaling to around Rs 421.53 Crore against the items considered under Other Income in the Regulations. Considering the rise expected in 2011-12 and 2012-13, this is like to increase to around Rs.450 Crore. The Commission has accordingly considered other income as Rs.450 Crore and apportioned it amongst the Discom in accordance with the receipts of 2010-11.

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

Table 92: Other income (Rs in Crore)

Discom	As filed	As admitted
East	115.83	128.01
West	127.37	177.78
Central	73.97	144.21
Total	317.17	450.00

- 3.185 The West Discoms has claimed an additional amount of Rs.201.45 Crore against the power purchase costs for the year 2007-08, which was not considered in the true up Order. As per the decision of Hon'ble APTEL for review of the True-up Order for the year 2007-08, the Commission has directed the Discoms to submit certain details vide Order dated 19th January, 2012. The matter is under process. The claims of the West Discom for the power purchase bills worth Rs.201.45 Cr shall also be considered along with the review of 2007-08 true up Order.
- 3.186 The Commission has passed the true up Order of MP Genco and MP Transco for FY 2008-09 allowing recovery of true up costs of Rs.106.77 Crore and Rs. 162.92 Crore respectively. These Companies have been allowed to recover true costs during FY 2012-13 from Discoms. The recovery of true up costs on this account has been included in the ARR for FY 2012-13.

3.187 The ARR as admitted for FY 2012-13 is presented in following table:

Table 93: Total Aggregate Revenue Requirement as admitted (Rs in Crore)

PARTICULARS	East	West	Central	Total
Power Purchase	2945.73	4708.36	3398.16	11052.25
PGCIL charges	189.34	249.06	161.60	600.00
Transco Charges (MP TRANSCO)	444.16	501.78	484.24	1430.18
SLDC Charges	2.80	2.86	2.95	8.61
O&M cost	641.72	603.07	579.29	1824.08
Depreciation	50.74	76.27	56.23	183.23
Interest on Project Loans	78.91	74.26	63.82	216.99
Return on Equity	120.74	137.58	102.03	360.35
Interest on Working Capital	0.00	0.32	0.00	0.32
Bad Debts	1.00	1.00	1.00	3.00
Interest on CSD	36.76	56.42	43.29	136.47
MPERC Fees	0.40	0.57	0.44	1.41
Less Other Income - Retail & Wheeling	128.01	177.78	144.21	450.00
ARR for FY 2012-13	4384.29	6233.77	4748.83	15366.89
Add: MP Transco True up FY 2008-09	50.12	59.47	53.35	162.94
Add: Tradeco Charges	8.58	12.19	9.29	30.06
Add: Genco True up FY 2008-09	24.08	43.40	39.29	106.77
Total ARR for FY 2012-13	4467.06	6348.84	4850.75	15666.66

Segregation of approved ARR between Wheeling and Retail Sale activities

- 3.188 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.
- 3.189 The licensees have 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 licensees have 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.
- 3.190 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 attributed to wheeling activity

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 attributed to retail sales activity

Aggregate Revenue Requirement (ARR) admitted by the Commission for FY 2012-13

3.191 On the basis of above, the ARR for FY 2012-13 for wheeling and retail sale activity for all the three Discoms is admitted as under:

Table 94: Total ARR (wheeling and retail) as admitted (Rs in Crore)

Particulars	East	West	Central	State
Power Purchase including PGCIL charges	2945.73	4708.36	3398.16	11052.25
PGCIL Charges	189.34	249.06	161.60	600.00
Transco Charges (MP TRANSCO)	444.16	501.78	484.24	1430.18
SLDC Charges	2.80	2.86	2.95	8.61
(A) Sub Total - Power Purchase Cost	3582.04	5462.06	4046.94	13091.04
Wheeling activity:				
O&M cost	641.72	603.07	579.29	1824.08
Depreciation	50.74	76.27	56.23	183.23
Interest on Project Loans	78.91	74.26	63.82	216.99
Return on Equity	120.74	137.58	102.03	360.35
Interest on Working Capital – wheeling	0.00	0.32	0.00	0.32
MPERC Fees	0.40	0.57	0.44	1.41
(B) Sub-Total Wheeling ARR for FY 2012-13 as approved	892.50	892.07	801.81	2586.38
Retail Sale activity				
Bad Debts	1.0	1.0	1.0	3.00
Interest on CSD	36.76	56.42	43.29	136.47
Other Income – Retail	128.01	177.78	144.21	450.00
(C) Sub-Total Retail ARR for FY 2012-13 as approved	-90.3	-120.4	-99.9	-310.5
Total ARR for FY 2012-13 (A+B+C)	4384.29	6233.77	4748.83	15366.89

Revenue from revised tariffs

3.192 The consumer category wise revenue at approved FY 2012-13 tariffs is presented in the table below:

Table 95: Revenue from revised tariffs in FY 2012-13 (Rs in Crore)

Customer Categories	2012-13 (RS in Crore)							
	E	ast	W	est	Cen	tral	To	otal
	Sales	Revenue	Sales	Revenue	Sales	Revenue	Sales	Revenue (Cr)
	(MU)	(Cr)	(MU)	(Cr)	(MU)	(Cr)	(MU)	(Cr)
LV-1: Domestic Consumers	2,458.81	1,144.75	3,044.38	1,389.48	2,396.00	1,207.53	7,899.20	3,741.76
LV-2: Non Domestic	594.81	386.79	782.75	529.35	679.61	455.05	2,057.17	1,371.19
LV-3: Public Water Works and Street Light	292.01	119.93	264.39	110.90	320.97	129.39	877.37	360.23
LV-4: Industrial	319.84	185.96	506.17	298.67	241.57	157.75	1,067.57	642.39
LV-5.1: Irrigation Pumps for Agriculture	2,013.37	717.89	4,434.13	1,665.36	3,386.68	1,280.04	9,834.18	3,663.28
LV-5.2 Agriculture related use in Rural Areas	1.12	0.51	8.39	3.34	1.98	0.83	11.49	4.68
LT Units Sold (MU)	5,679.96	2,555.83	9,040.21	3,997.10	7,026.81	3,230.59	21,746.98	9,783.52
НТ							-	-
HV-1: Railway Traction	591.47	347.96	396.07	243.04	744.33	462.88	1,731.86	1,053.88
HV-2: Coal Mines	497.03	316.66	-	-	34.03	23.97	531.06	340.63
HV-3.1: Industrial	1,389.86	837.10	2,196.55	1,292.96	1,429.91	833.18	5,016.32	2,963.24
HV-3.2/4: Non-Industrial	266.32	184.27	1,051.95	563.72	264.98	173.68	1,583.25	921.67
HV-4: Seasonal	5.80	3.92	10.03	7.18	0.99	0.75	16.81	11.85
HV-5.1: Irrigation	65.25	29.43	436.38	176.04	77.10	33.97	578.72	239.45
HV-5.2 other	12.03	5.33	4.65	2.24	0.86	0.54	17.55	8.11
HV-6: Bulk Residential Users	393.21	186.79	6.74	3.78	184.94	91.85	584.88	282.42
HV-7: Bulk Supply to Exemptees	-	-	170.54	62.26	-	-	170.54	62.26
HT Units Sold (MU)	3,220.96	1,911.48	4,272.91	2,351.22	2,737.14	1,620.81	10,231.00	5,883.51
Total LT + HT Units Sold (MU	8,900.92	4,467.31	13,313.12	6,348.32	9,763.94	4,851.40	31,977.98	15,667.03

Gap / surplus at new tariffs:

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

Table 96 : Final ARR and Revenue from revised tariff (Rs in Crore)

Particulars	East	West	Central	State
Total ARR for FY 2012-13 (A)	4,384.29	6,233.77	4,748.83	15,366.89
Add: MP Transco True Up FY 2008-09 (B)	50.12	59.47	53.35	162.94
Add: MP Tradeco ©	8.58	12.19	9.29	30.06
Add: Genco True up FY 2008-09 (D)	24.08	43.40	39.29	106.77
Total FY 2012-13 ARR as approved (A+B +C+D= E)	4,467.06	6,348.84	4,850.75	15,666.66
,	4.1.62.00	5.004.64	4.510.50	14 (10 2)
Revenue at Current Tariffs (F)	4,163.90	5,934.64	4,519.72	14,618.26
Gap at Current Tariffs (E-F)	303.16	414.20	331.04	1,048.40
Revenue at New Tariffs (G)	4,467.31	6,348.32	4,851.40	15,667.03
Uncovered Gap/Surplus (G-E)	-0.25	0.51	-0.64	-0.37

A4: WHEELING CHARGES AND CROSS SUBSIDY SURCHARGE

Determination of "wheeling cost"

4.1 For the purpose of determining wheeling cost, the Commission allocates the fixed costs of distribution (i.e. other than power purchase) for wheeling activity 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 on normative working capital for wheeling activity
- (e) Return on Equity
- (f) Other miscellaneous expenses
- (g) Less: Other Income as attributed to wheeling activity
- 4.2 On the basis of the approved ARR for FY 2012-13, the expenditure towards wheeling activity for all the Discoms is Rs. 2586.38 Crs.

Segregation of costs among voltage levels

- 4.3 The costs of distribution identified as attributable to wheeling activity must further be distributed among the two voltage levels of distribution i.e. 33KV and below 33KV. Though the EHT consumers (i.e. at voltages above 33 KV) are consumers of the Distribution Companies, they are not connected to the distribution system. Some costs are associated with EHT consumers (mainly costs associated with metering, billing and collection). However, the Commission, at this juncture, is not inclined to get into those details, primarily on account of data unavailability.
- 4.4 The Distribution Licensees in MP presently do not maintain account of their costs on a voltage-wise basis. Similar is the case with other Govt. owned Distribution Companies in most States in India.
- 4.5 The present accounting practices of MP Discoms do not permit segregation of GFA among the voltage levels directly. The Commission, therefore, considers it appropriate to adopt the approach to use the transformation capacity in MVA at interfaces of 33/11KV and 11/0.4 KV.
- 4.6 The data used for this exercise for the value of the asset base is given below:

Table 97: Identification of asset value

Voltage level of Lines	Cumulative length of lines (ckt-kms)	Per unit cost (Lakh Rs./ckt-km)	Total Cost of lines (Rs. Crs.)
33KV (on rail pole)	42973	9.67	4155.49
Below 33 KV			
(a) 11 KV(on rail pole)	312230	8.46	26414.66
(b) LT (on PCC pole)	402217	3.74	15042.92
(c) Sub-Total			41457.57
Total			45613.06

Table 98: Total Cost of transformer voltage level

Transformer Voltage level	Cumulative capacity (MVA)	Per unit cost (Lakh Rs./MVA)	Total Cost (Rs. Crs.)
33/11KV Transformer	19998	21.00	4199.58
11/0.4KV Transformer	28815	2.28 per 100 KVA	6569.82
Total			10769.40

- 4.7 For the purpose of above, the data for length of lines and transformation capacity is as supplied by the Licensees as part of their filings for FY 2012-13.
- 4.8 In order to identify the asset values at different voltage levels, it is necessary to "assign" the interface transformers to either voltage levels. For this exercise, the Commission considers it appropriate to include the distribution transformers (11/0.4KV) to be part of the 11 KV network, while the power transformers of 33/11KV to be part of the 33 KV network. Based on this, the asset values at different voltage levels works out to:

Table 99: Identification of value of network at each voltage level

Voltage level	Cost of Lines (Rs. Crs.)	Cost of Transformation (Rs. Crs.)	Total Cost (Rs. Crs.)
33KV	4155.49	4199.58	8355.07
Below 33 KV	41457.57	6569.82	48027.39
Total	45613.06	10769.40	56382.46

4.9 The expenses of wheeling activity, identified as incurred for the above different voltage levels of distribution, shall now be worked out using the asset value ratios as obtained from above. This shall be as follows:

Table 100: Identification of network expenses (wheeling cost) at different voltage level)

Voltage level	Assets value (Rs.Crs.)	Assets value Ratio (%)	Total wheeling cost (Rs Crs.)	Wheeling Cost (Rs Crs.)
33KV	8355.07	14.82		383.26
Below 33 KV	48027.39	85.18	2586.38	2203.12
	56382.46	100.00		2586.38

Sharing of Wheeling costs

- 4.10 The cost of wheeling identified as above for the above voltage levels is again required to be allocated to the users at the same voltage levels. It is necessary to do so since the 33KV network is used by the consumers at 33KV and below 33 KV, while the below 33KV network is used by the consumers of 11KV and LT.
- 4.11 This allocation of wheeling cost at different voltage level is done based on the usage of the network at different voltage level by consumers. The Commission has chosen to adopt "Units Sold" at different voltage levels as the measure of network usage to allocate the costs as detailed below:

Table 101: Allocation of wheeling cost over distribution system users

	Particulars	Rs in
		Crore
Α	Wheeling Cost at 33 KV- Rs Crore	383.26
В	Sales at 33 KV(MU)	5597
C	Total Sales (MU) {excluding sales at 132 KV}	26381
D	Proportion of 33 KV sales to total sales	0.21
	Cost allocation	
Е	Wheeling cost of 33 KV allocated to 33 KV users only (A*D)Rs. Crore	81.31

4.12 The wheeling cost allocated to 33 KV thus works out to Rs. 81.31 Crore. Based on this allocation and considering the consumption at 33 KV, the wheeling charges in Rupees per unit are determined as below:

Table 102: Wheeling Charges

Voltage	Wheeling Cost allocated (Rs. Crore)	Sales (MU)	Wheeling charges (in Rs./unit)
EHT	-	-	-
33KV	81.31	5597	0.15

Applicability of wheeling charges under different scenarios

4.13 Various scenarios of location of open access generators and their consumers and the

consequent applicability of transmission and wheeling charges shall be as below:

- (a) Scenario 1: Generator is connected to Transmission network (EHT voltages), while the consumer is connected to the distribution network at 33KV of Distribution Licensee: The scenario shall attract both transmission and wheeling charges since power required by the open access consumer will flow downstream from the transmission network through distribution network up to the consumer's connection.
- (b) Scenario 2: Generator is connected to distribution network at 33KV of Distribution Licensee, while the consumer is connected to the transmission network (132KV or above): In this scenario, the consumer's requirement will be met by power flow over transmission network alone. The power generated by the open access generator will be locally consumed within the Discom and will not flow upstream to the open access consumer. Hence, such transactions shall attract only the transmission charges.
- (c) Scenario 3: Both Generator and consumer are connected to the transmission network (132KV or above): Only transmission charges shall apply, since there is no usage of distribution network.
- (d) Scenario 4: Both generator and consumer are connected to the distribution system of any of the Distribution Licensee at 33 KV: The power generated by the open access generator will be consumed within the Discoms under the conditions of uniform retail tariff throughout the M.P. and hence it will contribute to meeting the demand of the open access consumer. Therefore, there is no additional usage of transmission network in this transaction. Hence, such transactions shall attract only the wheeling charges.
- 4.14 For encouraging open access, the Commission has determined the above applicability of charges. The formulations above also conform to the principle that power flows on the network by displacement method.

Determination of Cross-Subsidy Surcharge

4.15 The Tariff Policy prescribes the following formulae for determination of cross- subsidy surcharge for various categories of consumers.

"8.5 Cross-subsidy surcharge and additional surcharge for open access

Surcharge formula:

$$S = T - [C(1+L/100) + D]$$

Where

S is the surcharge

T is the Tariff payable by the relevant category of consumers;

C is the Weighted average cost of power purchase of top 5% at the margin excluding liquid fuel based generation and renewable power."

D is the Wheeling charge

L is the system Losses for the applicable voltage level, expressed as a percentage

- "8.5.5 Wheeling charges should be determined on the basis of same principles as laid down for intra-state transmission charges and in addition would include average loss compensation of the relevant voltage level.
- 4.16 The first step in the determination of cross-subsidy surcharge is to work out the cost of marginal power purchase of top 5% power. This works out as below:

Total Energy required in FY 2012-13 = 44590 MU

Table 103: Cost of marginal power purchase of top 5% power

Stations	Units (MU)	Cost (Rs./unit)	Total cost (Rs. In	5% marginal
			Crs.)	power
Short term Power purchase	1195	4.50	537.75	2230
Medium term Power purchase	577	4.00	230.80	
ER-Kahalgaon STPS-II	322	3.80	122.36	
DVC	136	3.79	51.54	
Total	2230		942.45	

- 4.17 Therefore, the weighted average cost of power purchase of top 5% at the margin works out as Rs. 942.45 Crore/2230 MU = Rs. 4.23 per unit.
- 4.18 The Tariff Policy specifies that the Loss level (term L) should be worked out for each voltage level separately. For this purpose, the loss levels at each voltage level are assumed as below because of non-availability of required reliable data by the Distribution licensees:

Table 104 : Voltage-wise loss levels

Voltage Level	Loss level (L)
EHT (transmission system) including External	5.87%
losses	
33KV (only 33KV system)	5.36%

4.19 The cost of transmission shall be uniformly spread over all consumers at every voltage level, as the transmission network is utilized by all consumers. Therefore, similar to wheeling costs, the approved transmission charges for FY 2012-13 are worked out as under:-

Table 105: Transmission Charges

Particulars	Rs in Crore
PGCIL Charges	Rs. 600.00 Crore
MPPTCL Charges	Rs. 1430.18 Crore
SLDC Charges	Rs. 8.61 Crore
Total Charges	Rs. 2038.79 Crore
Units to be handled by MPPTCL	44590 MU
Transmission Charges per unit	46 paise

- 4.20 Finally, the last term in the Tariff Policy formula T Average Tariff for each category is obtained from the revenue model of FY 2012-13 Tariff Order.
- 4.21 As per MPERC (Terms and Conditions for Intra State Open Access in Madhya Pradesh) Regulations, 2005, the consumers with Contract Demand of 1 MW or above have been allowed open access w.e.f. 1st October, 2007. These consumers are to be connected at 33 KV or above as per M.P. Electricity Supply Code.
- 4.22 In accordance with the above, the total cost for various categories of HT consumers having contract demand of 1MW or above at 132KV/33 KV under various scenario are worked out as detailed in table below "scenario wise cost". The Crosssubsidy surcharge shall be the difference of average tariff and the total cost for the particular category at particular voltage. The category wise average tariff as per tariff order for FY 2012-13 is given in table below "category wise average tariff". For example, for Railway Traction at 132 KV the average tariff for FY 2012-13 as per tariff order works out to Rs. 6.09 per unit and total cost works out to Rs. 4.95 per unit. Therefore, Cross-subsidy surcharge shall be Rs. 6.09 Rs. 4.95 = Rs. 1.14 per unit. However, in case (e.g. Public Water Works, Other than Irrigation, Bulk Residential Users, Bulk Supply to Exemptees etc.) where cross-subsidy surcharge, based on above methodology, works out as negative, the same shall be considered zero for billing purposes.

Table 106 : Scenario wise cost (Rs. per unit)

S.	Scenario	Cost of	Cost of Power	Cost of Power	Transmission	Wheeling	Total Cost
No.		Power at	grossed up for	grossed up for	charges	charges	[C(1+L/100)+D]
		5%	distribution	transmission			
		Margin	losses (5.36%)	losses (5.87%)			
i.	1	4.23	4.47	4.75	0.46	0.15	5.36
ii.	2	4.23	0	4.49	0.46	0	4.95
iii.	3	4.23	0	4.49	0.46	0	4.95
iv.	4	4.23	4.47	4.75	0	0.15	4.90

Table 107: Category wise average tariff (Rs. per unit)

S.	Category of HT/EHT consumers	Average Tariff
No.		'T'
i.	HV-1: Railway Traction	6.09
ii.	HV-2 : Coal Mines	6.41
iii.	HV-3.1 : Industrial	5.91
iv.	HV-3.2 : Non-Industrial	6.45
v.	HV-3.3 : Shopping Malls	6.84
vi.	HV-3.4 : Power Intensive Industries	5.10
vii.	HV-4: Seasonal	7.05
viii.	HV-5.1 : Public Water Works	4.06
ix.	HV-5.2 : Other than Irrigation	4.62
х.	HV-6 :Bulk Residential Users	4.83
xi.	HV-7: Bulk Supply to Exemptees	3.65

A5: FUEL COST ADJUSTMENT CHARGE

- 5.1 The Distribution Licensees of the State have proposed to levy Fuel Cost Adjustment charge as an automatic pass through in tariff to account for the increase/ decrease in fuel costs from time to time.
- 5.2 Regulation 9.1 of 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 "As provided in Section 62(4) of the Act, the fuel surcharge formula may be specified by the Commission and tariff may be permitted to be charged under the terms of specific formula. The impact of fuel surcharge whenever permitted in respect of Generating Company shall be recoverable from consumers and the Distribution Licensee may approach the Commission for such orders as are necessary under Section 62(4) of the Act."
- 5.3 Hon'ble Appellate Tribunal for Electricity in the judgment in O.P. No.1 of 2011 dated 11.11.2011 has given directions to the State Commissions in this regard as "65(vi) Fuel and power purchase cost is a major expense of the Distribution Company which is uncontrollable. Every State Commission must have in place a mechanism for fuel and power purchase cost in terms of Section 62(4) of the Act. The fuel and power purchase cost adjustment should preferably be on monthly basis on the lines of Central Commission's Regulations for the Generating Companies but in no case exceeding a quarter. Any State Commission which does not already have such formula/mechanism in place must within 6 months of the date of its order put in place such formula/mechanism."
- 5.4 The Energy Department, GoMP vide their letter No.967 dated 21.08.2011 has conveyed the policy directive of the State Govt. that appropriate Regulations be framed by the State Commission in terms of Section 62(4) of the Electricity Act, 2003 to allow for automatic adjustments for increase or decrease in the fuel cost in the monthly bills to be raised on consumers and avoid deferring the pass through of such increase or decrease in the fuel cost.
- 5.5 The Commission taking cognizance of aforementioned directive specifies following formula for deriving Fuel Cost Adjustment (hereinafter referred as "FCA") for recovery/adjustment of un-controllable costs due to increase or decrease in the cost of fuel in case of coal, oil, and gas for generating plants.

	IVC (Rs. in Crore) X 1000
FCA for billing quarter $(p/u) =$	
	Normative sale (MUs)

Wherein,

- ➢ "IVC" shall mean sum of (a) difference in per unit variable cost actually billed by each long term coal or gas based power generator and variable cost as allowed in the tariff order, multiplied by (b) units availed from each such generating Station in the preceding quarter. Variable costs of Hydel Generating Stations shall not be considered for the purpose of working out the increase in variable Cost of Power Purchase.
- > "Preceding Quarter" means period of preceding three months excluding the period of two months immediately proceeding to the billing quarter.
- ➤ "Billing quarter" means the period of three months for which FCA is to be billed and shall be a period commencing on first day to last day of quarter for the quarter commencing from 1st April ending 30th June and so on.
- "Normative Sale" means the sale grossed down from the total actual ex-bus drawl from all sources (Generators + Other sources) during preceding quarter by the normative PGCIL, transmission and distribution losses for the months of the *preceding* quarter as provided in the tariff Order.
- 5.6 FCA charge shall be in the form of paise per unit (Kwh) rounded off to the nearest integer. For this purpose, fraction up to 0.5 shall be ignored and fraction higher than 0.5 shall be rounded off to the next higher integer. This charge shall be added to or deducted from, as the case may be, the energy charges as per the existing tariff for the energy billed to every consumer and shall be indicated separately in the electricity bills issued to the consumers and shall be treated as part of energy charge.
- 5.7 The FCA charge shall be uniformly applicable to all categories of consumers of the Distribution Companies in the State.
- 5.8 The M.P. Trading Co. Ltd., Jabalpur has been authorized by the Distribution Companies to procure power on their behalf for retail supply to consumers. The responsibility of working out the rate of FCA every quarter shall rest with the M.P. Trading Co. Ltd., Jabalpur.
- 5.9 The M.P. Trading Co. Ltd., Jabalpur shall workout change in variable cost of power purchase during the preceding quarter based on the bills received by them from the Long Term Coal and Gas based Generators. The information shall be prepared in the following manner for every month of the "preceding quarter" and summated thereafter for the quarter:

Table 108: Format for FCA charge

Month/ quarter	Name of generating Station/ other source	Power Drawn ex-bus	variable cost i based on a variable ch	ctual	Variable cost rates provided Order	in tariff	increase in variable cost of power purchase
		(MUs)	Rate (paise/unit)	Cost (Rs. in	Rate (paise./unit)	Cost (Rs. in	Rs. in Cr (Diff. of
				Cr)		Cr)	Col.5-7)
1	2	3	4	5	6	7	8
Total							

- 5.10 The M.P. Power Trading Co. Ltd., Jabalpur shall workout "normative sale". For this purpose normative PGCIL, transmission and distribution loss (percentage /quantum) for the months of preceding quarter, as provided in the Tariff Orders, shall be subtracted from the total ex-bus power drawn during the preceding quarter to arrive at normative sale.
- 5.11 FCA charge shall be worked out by the M.P. Power Trading Co. Ltd., Jabalpur based on the formula provided herein before. The Distribution Companies of the State shall be advised by them from time to time to incorporate the FCA charge for billing purposes for the billing quarter. This exercise should be completed at least 15 days before the commencement of the billing quarter. The M.P. Power Trading Co. Ltd., Jabalpur shall simultaneously submit all relevant details of calculations along with supporting details to the Commission within 7 days of the completion of the exercise.
- 5.12 If the Commission finds after review of the details submitted by the M.P. Power Trading Co. Ltd. Jabalpur any over or under recovery of FCA charge, it may direct the M.P. Power Trading Co. Ltd., Jabalpur and the Distribution Companies of the State to make required changes in FCA charge billing and any further adjustments in consumer bills that it may consider appropriate.
- 5.13 The Distribution Companies of the State shall commence billing of FCA charge from the first day of the billing quarter.
- 5.14 The rate and amount of FCA charge shall be shown separately in the consumer bills.
- 5.15 Following illustration is given for the purpose of understanding:
- 5.16 If the "billing quarter" is say "July to Sept", then the "preceding quarter" shall mean the period "Feb to April" and the period of May and June months is allowed to collect the data/ details and finalization of FCA charge.
- 5.17 The details of the normative Losses for PGCIL System and MPPTCL System and normative distribution losses as per the Tariff Orders of the Commission are indicated in the table below:

Table 109: PGCIL, MPPTCL and distribution losses %

Sr. No.	Month/Year	PGCIL Losses*		MPPTCL Losses**	Distribution Losses***	
		Region	%	%	0/0	
4	November, 11	W.R.	4.79%	2.740/	26.450/	
1		E.R.	2.38%	3.74%	26.45%	
2	D	W.R.	4.79%	2.740/	26.45%	
2	December, 11	E.R.	2.38%	3.74%		
3	January 12	W.R.	4.79%	2.740/	26.450/	
3	January, 12	E.R.	2.38%	3.74%	26.45%	
4	Echmany 12	W.R.	4.79%	3.74%	26.450/	
4	February, 12	E.R.	2.38%	3.74%	26.45%	
5	March 12	W.R.	4.79%	2.740/	26.450/	
3	March, 12	E.R.	2.38%	3.74%	26.45%	
6	April, 12	W.R.	3.61%	3.74%	23.82%	
0	April, 12	E.R.	2.69%	3.74%	23.02%	
7	Mov. 12	W.R.	3.61%	3.74%	23.82%	
,	May, 12	E.R.	2.69%	3.7470	23.8270	
8	June, 12	W.R.	3.61%	3.74%	23.82%	
8		E.R.	2.69%	3.7470		
9	July, 12	W.R.	3.61%	3.74%	23.82%	
	July, 12	E.R.	2.69%	3.7470	23.8270	
10	August, 12	W.R.	3.61%	3.74%	23.82%	
10		E.R.	2.69%	3.7470		
11	September, 12	W.R.	3.61%	3.74%	23.82%	
11	September, 12	E.R.	2.69%	3.7470	23.0270	
12	October, 12	W.R.	3.61%	3.74%	23.82%	
12	October, 12	E.R.	2.69%	3.7470	23.0270	
13	November, 12	W.R.	3.61%	3.74%	23 82%	
13	November, 12	E.R.	2.69%	3.7470	23.82%	
14	December, 12	W.R.	3.61%	3.74%	23.82%	
14	December, 12	E.R.	2.69%	3.7470	23.0270	
15	January, 13	W.R.	3.61%	3.74%	23 82%	
13		E.R.	2.69%		23.82%	
16	February 12	W.R.	3.61%	3.74%	23.82%	
10	February, 13	E.R.	2.69%	3.74%	23.02%	
17	March 12	W.R.	3.61%	2.740/	22.020/	
17	March, 13	E.R.	2.69%	3.74%	23.82%	

Note: * PGCIL Losses: % PGCIL loss is based on input separately from E.R. & W.R.

^{**} Transmission Losses: % M.P. Transmission losses are based on input at State periphery.

^{***} Distribution Losses: % Distribution losses are based on input at Discoms periphery.

A6: PUBLIC OBJECTIONS & COMMENTS ON LICENSEES' PETITIONS

- 6.1 After admission of the ARR and Tariff proposals for FY 2012-13 filed by the three Discoms, salient features were published in the newspapers. The Commission had directed the petitioners to publish gist of their tariff applications and proposals to invite comments/objections/suggestions from various stakeholders in the newspapers and the last date of submission was 31st January 2012. The Commission has considered all the comments received up to the date of public hearings. Names of objectors who had filed the comments/ objections on Discoms ARRs/Tariff Proposals for FY 2012-13 are given in Annexure-I.
- 6.2 The Commission subsequently issued a public notice inviting all stakeholders willing to present their suggestions/objections related to the ARR and Tariff proposals in person during the public hearings. Number of comments received on ARRs/Tariff proposals is shown in the table below:-

Table 110: No. of objections received

1401	e 110 . No. of objections received	
Sr.	Name of Discom	Number of
No.		suggestions/ objections
		received on ARR &
		Tariff Proposal for
		FY2012-13
1.	M.P. Paschim Kshetra Vidyut Vitaran Co. Ltd., Indore (West	82
	Discom)	
2.	M.P. Poorv Kshetra Vidyut Vitaran Company Ltd., Jabalpur,	19
	(East Discom)	
3.	M.P. Madhya Kshetra Vidyut Vitaran Company Ltd., Bhopal	29
	(Central Discom)	
	Total	130

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

Table 111 : Public hearings held:

Sr. No.	Name of the Distribution Company	Date of hearing	Venue of hearing		
1	Objectors of West	22 nd February 2012	Santosh Sabhagrah, Film Bhavan,		
	Discom, Indore		Near Rani Sati Gate, Yashwant Niwas		
			Road, Indore.		
2	Objectors of East	25 th February 2012	"Tarang Auditorium", Shakti Bhavan,		
	Discom, Jabalpur		Rampur, Jabalpur		
3	Objectors of Central	28 th February 2012	Auditorium, Academy of		
	Discom, Bhopal		Administration, 1100 Quarters, Bhopal		
			and		
		29 th February 2012	The Commission's Court room		

- Ouring the course of hearing, majority of the respondents from all consumer categories opposed tariff hike as proposed by the Discoms. Similarly Discoms' proposal for increase in rate of assessed consumption per HP for billing of unmetered agriculture consumers in rural and urban areas was opposed by representatives of various farmers associations. Most of the respondents were of the view that major cause of poor performance of the three Discoms was high distribution losses including theft of electricity and lack of meterisation of un-metered connections for domestic and agriculture categories. Majority of respondents raised their serious concerns on poor progress of meterisation so far achieved by Discoms specifically in case of metering of domestic and agricultural connections in rural areas and were of the view that a definite plan for implementing 100% meterisation for all categories of consumers be enforced in line with the provisions of the Electricity Act, 2003.
- 6.5 Representatives from various industrial associations have suggested that road map for reduction in cross—subsidy notified in 2007 for FY2008-2011 needs to be revisited for FY2012-13 and onwards indicating gradual reduction of cross subsidy in line with Tariff policy.
- 6.6 Representatives from Non Governmental Organisations (NGOs) and others have suggested taking effective measures to bring awareness about Demand Side Management and use of energy efficient devices for negating peak shortage in State besides promotion and incentivisation on use of Green power such as Solar.
- 6.7 As part of the tariff exercise, a meeting of the State Advisory Committee (SAC) was convened on 03.02.2012 at the Commission's office to obtain their views on the ARR/Tariff proposals of Licensees. The suggestions made by the members of SAC were duly taken into consideration by the Commission while finalizing the Tariff Order.
- 6.8 While a number of suggestions/ objections and comments have been received and given due consideration by the Commission, only major responses/objections received and also those 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 applicable for that particular voltage category

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 Discoms' proposal for increase in fixed & energy charges. The cost of supply applicable for the particular voltage category should be taken to in account.

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: Increase in excess demand charge and energy charges for consumption corresponding to excess demand

Issue raised by objectors

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

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)

<u>Issue raised by objectors</u>

Representatives from Railways have requested for following incentives/rebates

- (a) **Power Factor (PF) Incentive**: i) To consider giving incentive from PF above 0.90 in place of existing 0.95 for traction supply as was available earlier; ii) and decline the Discoms' proposal for levying penalty on power factor below 0.90 and retain the level 0.85 as was applicable earlier.
- (b) **Voltage Rebate:** To consider giving a rebate of 4% on 132 kV and 5% on 220kV on energy charges as supply is availed at 132/220 kV.

Response from Discoms

a) 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.

Further, 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.

b) 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 being taken as average cost of supply across all voltage levels for tariff framing.

ISSUE NO. 4: Tariff hike in Bulk residential users(HV6) and Non Domestic (LV2.2) tariff category

Issue raised by objectors

Indian Railways have opposed the Discoms' proposal on tariff hike in Bulk residential users (HV6) and Non domestic (LV2.2) tariff category stating that it is a direct burden to passengers amenities items such as station lighting, station water supply etc.

Response from Discoms

The licensee has already adopted the road-map for reducing the cross-subsidy, as notified by the Commission, vide its notification dated 6th October 2007. Moreover, the Discom

has not even proposed to recover the entire cost of supply (CoS) from the consumers. Therefore, the marginal increase proposed by the licensee to barely cover up the cost of inflation is just, proper and reasonable.

Commission's views

The Commission has given due consideration to the issue and the tariff for Bulk residential users (HV6) and Non domestic (LV-2.2) tariff category has been determined considering relevant factors.

ISSUE NO. 5: Restoration of Load factor incentives for Power Intensive Industries

Issue raised by objectors

Representative from All India Induction Furnace Association has requested for restoration of load factor incentives falling under HV 3.4 tariff category for power intensive industries for load factor above 75%.

Response from Discoms

The licensee has not proposed any load factor incentive to any category of HT consumers. In case of power intensive consumers the proposed tariff is already less than that for other HV-3 category consumers. In fact, the advantage sought by the objector is already built into the tariff proposed for them. It is also quite pertinent to mention that the petitioner does not even envisage 100% recovery of its efficient costs through the instant tariff petition.

Commission's views

The Commission has introduced a separate category for Power Intensive industries in the tariff Order for FY 11-12 wherein the impact of load factor incentive was also duly considered and therefore no load factor incentive was provided for this category. Same principles have been adopted for the tariff of FY 12-13 and hence the request to allow load factor incentive is not tenable.

ISSUE NO. 6: Increase in Minimum Guarantee Consumption

Issue raised by objectors

Representatives from various associations of LT non-domestic and industries have opposed the proposed increase in minimum annual guaranteed consumption in urban and rural areas respectively under LV-2 and LV-4 categories.

Response from Discoms

As mentioned in ARR/ Tariff petition, the supply hours will increase in the year 2012-13 i.e. the consumption will be more and therefore the minimum annual consumption has been proposed to be more than the levels of tariff order for FY 11-12.

Commission's views

The Commission is of the view that ideally minimum guaranteed consumption should not be levied. The Electricity Act, 03 provides for levy of fixed charges and energy charges for recovery of fixed costs and variable cost incurred by the Licensees. In the present scenario fixed costs are high and if these costs are fully received by levy of fixed charges, it would result in heavy burden on the consumers, particularly those who have low load factors. Therefore taking a conscious view the Commission has continued to levy minimum guaranteed consumption to meet a part of fixed cost. The minimum guaranteed consumption is levied in only those cases where the actual consumption is below the minimum prescribed level. However any increase in minimum consumption level, as prescribed hitherto, has not been accepted.

ISSUE NO. 7: 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

It is submitted that the receipts from late payment surcharge are uncertain and hence such receipts cannot be predicted. Moreover, the late payment means that the Licensee has been deprived of its own revenue and consequently forced to take loans from Financing Agencies by paying huge interest. The delayed payment surcharge being the compensation against the interest on loans, it should not be treated as a part of revenue.

Commission's views

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

ISSUE NO. 8: Reduction of billing demand to extent of 75% of contract demand

Issue raised by objectors

a) Representatives of All India Induction Furnace Association and other industrial associations 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. The proposal of Discoms that billing demand should be rounded off to next higher integer number has been opposed and request was made to continue the existing provision specified in Tariff Order FY2011-12.

Response from Discoms

The petitioner feels, that a flexibility of 10% in contract demand is, quite justified and reasonable. The petitioner Discom recovers only a small fraction of the fixed costs through the demand charges. Hence, figure of 90% is rational. It is felt, that, the impact

of rounding-off of demand to the next higher integer will certainly be meagre. Hence, the petitioner feels that the existing provision is in order because the licensee's ultimate concern is overall revenue neutrality.

Commission's views

The Commission is of the view that any change in present provisions is not warranted.

ISSUE NO. 9: Fuel Surcharge adjustment

<u>Issue raised by objectors</u>

Respondents from Electricity Consumer Society suggested that for fuel surcharge adjustment, a formula can be approved through separate Regulation/ order in view of multi-year tariff framework

Response from Discoms

The need for Fuel Surcharge Adjustment has been discussed in detail in the petition. The fuel surcharge adjustment is a mechanism to provide an interim relief to cover the variation in price of energy only. The final adjustment will be realized through the true-up exercise.

Commission's views

The Commission has introduced Fuel Charge Adjustment formula for FY2012-13, as has been detailed in earlier sections of this Order.

ISSUE NO. 10: 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, 30% surcharge of normal rate has been proposed. This surcharge may be restored as 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. The price of short term transaction of electricity through Traders has been given in CERC website. From this it can be seen that price of power during peak period is higher than the price of power traded round the clock by generally more than 15%. It could also be seen that price of power during off peak period in general is marginally lower 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.

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 for any further changes.

ISSUE NO.11: Formation of regulatory assets

Issue raised by objectors

Representatives from various industrial associations have raised the concern that formation of regulatory assets as proposed by Discoms is an indication of financial mismanagement and proposal of Discoms should not be accepted.

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 provided for the estimated revenue which fully meets the allowable costs hence there is no need of providing any regulatory assets.

ISSUE NO. 12: 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.

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 relevant factors into account while deciding additional charges on demand recorded in excess of contract demand and finds no justification for any change in existing provisions.

ISSUE NO. 13: 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 cannot 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. It is also stated by some objectors that tariff for power intensive HV category is less than domestic category.

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 a small portion balance costs 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. Further it is not correct that the tariff of power intensive HV category is less than domestic category.

ISSUE NO. 14: Removal of connected load ceiling in case of demand based LT Industrial tariff

Issue raised by objectors

Representatives from Industrial Associations have requested for removal of connected load ceiling for contract demand up to 150 HP in case of demand based tariff for LV4.1b(i),LV4.1b(ii) ,and LV4.1 C . It was argued that majority of consumer in LT Industries categories 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.

Response from Discoms

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 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.

Commission's views

The Commission has reconsidered the matter with regard to request for removal of ceiling on the connected load in case of LT industrial consumers having contract demand based tariff. In light of recent pronouncement by higher courts and tightening control on grid discipline, it is not feasible to do away with ceiling on connected load for LT industrial consumers. The Commission is of the view that higher connected load consumers should migrate to HT and to facilitate this has lowered the contract demand to 50 KVA in last tariff order. In furtherance of this intent Commission in this tariff order has reduced minimum annual consumption from 900 units per KVA to 600 units per KVA for contract demand up to 100 KVA.

ISSUE NO. 15: 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

The provision referred by respondent was in vogue till 2008-09. The same however was withdrawn by the Commission after receiving complaints of misuse of the above provision.

Commission's views:

The Commission agrees with the view expressed by the licensees

ISSUE NO. 16: Change in definition of rural area

Issue raised by objectors

Representatives from various industrial organizations & industries have opposed the Discoms' proposal regarding change in respect of definition of "Rural area" in general terms & conditions of Low tension tariff and requested that definition of rural area may be continued as per retail supply tariff order FY2011-12 at 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.

The definition of rural area as given in previous tariff orders creates practical problems as experienced by the Licensee and therefore a different definition has been proposed in the petition.

Commission's views

The Commission remains of the view that no change is required. This issue has already been dealt with in the previous tariff Orders.

ISSUE NO.17: 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. 18: 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 have also opposed the increase in assessed consumption for billing of unmetered agriculture consumers as proposed by the Discoms.

In this regard, it is mentioned that agricultural consumers in rural areas are not given definite and continuous supply for specified hours as per directives of the Commission for their irrigations pumps. In respect of marginal farmers in tribal pre-dominant areas of West Discom, it is suggested that actual consumption of such farmers are far less than prescribed annual norms and therefore it is suggested that an independent survey should be carried out to assess the actual consumption of these marginal farmers. It is also suggested that all the agriculture connections should be meterized either by providing individual meters or through DTRs—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 also voiced their common difficulties being faced by them on account of poor voltage Regulation in rural areas.

The Discoms have 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 predominated DTRs.

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.19: 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 for Narmada Water Pump a request has been made to provide benefits for public water supply due to reduced cost of supply.

Response from Discoms

The Discoms 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 tariff determination is based on average cost of supply, not on the voltage level/category wise cost of supply however while designing of the HV category of consumer the attempt has been made that the average tariff of higher voltage level may be less than the average tariff of lower level consumer of same category. This principle is squarely applicable to water works category also.

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. 20: Tariff for Telecom service providers

Issue raised by objectors

Representatives from Telecom service providers requested for specifying Telecom services as essential service maintenance category. It is stated that Distribution Licensee is treating the Telecom Service provider as Non Domestic consumer (Commercial) whereas Respondent is an infrastructure service provider (telecom). Further Respondent is also registered with Service Tax Deptt and paying service tax.

There is no such category as commercial or infrastructure service provider in the tariff structure. However, any establishment including infrastructure service provider who is required to pay service tax is covered under the Non-domestic tariff.

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 expansion of telecom infrastructure in rural areas suitable rebate in energy charges for such consumers situated in rural area provided since 2011-12 as being continued this year also.

ISSUE NO. 21: Reduction of Fixed charges

Issue raised by objectors

Some of the respondents have requested that the Discoms' 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. 22: Abolition of provision of minimum consumption charges

Issue raised by objectors

Representatives from various industrial organizations suggested that no tariff minimum unit charges in case of HT and LT categories should be taken as Discoms are already recovering energy charges more than tariff minimum units.

Response from Discoms

The request for abolition of tariff minimum consumption/ charges as objected by the objectors may not be accepted as it is main body of the tariff structure because it is related to the contract/ agreement made by the consumer with the Company to provide power supply for a contracted demand / load for which the Company is also committed & bound to extend electric supply for the contracted demand and has to create infrastructure as well as make provisions for the load. Rather it is being preserved for the consumer's ties in agreements. Hence the provisions of minimum charges needs to be continued in the tariff and it should be allowed as proposed by the Company.

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.

ISSUE NO.23: 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 are 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 .24: 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. 25: Temporary supply should not be charged higher than 1.1 times the normal charges

Issue raised by objectors

Representatives from industrial associations have opposed the proposal of Discoms that fixed charges and energy charges for temporary supply shall be billed at 1.5 times the normal charges as applicable to relevant category in place of existing 1.3 times in LV and HV category. It is suggested that temporary charges in all categories should not be levied higher than 1.1 times the normal charge.

Response from Discoms

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.

ISSUE NO. 26: 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 Discoms

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. 27: Suggestion for change in category in respect of Poultry Farm

<u>Issue raised by objectors</u>

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). There should be no major difference in urban and rural tariff as well as the pump motors used for poultry farms should be allowed on agriculture tariff.

Response from Discoms

Making of new slab in a tariff order is dealt with 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 has considered the matter and is of the opinion that no changes are warranted.

ISSUE NO. 28: Rationalization of EHV/HV category

Issues raised by Objectors

- i. 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.
- ii. It is also suggested that HV1 (Railway), HV2 (Coal Mines) and HT 4 (Seasonal) should be merged with HV3 (Industrial, Non-industrial, and Shopping Mall) category.

Response from Discoms

- i. As per the Tariff Policy, the overall average cost of supply is to be considered for determination of tariff and cross subsidy, rather than voltage level wise or category wise cost of supply.
- ii. Merging of HT categories together will be against of provisions of Section 62(3) of the EA2003 as the purpose for which the supply is required is different in said categories

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.

ISSUE NO. 29: Tariff hike is opposed for Shopping Mall category

<u>Issue raised by objectors</u>

Shopping malls should be treated as "Bulk Users" and appropriate relaxation may be allowed in the applicable tariff similar to HV-6 and HV-7 tariff category applicable to bulk supplies to different users having mixed load.

Response from Discoms

The HV 3.3 tariff, applicable to the Shopping Malls, is already less than the low tension tariff applicable for the same category. Further, purpose of supply and end-use in case of consumers under the HV-6 and HV-7 categories is different from those under HV-3.3. Therefore, the contention of the objector is not justified.

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.30: 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 though rural feeder is not acceptable as the Commission has already taken all care in its retail supply tariff order for FY2011-12 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. 31: Claiming high distribution losses over normative loss

Issue raised by objectors

Objector from East Discom has observed that the East Discom has proposed the distribution losses at 26.35% including additional 2.35% losses on account of taking over of electricity supply business of 4 no. R.E. Co-operative societies (REC) against the normative loss of 24% for FY12-13. Respondent opined that merger of the area of RECs should not be treated as a cause for increasing the losses over normative loss for FY12-13 specified by the Commission and hence it should not be allowed.

In accordance with the MPERC Regulation G-35 of 2009, Distribution loss level trajectory for East Discom was specified as 27% and 24% respectively for FY2011-12 and FY2012-13 respectively. These losses were specified in Regulation before taking over the business of these RECs i.e. 15th August 2010 by the Company therefore impact of possible increase in distribution losses could not be anticipated and thus not taken into to account.

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.32: Horticulture related issues

Issue raised by objectors

- i) The Director (Horticulture) has requested for providing separate tariff for Horticulture/Agriculture base industries tariff as it was notified in the Tariff Order 2006-07 for categories such as Horticulture and allied activities including Horticulture activities such as production in green houses/net house, plantation of fruits growing plants, nursery for propagation of planting material, primary processing units such as grading plants, pulp making, packing units & other value addition cold storage/cold chain units, and other industries like flour mills, rice mills, dal mills, khandsari sugar mills, gur (jaggary), ginning and pressing, dairy, aquaculture, sericulture, fisheries pond and other covered in the tariff order for the year 2006-07 under Tariff Schedule LV-5.2.
- ii) Cultivators may be allowed to run their industries with their electrical connections availed for agriculture pumps.
- iii) Fixed charges may be abolished and Energy charges to be concessional as compared to urban area
- iv) Ensured and continuous power supply at least eight hours during the day time at fixed hours.

Response from Discoms

i) The petitioner would like to highlight the fact that, in the existing tariff schedule, the category LV-5.2 broadly covers most of the activities mentioned by the objector. The said category covers all the primary activities associated with agriculture like nurseries growing flowers, plants, saplings, fruits, fisheries ponds, aquaculture, sericulture, hatcheries, poultry farms, cattle breeding farms, grasslands, milk extraction pasteurization units etc. The petitioner has not proposed any structural changes in the tariff, to rule out uncertainty amongst consumers and convenience in revenue projections. In any case, the petitioner would like maintenance of revenue neutrality in determination of tariff.

- ii) The purpose of using the electricity is different in the two cases. Therefore, the petitioner licensee is of the opinion, that, such an arrangement is not feasible, technically and commercially.
- iii) The petitioner licensee has to incur the fixed expenses to run the business. Therefore, recovery of fixed charges is in order. Moreover, the recovery of fixed expenses through the fixed charges in the tariff is only partial in the existing tariff schedules; the energy charges are identical for urban and rural areas in all the other categories. Hence, there is no cogent rationale for concessional rate for rural areas.
- iv) The petitioner licensee is vigorously pursuing the objective of providing 24 hours' supply to all consumers other than agricultural consumers and assured 8 hours' supply to all agricultural consumers in the State, by January 2013.

Commission's view -

The Commission has introduced a new tariff category namely LV5.2 nurseries growing flowers/ plants/ saplings/ fruits, grasslands and mushroom growing farms.

Issue No.33: Review of Tariff Structure of HV – 3.1 Industrial for 11KV Supply Consumer.

Issue raised by Objectors

Representative from Industrial Associations requested for reviewing tariff structure of HV3.1 for industrial consumers availing supply at 11kV Voltage level as the cost of energy in this class of consumers was reported very high compared to other voltage level of same category. It is submitted that Industries falling under this class hardly reach to Load Factor up to 50% and therefore monthly fixed charges and /or the energy charges (both for consumption up to and in excess of Load Factor of 50 %) may be rationalized.

Response from Discoms

The Licensee is concerned mainly with the revenue neutrality i.e. its revenue gap must be filled. If the Tariff of any particular category is reduced, any other category has to take its burden therefore the MPERC may take an appropriate view in the matter.

Commission's view

The Commission has given due consideration while finalizing the tariff. It should however be kept in mind that licensee has to incur fixed costs at the same level even if the consumption is low by the consumers. The Commission therefore has determined lower fixed charges in case of 11kV consumers as compared to higher voltage levels.

Issue no. 34: Lowering the minimum contract demand of 100 kVA to 50 kVA in 33 kV Class.

Issue raised by Objectors

Representatives from various industrial associations requested to reduce the minimum contract demand of 100kVA to 50kVA in 33kV class for HT Industrial Consumers in

HV3.1. It is submitted that there are many consumers in the SME who are in the activities wherein they need an uninterrupted power supply and at good stable voltage, which is not available at the 11 KV feeders and their requirement of Contract Demand is low.

Response from Discoms

The MPERC has decided the minimum and maximum C.D. on the particular supply voltage on the recommendations of a Committee of Technical Experts. Moreover, when the condition 1.19 of General Terms & Conditions of HT Tariff is there i.e. in any special case the Commission may change the limits then there is no need to reduce the minimum Contract Demand of 100 KVA to 50 KVA in 33 KV class HT industrial consumers in HV-3.1. The Licensee is of the view that there should be no change in condition 1.18 of General Terms & Conditions of HT Tariff.

The Commission's views

The Commission has allowed lower limit of Contract Demand as 100 kVA at 33 kV level and is of the opinion that any further change is not warranted.

Issue No.35: Request to provide tariff at concessional rate for educational / technical Institutes

Issues raised by Objector

One of objector requested to provide domestic tariff at concessional rate for educational/technical Institutes in place of prevailing applicable tariff. Respondent, indicating the reasons for less consumption of electricity in his institution, further submitted that the working hours of their educational institute are normally between 10 a.m. to 4.30 p.m. for around 7 months in a year. Further, several electricity driven equipments which are installed as per norms of AICTE are not operated simultaneously. However, Institute has to pay minimum consumption charges irrespective of usages for contracted capacity as per agreement with Discom for at 33 kV level.

Response from Discoms

Under proposed tariff structure for HT consumers, minimum charges are decided based on annual minimum consumption in order to recover fixed charges. In case monthly consumption exceeds annual minimum consumption then minimum charges are not levied. For Consumers who opt for Demand based tariff, connected load and contract demand could differ. However, objector could avail or convert Contract Demand as per his uses in accordance with the provisions of Electricity Supply Code 2004.

The Commission's view

The Commission considering the difficulties of the educational institutes has already provided lower guaranteed minimum annual consumption charges as compared to other consumers of the HT category and no further changes are feasible.

Issue 36: Fixation of lower additional fixed charges for dental X-Ray machine

Issues raised by Objectors

It is suggested that tariff of X-Ray Machine be fixed on kW basis instead of fixed charges on single/three phase basis for dental X-ray machines as these machines are of small capacities as compared to the normal X-ray plants .

Response from Discoms

Tariff of X-Ray machine is not fixed on the basis of wattage or voltage or consumption. In fact its consumption of electricity is very less. On the other hand, moment X-Ray machine operates; it creates a sudden jerk on system .For this reason a fixed charge is levied.

The Commission's view

The Commission after considering the matter has determined lower additional fixed charges for dental X-ray machines.

Issue 37: Reduction in period for advance payment for temporary agriculture connections.

Issue raised by Objectors

Respondents from Farmers' Associations have requested that existing provisions for advance payment for temporary connections for a minimum of three months be reduced to one month.

Response from Discoms

The Commission vide its Tariff Order FY12 has provided that Consumers opting for temporary agricultural supply shall have to pay the charges in advance for three months including by 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.

The Commission's Views

The Commission earlier after going through the due process had decided that advance for three months be taken for serving of temporary agricultural supply. However, in case the consumer wishes to discontinue supply, if the period is less than three months, the refund be arranged within prescribed time lines. No change in this is considered necessery.

Issue No. 38: Terminal benefits

Issues raised by Objectors

The representatives from various associations of Power Companies including MP Pensioners Associations have requested that the provision for contribution to the terminal benefits Trust and provisions for allowing yearly pension/ terminal benefits be

allowed in ARR. One of the objector proposed that only the provisions of "pay as you go" on year to year basis be allowed in the ARR.

Response from Discoms

The Petitioners agree with the contention of the various associations of Power Companies including MP Pensioners Associations and requests the Commission to consider the request of stakeholder and allow such costs as claimed by the petitioners in their ARR for FY12-13.

Commission's views

The Commission has recently issued draft for separate Regulations to deal with this issue and has also allowed expenses towards Pension and Terminal Benefits in the ARR for expenses against yearly pension/ terminal benefits for FY 12-13.

Issue no. 39: Norms for unmetered connections be increased as per actual. <u>Issues raised by Objectors</u>

Some of the Objectors stated that the norms for agricultural and domestic unmetered consumers are very low and these should be revised based on actual consumption.

Response from Discoms

Discoms appreciate the concerns of the objector for increase in billing norms for the unmetered agricultural consumers. The rationale for increase in billing benchmark is to make the billed energy commensurate with realistic level of energy consumption by the unmetered agricultural consumers.

Commission's views

The Commission has considered the data submitted by the Discoms in this regard and found that it lacks consistency particularly in case of agriculture connections. The Commission has however revised the norms for un-metered domestic connections in rural area.

Issue No. 40: Availability and Demand forecast.

Issue raised by objectors:

Working of ARR has to be based on the actual sale levels and the licensees have filed exaggerated sale projections particularly for LT consumers. The sale projected by the licensees need to prudently checked so as to arrive at realistic figures.

Response from Discom

The instant petition has been filed as per the Regulation G-35 of 2009. As per the Electricity Act, 2003, the petitioner licensee is under obligation to supply electricity to the consumers to the maximum extent. Therefore, the energy/power requirements need to be based on the demand rather than the availability. The licensee cannot fully control and adhere to the time of incidence of the demand, and provision of ToD tariff is already there to stagger the Demand. As a general principle, minimum requirements of all the categories of consumers ought to be met before enforcing any restrictions. It is also pertinent to mention, that, during the rabi season, adequate power supply for agricultural

consumers has to be ensured for production of crops, which is crucial to the rural economy as well as well economy of the State.

Commission's views:

The Commission has reviewed the sale forecast and allowed prudent sale based on historical trends.

Issue No. 41: Revenue Forecast

Issue raised by objectors:

The revenue forecast needs a complete recast. No attempts have been made to capture revenue earned due to (1) Tariff minimum charges (2) Demand charges arising out of contract obligation (3) Fixed charges (4) Power factor penalty (5) Excess billing penalty and several other latent factors in the billing

Response from Discom

The petitioner, at the time of formulating the revenue forecasts, assumes that the consumers shall strictly follow the discipline and the terms of the agreement. Otherwise, it would mean encouraging the violation of discipline and terms of the agreement. However, the excess revenue earned through these avenues is anyway neutralized during the true-up exercise. The main reason for the average rate of realization being different from the average tariffs as per projection, is due to the difference in the actual pattern/of consumption being different from that used in the model used for projection, in a tariff structure that has two-part slab tariffs.

Commission's views

While the Commission agrees with the views expressed by the Discoms, the Discoms need to forecast the revenue earned on this account based on historical data.

Issue No. 42: Miscellaneous issues

Some other suggestions/views were received are listed below in brief. The Commission has given due consideration on most of these suggestions while determining the tariff and on other issues which are not related to tariff determining exercise it shall take appropriate action in due course of time.

- i) Tradeco should be asked to submit their ARR
- ii) Issue of cross -subsidy road map with +/- 90% average cost of supply
- iii) Meter management and billing should be outsourced to Private Public Participation (PPP) mode or to franchisees
- iv) Rebate for low loss areas
- v) Delay in finalizing true up petitions
- vi) Tradeco be abolished and power be procured by Discoms

- vii) Franchisees be not appointed
- viii) Tariff minimum should be considered for whole of the year and not month wise basis
- ix) In respect of additional charges for excess demand ,the consumer covered under LV2 should be exempted in both categories demand base tariff and connected load base tariff
- x) A new economical rate of HT supply for street light be considered.
- xi) There should be separate tariff under LT and HT tariff for agro based industries. In this category no fixed charge should be billed.
- xii) Load factor formula should be as per tariff Order 2008-09 and for calculation of load factor ,power factor should be considered as 0.9
- xiii) Load factor calculation should be done on the basis of actual supply hours given during the months and for this programming in meter may be done.
- xiv) Additional charges and excess and excess demand may be only on fixed charges and penal charges should be taken on corresponding units.
- xv) No separate welding transformer surcharge be taken when meter is having the facility of recording power factor. There is a provision of billing of surcharge in percentage of energy charge subject to a maximum of 10% of energy charge. Hence provision of billing of welding surcharge may be removed from tariff order.
- xvi) In case of LT, if excess load is found over and above sanction load, billing should be done as per provision of tariff order and no cases should be registered under Section 126/135 of the EA 2003.
- xvii) For small industries, a simple tariff of connected load base up to 25 HP should be continued and limit may be increased from 25HP to 20kW and limit of Contract Demand of 75 kW may be increased to 100kW.
- xviii) In case of LT consumers, billing of only one PF surcharge should be done as recorded by the meter subject to a maximum 10% of energy charge. No separate billing to be done for welding transformer surcharge having more than 25% of connected load. Only Surcharge should be taken for PF less than 0.8 only.
- xix) Textile industry be brought under Power Intensive Industry as load factor is above 70-75%
- xx) Reasonable cross subsidy surcharge should be determined to facilitate consumers who are desirous to avail outside power through open access above 1 MW
- xxi) To avail cheap power from the system, provision of tripartite agreement is suggested amongst Open Access Consumer, Supplier and MP Tradeco.
- xxii) Maximum Contract Demand at 132kV level should be increased to 70 MVA in place of existing 50 MVA.
- xxiii) State Transmission Co. has requested that amount of true up for FY2008-09 and subsequent years on true up order issued may be passed on in the ARR of Discoms for FY2012-13.

- xxiv) Separate sub category for engineering industries like Foundry, Forging, and Machining etc. may be considered under tariff schedule HV3 for facilitating entrepreneurs in State.
- xxv) Separate liberal tariff for CPP may be considered
- xxvi) Separate tariff for institutions being run by Charitable Trust or others who are working for welfare activities for Society.
- xxvii) Tariff for hostels (LV2.1) should be kept equal to or even less than the domestic tariff
- xxviii) In respect of flour mills (LV 4), a request for reduction in fixed charges and minimum annual consumption is made.
- xxix) PPP model to be explored for promotion of CFLs in place of Tube lights/bulbs and also advise State Govt. for implementation of Green Building Code.
- xxx) In respect of Bulk residential users (HV6), provision may be made to provide single point connections to the Societies of residential colonies in addition to Residential Group cooperating Housing Societies.
- xxxi) Delay in testing of meters for release of new connections
- xxxii) Load balancing on DTRs

A7: RETAIL TARIFF DESIGN

Legal Position

- 7.1 The Commission has determined the Aggregate Revenue Requirement for FY 2012-13 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.
- 7.2 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

- 7.3 In consultation with the State Government, the Commission formed the view that uniform retail supply tariffs should be continued for FY 2012-13 also.
- 7.4 The GoMP issued a notification on 29th March, 2012 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 2012-13 approved tariffs when compared with the approved ARR for FY 2012-13 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 2012-13 tariffs vis-à-vis the approved ARR of FY 2012-13 for all three Discoms, thereby ensuring uniform retail tariffs in the State.
- 7.5 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

7.6 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 2012-13 works out to Rs.4.90 per unit as against Rs.4.49 for FY 2011-12. The table below shows the cost coverage on account of tariff for FY 2012-13 as compared to the cost coverage as determined by the Commission in the FY 2011-12 Tariff Order:

Table 112: Comparison of tariff v/s average cost of supply

	Average realisation as % of Average CoS			
Category/ sub-category	FY 2011-12 (as per Tariff Order dated 23 th May,11)	FY 2012-13 (achieved as per this Tariff Order)		
Domestic	94.79%	96.69%		
Non-domestic	139.80%	136.05%		
Public water works	88.01%	82.92%		
Street Light	90.55%	85.20%		
Industrial	122.64%	122.82%		
Agriculture	73.23%	76.78%		
Railways	124.09%	124.21%		
Coal Mines	129.38%	130.92%		
Industrial	118.54%	120.57%		
Non-industrial	128.96%	118.82%		
Irrigation, PWW and Other than agriculture	97.51%	84.75%		
Bulk residential users	97.28%	98.56%		
Bulk supply to exemptees	73.45%	74.52%		

- 7.7 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.
- 7.8 The Commission after giving due considerations to the suggestions/ objections of the Objectors and the proposals submitted by the Discoms has made some changes in the tariff design for FY 2012-13. These changes are mentioned in following paragraphs.
 - i. Change of slabs in domestic category: The Commission has modified the consumption slabs of domestic category. The present structure of slabs in the range of 101 to 200 units per month and above 200 units have now been modified to 101 to 300 units per month and 301 to 500 units and above 500 units per month. These slabs have been introduced keeping in view trend of consumption of various domestic categories of consumers in urban and rural area. This is expected to give relief to lower and middle class income group consumers.
 - ii. **Change in applicability of horticulture activities**: The Commission has agreed to the request made for application of agricultural tariff for horticulture activities and has covered "nurseries growing flowers/ plants/ saplings/ fruits, grasslands and mushroom growing farms" under new LV 5.2 category with tariff identical to agriculture.

- iii. New slab in agricultural tariff LV 5.1: The Commission has introduced a new slab in agricultural category LV 5.1. Now instead of monthly slabs of consumption up to 300 units and rest of the units, the slabs would be up to 300 units, above 300 to 750 units and rest of the units in the month. Hon'ble APTEL in one of its Orders has stated that cross subsidy for higher consumption levels be discouraged. A separate tariff for consumption level in excess of 750 units per month has been determined. It would be pertinent to mention that most of the agricultural consumers having load of 3 HP or 5 HP would not get affected as their monthly consumption would be lower than 750 units.
- iv. **Revision of benchmarks for rural domestic un-metered consumers**: The Commission has revised the billing benchmark for rural unmetered domestic consumers to 42 units per month.
- v. **FCA mechanism**: The Commission has introduced a mechanism for recovery of variation in Fuel Cost during the year. This was deemed necessary on account of frequent and large variations in fuel cost, especially coal, in the recent past. Accordingly a formula designated as Fuel Cost Adjustment (FCA) charge is being prescribed. Details of this are given in the related chapter of this Order.
- vi. Minimum consumption for Metered agricultural consumers (LV-5.1): The Commission has modified minimum consumption in case of metered agricultural consumption. The consumers shall now guarantee a minimum consumption of 30 units per HP or part thereof of connected load per month for the months from April to September and 90 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 month.
- vii. Increase in the limit of use of connected load for non-domestic/ commercial and other general purpose in case of HV 6.1 category of Bulk Residential Users: The Commission has raised the limit from present level of 10% to 20% of total connected load for use as non-domestic/ commercial and other general purpose in case of HV 6.1 category of Bulk Residential Users after considering relevant factors in such cases.
- viii. **Reduction in levy of delayed payment surcharge**: The Commission has reduced levy of delayed payment surcharge from the present level of 1.25% to 1%. The Commission does not take in to account delayed payment surcharge as income for the purpose of ARR determination and therefore after giving due consideration to relevant factors has made the above modification.
 - ix. **Power factor incentive**: Power factor incentive has been revised upwards for HT consumers for recorded power factor of 99% and 100%. An increase of 0.5% incentive for power factor 99% and one percent in case of power factor of 100% is being allowed.
 - x. **Revision in structure of load factor incentive**: The Commission has been 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 reduced the rate of

- incentive from 0.15% to 0.10 % for every 1% increase in load factor in excess of 75% which is applicable for energy charges corresponding to the incremental load factor in excess of 75%.
- xi. **Reduction in guaranteed minimum annual consumption:** The Commission has reduced the guaranteed minimum annual consumption from the existing level of 900 units to 600 units in case of HV 3.1 tariff for 33kV and 11kV consumers having contract demand up to 100 kvA so as facilitate LT industrial consumers having connected load in excess of 150 HP to migrate to HT category.
- xii. Modification in condition no. 7 (q) of general terms and condition of low tension tariff: Pursuant to the Order dated 21st February, 2012 in W.P. no. 6006/2008 of the Hon'ble High Court , Jabalpur, the Commission has modified the condition no. 7(q) of general terms and condition of low tension tariff accordingly.
- xiii. **Dental X-ray Machines- Levy of additional charges:** At present the additional charges are levied on dental X-ray machines similar to that of the X-ray plants. The Commission considering the representation of the stakeholders that dental X-ray machines are smaller having low consumption as compared to the X-ray plants, has introduced separate levy of lower additional fixed charges.
- xiv. **Welding surcharge:** The Commission has considered the suggestions of the stakeholders and has accordingly decided that welding surcharge will not be levied in those cases where the recorded power factor is 0.8 or more.

A8: COMPLIANCE ON TARIFF ORDER FY 2011-12

Para-wise response of Discoms on the directives issued by Commission in retail supply tariff order for FY 11-12 is given below:

8.1 Distribution losses:

Commission's Directives:

The Commission 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.

Discoms response

East Discom: It is submitted that the loss level of MPPKVVCL which was 33.45% for the year 2009-10 has reduced to 31.54% during 2010-11. Therefore MPPKVVCL has achieved the reduction of loss level by 1.91%. The normative loss level as per MPERC Regulation for FY 2010-11 was 30%.

West Discom: The Discom could succeed in achieving a line loss to level of 26.41 % during FY 10-11. The achievement made in loss level is very nearer to the line loss trajectory notified by GoMP / Commission.

Central Discom: For 2010-11 distribution losses were 31.82%, which is 1.18% lower than the milestone for distribution losses as per target given by GoMP and approved by the Commission.

The Discoms have further stated in their petitions that a number of schemes involving huge Capex are under execution and after successful implementation, the losses would get reduced. Efforts for monitoring, vigilance activities are also highlighted in their petitions.

Commission's observations/ directions: Although all the Discoms have shown reducing trend of losses, however the East and West Discoms could not achieve the prescribed milestones. The Commission directs that efforts for loss reductions needs to be further intensified.

8.2 Meterization of unmetered connections

Commission's Directives:

The progress so far achieved by the Discoms with regard to domestic meterization 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 unmetered 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

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.

Discoms response:

East Discom:

Meterization of Urban Domestic Consumers:

The Company is having total 9, 41,305 Domestic Light & Fan (DLF) consumers as on 30.09.11, out of which 9, 37,539 consumers have been provided with meters and only 3766 consumers are unmetered. These un-metered consumers are covered under R-APDRP scheme for which contract has been awarded and work is expected to be completed by Dec'2011. It may be mentioned that no new connection are being released

in urban area but these un-metered DLF consumers have increased due to regularization of unauthorized consumers as they were already drawing power illegally from our distribution network and have been brought into the billing system.

Plan for Meterization of Urban Domestic Consumers:

Sr.	Particular	As on 30-09-11
1.	Total Consumers	9,41,305 nos.
2.	Metered Consumers	9,37,539 nos.
3.	Unmetered Consumers	3,766 nos.
4.	Target as per MPERC:	
	(i) 100% by Sept-11	
5.	Plan for meterisation	By Dec'2011

Meterisation of Rural Domestic Consumers:

The Company is having total 16, 57,026 Domestic Light & Fan (DLF) consumers in rural area, out of which 6, 83,868 consumers are metered as on 30.09.2011. Balance 9, 73,158 consumers are unmetered. Since these connections are very large in number so their meterization would not be possible by March-12 due to financial constraints. However, under the Feeder Separation Project, provision has been made to provide 5.75 lakh meters to unmetered domestic consumers in rural areas and replacement of stop/defective meters. Under REC financed Phase-I of the Feeder Separation Project, there is provision of 2.25 lakh meters and Phase-I is targeted for completion by July-12. In second phase of FSP financed by ADB, there is provision of 3.50 lakh meters and Phase-II is scheduled to be completed by Feb-13. With the above meterization plan, still more than 4 lakh metres need to be procured for rural areas which will require Rs.48 Cr. for which funds are yet to be tied up. If the financial assistance in the form of soft loan or grant is received then the meterization work can pick up momentum.

Plan for Meterization of Rural Domestic Connection:

Sr.	Particulars	As on 30.09.11
1.	Total Consumers	16,57,026
2.	Unmetered Consumers	9,73,158
3.	Target as per MPERC	Plan
(i)	25% of unmetered consumers by end of Sept-11	60% of unmetered connection i.e.
(ii)	60% of unmetered consumers by end of Dec-11	5.8 lacs will be meterized under
		feeder separation project by Feb-
		13
(iii)	100% of unmetered consumers by end of Mar-12	Financial assistance of Rs.48.0 Cr.
		needed for meterization of balance
		about 4 lacs meters for which
		funds are yet to be tied up.

Agricultural DTR Meterization:

Company as on 30.09.11 is having 387 metered agricultural predominant DTRs out of 39075 agricultural DTRs. Due to critical financial conditions, the company is not in a position to provide the meters on all agricultural predominant DTRs. Meterization of Agricultural Predominant DTRs is also not covered under any on-going scheme. However, 11KV feeder meterization is covered under Feeder Separation Project.

SN	Particulars Particulars	As on 30-09-11
1.	Existing Ag. Predominant DTR (Nos)	39,075
2.	Metered Ag. Predominant DTR (Nos)	387
3.	Balance unmetered Ag. Predominant DTR (Nos)	38,688
4.	Target as per MPERC:	Plan
(a)	25% of total such DTRs by end of Sept-11	Financial Assistance of
(b)	60% of total such DTRs by end of Dec-11	Rs.42.0 Cr. is required to
(c)	100% of total such DTRs by end of Mar-12	achieve the target and
		funds are yet to be tied
		up.

The Company has started implementation of HVDS scheme in which meter for individual agricultural consumer is installed at DTR. The work is being carried out under ADB funding and it is proposed to cover 17656 DTRs of 16 / 25 KVA in first phase and 16739 DTRs in second phase. On all these transformers, consumer meters are to be provided and thus 34395 Agricultural Predominant DTRs shall provide 130761 meters for individual consumers. Up to 30.09.11 total 19005 Transformers have been provided with individual consumer meters. Under Kisaan Mahapanchayat Anudan Yojana launched by the GoMP, provision has already been made to provide the consumer meters at DTR itself. Total 7034 metered pump connections have been served under this scheme up to Sept-11. Under Feeder Separation Project, the agricultural load is being separated. Feeders are being provided with feeder meters but due to financial constraints the agricultural predominant DTR are not covered in the project.

West Discom:

- i. As on Sept. 11, the Company has made work plan to install the meters on 100% unmetered connections. It is submitted that the Company in inclined to install meters on 275949 Nos. of domestic unmetered connections in rural areas. The Company has made a plan for procurement of meters. An order for procurement of 3.15 lacs meters on M/s Bentec Electrical and Electronics Pvt. Ltd., Kolkata has already been placed vide No. CMD/WZ/06/Pur/TS-483/ORD/1194/18508 dated 5th Sept. 11 and the supply of meters is about to commence shortly in a phased manner.
- ii. There are 64228 Nos. of Agricultural predominated DTRs in the Company area out of which 13275 Nos. are provided with meters. The Company has issued an award on M/s Omni Agate Chennai under ADB Trench 4, for providing 12026 Nos. of meters on agricultural predominated DTRs, it is expected that 6000 Nos. of more meters will be installed by end of March 12 and for balance 44982 Nos. Agricultural predominated DTRs, a fund of about Rs. 100 Crore is required. Attempts are being made to arrange

finance from financial institutions and plan for meterisation of above balance agricultural predominated DTRs shall be accordingly prepared as soon as funds are available with the Discom.

iii. As regards compilation of Data of at least 10% of total agricultural predominated DTRs is concerned, it is submitted that the data of DTRs are being regularly collected and submitted. As per the abstract of data of agricultural predominated DTRs, the consumption pattern on the basis of which Commission may consider monthly consumption per HP are reproduced below:-

Sr. No.	Category	No. of DTR	No. of	Consumption.
			consumers	
01	Un-metered agriculture in Rural Area	6853	19429	98 units / HP/month for non season period. The analysis of data for the season period during FY 11-12 shall be collected and submitted shortly.

The Discom has carried out regular process of collecting the data and submitted before the Commission in the past. The analysis of data retrieved in the past and submitted before the Commission reveals that consumption per HP/per month is much higher than allowed by the Commission in the tariff order which needs due consideration for revision in the bench mark as below:-

Off season - 98 units per HP/ per month.

On season - General – 180 units per HP per month.

Banana and Narmda Belt – 250 units per HP per month.

Besides above, the Discom has also aimed to meterise all 33/11KV feeders. The work order for supply and erection has already been issued vide No. CMD/WZ/06/Pur/1199-1200/18956-18957 dated 9.9.11, It is expected that the all 33KV and 11KV feeders will be metereised by the end March 12.

Central Discom:

The meterisation status of urban domestic consumers is as follows:-

S. No.	Particulars	March 11	August 11	Increase / Decrease with respect to March 11
1	Total Urban domestic consumers	939224	965430	26206
2	Un-metered – Gen	9164	4056	
	SC/ST/BPL	4347	10166	
	Total Un-metered	13511	14222	711
3	% of un-metered with respect to Total	1.44	1.47	0.03
	consumers			

From the above table it may be verified that Company is constantly improving meterisation status in urban area. As on Aug 2011, only 1.47 % of connections are to be provided with meters. Prime focus of Licensee is to meterise balance un-metered connections by Oct, 2011 as decided in the meeting with Commission on dated 12 August 2011 & replace stop /defective meters on demand. Provision of procurement of meters for urban area has been made in various on-going schemes viz. RAPDRP (part Babout 2.45 lakh), HVDS (ADB tranche VI), also single phase & three phase energy meters in sufficient numbers have been received in store against various purchase order & 100 % meterisation of urban DL&F consumers by Oct, 2011 is targeted.

The meterisation status of **Rural domestic consumers** is as follows:-

Sl. No.	Particulars	March. 11	August 11	Decrease/ Increase with respect to March 11
1	Total Rural domestic consumers	1044475	1050345	5870
2	Un-metered – Gen	112465	111014	
	SC/ST/BPL	322711	316954	
	Total Un-metered	435176	427968	(-) 7208
3	% of un-metered with respect to Total	41.66	40.75	(-) 0.91
	consumers			

About 3.24 lakh consumers under SC/ST/BPL Category & 1.11 lakh consumers under General Category are un-metered as on Aug 2011 in rural area. It is to state that nearly 2.52 lakh consumer have been added after March, 2010. Licensee plans to take care of these un-metered connections under proposed /on -going schemes viz. RGGVY (6.07 lakhs), HVDS under ADB Tranche V (34,390 Nos.), Feeder separation (6.94 lakhs) and through procurement of meters under HUDCO assistance. Supply of 1, 25,000 single phase meters is scheduled to be completed by Dec.2011 & further 3,75,000 meters will be procured by May 2012. The Licensee envisages to complete all the balance consumer metering in rural area including replacement of stop/defective meters by Dec 2016.

Complete Meterisation Programme:

Board of the Company has approved Meterization plan in its 45th Meeting & same is under implementation. In this plan, meterisation 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 meterisation of unmetered DLF consumers by March, 2013 in urban area & by Dec, 2016 in rural area. Provision for meterisation is done in various ongoing schemes; also meters @ 13500 per quarter are being procured through HUDCO finance.

Status of DTR meterisation:

DTR metering Target & status as given with previous year ARR is as given below:

Scheme	Nos. Of DTR	Progress /Target for completion	Area Covered	Scheme
APDRP	7865	Already Installed	Town area	APDRP
HUDCO	7500	94 % Work complete 7012 meters installed/ Dec.2010.	Rural feeders to know consumption pattern of agriculture consumers	HUDCO
ADB Tranch IV	3679	Work completed in August 2011. 3640 meters installed.	Part of Gwalior & Morena Ambha city	ADB Tranch IV
RAPDRP	6217	/Oct 2011	32 RAPDRP Towns	RAPDRP

Work order for providing AMR meters on distribution transformers installed on predominantly agriculture feeders with two years energy audit under HUDCO finance was placed as follows:

Agency	Contract Amount
Agency	Contract Amoun

(1) M/s Omni Agate System Pvt. Ltd., Chennai 10.815 Crs.

(2) M/s Genus Power Infrastructure Ltd., Jaipur. 4.853 Crs.

95 % of work is completed & balance work along with regular data monitoring with a purpose of Energy Audit will also be done soon.

The existing distribution metering points in the Company are 90,902, out of which 17,223 have already been metered; out of which 7499 are AMR based metering points and 9724 are non AMR metering points. As already been furnished to the Commission as on 30.06.2011, total 64,042 distribution transformers are installed in pre-dominantly agriculture area out of which 8847 are already metered which amounts to 13.81%. The meterization plan has been approved by Board of the Company in its 45th Meeting and is under implementation. As per this meterization plan after completion of various schemes in urban and rural areas such as RAPDRP, Part A & B, ADB Tranche – IV, V & VI, RGGVY schemes and Feeder Separation scheme, it is estimated that total 1,67,187 distribution transformers will cater supply to various categories of consumers. Out of this 93508 DTRs will be metered which comes to 55.93%. It is to mention that all the distribution transformers being installed in rural areas against Feeder Separation and RGGVY schemes will be metered. Thus, by Dec.'2012 the percentage of meterization of agriculture dominating areas will be drastically improved.

Agriculture DTR:-

Sample data of metered DTRs which have been regularly monitored over whole of year 2010-11 and data for un-metered Domestic Light & Fan category of consumers

connected to metered DTRs is furnished in the petition. Consumption pattern on the basis of above data is as follows:

Sr. No.	Category	No. of DTRs	Consumers	Consumption
1.	Un-metered agriculture in Rural area	142	635	156 units/hp/ month
2	Un-metered DL & F in Rural area	19	889	181units/month/consumer
3	Un-metered DL & F in Town area	35	2103	340 units/month/consumer

A total of 8847 nos. of agriculture DTRs have been metered. It is also to mention here that two contracts for installation of AMR meters on distribution transformer installed on pre-dominantly agriculture feeders with two years energy audit have been awarded to M/s Omni Agate System, Pvt. Limited, Chennai and M/s Genus Power Infrastructure Ltd., Jaipur. Under these contracts, installation of 7,500 AMR meters is completed and data transfer has been started in installments. Licensee has collected 580 No. of AMR data from April to October, 2011 from M/s Omne Agate System and 186 No. AMR data from M/s Genus Power Infrastructure Ltd., for the period from April to October 2011. Similarly, for the month of October, 2011, 362 AMR data from M/s Genus Power have been collected and analysis done. These meters are capturing the consumption of DTR and record maximum demand on this DTR. Based on these two parameters average consumption KWH per KVA has been calculated. The result of this study is as follows:-

Study R	Study Result of Metered DTR – Period April – Oct. 2011									
S. No.	No. of	KVA of	Averag	e consu	mption	KWH/j	per K.V	A. on t	he	Average
	D.T.R.	installed	basis of	record	ed maxi	mum d	emand			KWH/
		DTR	April	May	June	July	Aug.	Sept.	Oct.	Month April-
			' 11	' 11	' 11	' 11	'11	' 11	'11	Oct. 2011
1	580	46350	120	124	96	128	154	151	136	130
2	186	15414	136	158	124	155	164	154	109	143
3	362	29832							128	128
Total	1128	91596	128	141	110	142	159	153	124	137

From the above two studies, it is clear that consumption of un-metered agriculture connections in unit/HP/month is 156 units/HP/month for year 2010-11 and 137 units/KVA on the basis of recorded maximum demand for the period April '11 to Oct,11. The Commission is therefore requested to consider revising the billing norms of unmetered category of agriculture consumers.

Commission's observations/ directions: It is observed that the results so far achieved in meterisation of un-metered connections are far from satisfactory. The Commission finds

the attitude of the Discoms on this issue totally untenable. The Discoms have been time and again assuring to improve the meterisation status, however the achievements so far are unsatisfactory. The status of meterisation of unmetered domestic connections particularly in rural area has been very poor and continues to be so. The East Discom is the worst performer in this regard. The Discoms are also not paying due attention to improve meterisation of agricultural DTRs, 33 kV and 11kV feeders so as to ensure proper energy auditing. The targets proposed for completion of meterisation particularly for unmetered rural domestic consumers are unacceptable. The Commission finds the plea of non availability of funds for meterisation totally without merit in backdrop of huge capex being under taken by Discoms. The management of these Companies must realise that there they are contravening and are in default of Sec 55 of the EA, 2003. They must demonstrate on best effort basis, their will and intent to comply failing which they shall be liable for being dealt with appropriately as per provision of the Act. The Commission would like to take this issue separately with the Discoms and if it finds that improvements are not to the desired level, it may take stringent action. The Discoms are directed to file concrete month wise plans/ targets for meterisation of un-metered domestic connections, agricultural DTRs, 33kV and 11kV feeders within a month of issue of this Order so as to ensure that 100% meterisation in this regard is achieved by March, 2013.

8.3 Capex. plan for reduction of technical losses:

Commission's directives:

The Licensees are directed to file the progress of Capex during the year FY11-12 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.

Discoms' response:

East Discom: As per the directives the comprehensive Capex plan for the year FY 2011-12 to 2015-16 has been submitted to the Commission vide letter no. CE (W&P)-EZ letter no. 6520 dated 30/08/2011 in accordance with the Regulation.

West Discom: The Discom has taken a prompt action to file a capex. plan before the Commission for *the* period 11-12 to 16-17 *covering* progress achieved in the above capex. during FY 10-11. The Commission has desired to file Capex Plan in the form of petition and the same is being prepared and will be filed very shortly covering all ongoing schemes in the company.

Central Discom: Progress of Capex plan for the year ending on 31st March 11 & for the quarter ending June 2011 has been submitted to the Commission vide letter No.CMD/MK/Works/127,dated 30/04/2011 & CMD/MK/Works/751 dated 12/09/2011. 12th Five year CAPEX Plan from FY 2012-13 to FY 2016-17 has been submitted to State Govt. vide No. CMD/MK/Works/11-12/744 dated 07/09/2011.

Commission's observations/ directions: The plans as submitted by the Discoms were reviewed by the Commission and the Discoms were directed to ensure that these plans include provisions for 100% meterisation of un-metered connections including meterisation of agricultural DTRs. The matter is under further review of the Commission.

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

Commission Directives:

The Commission 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.

Discoms' response:

East Discom: Presently the meters capable of recording the maximum demand are of the order of 12000 and form a substantial percentage (80% of the overall figures). Supply of 13000 nos. of MD based meters already ordered on M/s Genus Meters is expected within 2 months. It is being ensured that the consumers having load more than 10kW are provided with the said type of meters up to March'2012.

West Discom' response: The Discom is keen to comply the direction. The process has started to install meters on connections having a connected load of 10 KW in Indore city.

Central Discom: All the domestic connections will be provided with demand meter which are capable of recording maximum demand.

Commission's observations/ directions: One of the Discom has proposed contract demand based tariff for domestic consumers. However as may be seen from the status reported, it would be premature to introduce such tariff unless all such consumers are provided with appropriate meters. The Discoms are directed to complete the work in FY 12-13.

8.5 Segregation of rural feeders into agricultural and others:

Commission's Directives:

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.

Discoms' response:

East Discom: The current status about feeder separation project is as under:-

	Progress of Feeder Separation Scheme under FSP – As on 23-09-2011								
	Survey Details				No. of	Erection Status			
No. of feeders	No. of	HT Line	DTR	LT Line	Consumers	РТ	PE	Stringing	
	feeders	(km)	(Nos.)	(km)	(Nos.)	(Nos.)	(Nos.)	(km)	
1645	435	137077	151609	159945	666641	52927	13006	61.36	

Further as per the directives the progress of implementation of Feeder Separation Scheme will be included in progress report on Capex.

West Discom: The Discom has launched feeder separation schemes in two phases. The phase one covers Indore, Dhar, Khandwa, Khargone, Barwani, Burhanpur and Ratlam districts while phase two of the scheme covers Ujjain, Dewas, Mandsaur, Neemuch, Alirajpur, Jhabua and Shajapur Districts. The tie up of finance for the scheme has be done from REC and ADB in phase one and phase two respectively. The awards of both phases have been placed an agreement also executed with the agency and the works are under execution. In first phase of feeder separation scheme, 422 KM 11KV line, 262 Nos. of DTRs and 2975 KM conversion of bare LT conductor into AB cables and 3925 Nos. of new connections have been so far completed, while awards in second phase for 07 No. of districts have been placed and mobilization advance have also been released to the firm. The materials required for execution are being procured by the firms and the survey is under progress. Further, the work of 20 Nos. 11KV feeders coming 440 Nos. of villages has already been completed.

Central Discom: The scheme is being implemented in two phases, details of which are furnished in petition No. 63/2010. Further physical & financial progress of the scheme is being reported to the Commission through CAPEX Progress on quarterly basis. Brief summary of the scheme is as follows: -

Phase	Districts covered	Contract Amount in Crore	Expected date of completion	Remark
Phase I	Bhopal, Harda, Raisen, Vidisha, Hoshangabad, Betul, Sehore	438	July 2012	Work order to all agencies has been issued. Work of 35 Crore have been completed, which is 8 %.
Phase II	Guna, Ashok Nagar, Rajgarh, Datia, Bhind, Morena, Shivpuri, Sheopur and Gwalior	699	Feb 2013	Work order to all agencies has been issued in July 2011. Mobilization advance has also been disbursed in August 2011.

Under this scheme, 1315 numbers of 11 K.V feeders will be separated with creation of 920 new additional bays. Provision of 16821 KM. 11 KV line, 28960 Distribution Transformers, 17742 KM LT-AB Cable & 694160 Energy meters has been done to meet feeder separation target by 3 July 2012 & Feb. 2013 for I & II phase respectively.

Commission's observations/ directions: The Discoms have indicated that they are going in a big way for implementation of the feeder separation scheme having completion target by Jan, 2013. The Discoms are directed to submit the progress regularly.

8.6 Minimum supply hours:

Commission's directives:

The Commission directs the Licensees to maintain the minimum daily supply hours as directed in the tariff order for FY 10-11 during this year also.

Discoms' response:

East Discom: The Power Supply in the East Discom area is regulated as per the availability and demand in co-ordination with the SLDC. Due to financial constraints, there may be slippage on sudden increase of demand; however the East Discom is making all sincere efforts to ensure the minimum supply hours as prescribed by the Commission.

The month-wise average supply hours for the financial year 2011-12 up to Oct'2011 are produced below:-

Month	СНО	DHQ	THQ	RURAL(3-phase)
April 11	23:11	21:01	16:36	12:29
May 11	23:30	21:57	16:36	12:28
June 11	23:55	22:59	20:18	15:56
July 11	23:41	22:45	17:36	13:35
August 11	23:54	23:45	19:41	15:38
September 11	24:00:00	24:00:00	22:51	21:38
October 11	23:15	20:48	14:04	9:36

	MONTH WISE AVERAGE SUPPLY HOURS (YEAR 2011-12)							
S.NO	MONTH	RURAL	T.HQ	D.HQ	C.HQ			
1	April 11	11:47	16:01	20:51	22:18			
2	May 11	12:19	16:33	21:30	22:26			
3	June 11	14:28	18:40	22:33	23:24			
4	July 11	13:23	17:35	21:50	22:54			
5	August 11	16:38	19:54	23:26	23:38			
6	September 11	20:26	21:58	23:59	24:00:00			
7	October 11	11:28	15:00	21:44	22:58			
	AVERAGE	14:21	17:57	22:16	22:58			

West Discom: The supply hours in the West Discom from April 11 to Oct. 11 has been as given below:-

Central Discom: Average supply hours for the year 2010-11 and 2011-12 have been as follows:

AVERAGE SUPPLY HOURS 2010-11							
S. No.	Comm. H.Q.	Distt. H.Q.	Tehsil H.Q.	Rural (3Ph + 1Ph)			
	22.32	20.31	16.31	11.33			
	Average						

	SUPPLY HOURS – 2011-12								
S. No.	Month	Comm.	Distt.	Tehsil	Rural (3Ph +				
NO.		HQ	HQ	HQ	(3Pff + 1Ph)				
1	April 11	22.55	21.02	17.44	12.54				
2	May 11	22.48	20.29	16.38	12.14				
3	June 11	22.56	20.45	17.34	14.13				
4	July 11	23.17	21.14	17.43	13.15				
5	Aug. 11	23.44	22.56	20.10	16.11				
6	Sep.11	24.00	24.00	22.22	22.27				

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/ directions: The Commission directs the Licensees to maintain the minimum daily supply hours as directed in the tariff order for FY 11-12 during this year also.

8.7 Appointment of Franchisees:

Commission's Directives:

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.

Discoms' response:

East Discom: It is submitted that there are 27 DTR level input based franchisees in working.

West Discom: (a) Districts and City Franchisees: NIT issued on 30.09.11 for Ujjain City and pre bid conference was held on 15.10.11. Good response was received for this NIT and large numbers of Companies have shown their interest for this NIT. Based upon the discussions held in the pre bid conference the terms and conditions of RFP are to be revised and hence bid dead-lines have been extended till further instructions. Provision for capital expenditure has been made in the NITs issued for district franchisee as well as city franchisee. (b) Rural Franchisees: 2 new rural franchises have been added in the current year namely Bhasner and Temla in Khargone District. Training camp for the Sarpanchs of various Gram Panchayats have been organized so as to motivate the Panchyat to avail franchisee for their areas. New rural franchisee policy has been approved by the BoD of West Discom and same has been circulated in the month of Oct. 2011. For the new franchise policy input will be measured at 11KV level and bill to the franchise will be prepared on the basis of average billing rate of the consumer. Notices have been issued to existing franchisees to accept the new 11KV in put based franchisee scheme. 15 new Gram Panchayats have come forward in Ratlam District to opt for the rural franchisee namely Palsoda, Bangrod, Nalkui, Bhati Barodiya, Kua Zangar, Munderi, Dholka, Aaliniya, Bilpank, Dhikwa, Badnara, Sinoda, Simlawada, Birmawal and Dantodiya. Adequate care has been taken to safeguard interest of the consumers in franchisee area. In fact 3 hours extra supply is being given to franchisee area as compared to supply given to other rural areas and consumers satisfaction level has increased to great extent in such areas.

Central Discom: Initially, as a pilot project, the Company had appointed zone level Franchisee, with an input based franchisee model i.e. metering at 11 kV feeders through meters installed at input point of supply. 5 Franchisees were appointed under Central Discom, Bhopal on input based model details given below:-

S1.	Name of DC/Zone awarded to	Name and Address of	Operational date of
No.	franchisee	Franchisee	Franchisee
1	Berasiya DC under O&M	Social Welfare Organization	1 st May, 2007
	Circle Bhopal	Vidisha	
2	Karond Zone under City Circle	Agrawal Power Bhopal	1 st October,2007
	Bhopal		
3	Chhola Zone under City Circle	Shyam Indus Power Solution	1 st February,2008
	Bhopal.	New Delhi	
4	Jahangirabad Zone under City	Zoom Developer Indore	1 st February,2008
	Circle Bhopal.		
5	Chandbadh Zone under City	Shyam Indus Power Solution	1 st March,2008
	Circle Bhopal.	New Delhi	

Presently only 2 no. Franchisees (at S. No. 2 & 3) are working. Franchisees shown at S. No. 1, 4 and 5 have discontinued before completing the tenure.

Proposal for New Franchisees: The Company has decided to appoint district level franchisees for Gwalior, Datia & Bhind district. For this, RFP has been issued with last date of submission of bids as 19/08/2011. Pre—bid conference with the prospective bidders has been concluded. Based on pre-bid conference discussion, the RFP needs further revision, which is under process.

Commission's observations/ **directions**: The status of appointment of franchisees is not very encouraging. The Commission would like to continue to review the status.

8.8 Issue of tariff card with first bill based on new tariff for the year 2009-2010:

Commission's Directives:

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.

Discoms' response:

East Discom: The Company has arranged to print the tariff cards at the corporate level and has provided the same to LT consumers through field units. The tariff booklet has been provided to all the HT consumers.

West Discom: The tariff card containing details of tariff applicable for various categories of consumers as per tariff order for FY 11-12 with the first bill issued to all consumers. The tariff card containing details of tariff applicable for various categories of consumers as per tariff order for FY 11-12 with the first bill issued to all consumers.

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/ **directions**: The Commission directs that the practice of providing tariff cards should be continued for tariff Order of FY 2012-13.

8.9 Filing of ARR and tariff proposals in Hindi language

Commission's Directives:

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.

Discoms' response:

East Discom: It is submitted that the filing has been made in English and sincere efforts will be made for conversion of summary of proposal into Hindi and will be filed before the issue of public notice.

West Discom: Hindi version of ARR will be submitted shortly.

Central Discom: For Hindi translation of ARR, contract has been awarded and Hindi version of ARR will be submitted shortly. Executive summary of the tariff proposal is submitted herewith.

Commission's observations/ directions: The Commission had directed the Discoms after receipt of ARR/ Tariff proposals to file Hindi version. Subsequently the Discoms have submitted the Hindi version which was made public. The next filing of ARR/ tariff proposals should be made in Hindi and English.

8.10 Accounting of rebates/incentives/ surcharge:

Commission's Directives:

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

Discoms' response:

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 are available in the submitted data.

West Discom: The Discom is implementing RAPDRP project in which M/s TCS is developing a billing soft ware. The feature like separate rebate/incentive/surcharge will be available in the unit developed software.

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/ directions: The West and Central Discoms have not submitted desired details. Discoms should at least submit details pertaining to HT consumers with their next ARR proposals.

8.11 Maintaining uniform accounts:

Commission's Directives:

The Commission 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.

Discoms' response:

East Discom: It is submitted that the three Distribution Companies are functioning independently w.e.f. 1st June'2005. Since different statutory auditors are functioning separately, therefore the Company is facing difficulty in compliance of the aforesaid directives.

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.

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/ **directions**: The Commission is not satisfied with the response and would like Discoms to bring parity in maintaining the accounts at an early date.

8.12 Compliance of Regulations:

Commission's Directives:

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.

Discoms' response:

Discoms' response: The petitions have been filed in accordance with the provisions of the Regulations along with additional submission.

Commission's observations/ **directions**: The compliance of the directives should be maintained in future also.

8.13 Mandatory demand based tariff for all Non-domestic LV consumers having load in excess of 25 HP

Commission's Directives:

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.

Discoms' response:

East Discom: It is submitted that meters have been installed on the consumer of non – domestic category having connected load above 25 HP do support recording of maximum demand.

West Discom: The Discom is making endeavour to provide demand based tariff meters on all NDL consumers having load in excess of 25HP.

Central Discom: All the high value L.T. consumers having connected load in excess of 25 H.P. are being provided with A.M.R. meters. For this, contract has been awarded to two different contractors. As on 30.06.2011, total 4666 AMR meters have been installed against contracted quantity of 8999. Further 31164 AMR meters against RAPDRP-B scheme will be installed by December, 2012.

Commission's observations/ **directions**: The compliance of the directives is yet to be done by the Central and West Discom. They are directed to comply this directive in FY 2012-13.

8.14 Removal of ceiling on connected load in LT demand based tariff

Commission's Directives:

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.

Discoms' response:

East Discom: The meters are already in existence from Secure, L&T and Genus for demand based LV consumers, but the petitioner does not support the idea of removing ceiling of connected load for demand based LV consumers.

West Discom: Directions are being complied.

Central Discom: Installation of demand based meters on all Non-domestic LV consumers having load in excess of 25 H.P. and installation of AMR based meters for all consumers who have opted demand based tariff is expected to be completed by Dec, 2012.

Commission's observations/ directions: The Commission has not considered the removal of ceiling on connected load in case of demand based tariff LT consumers for reasons explained in this Order in the Chapter on "Public objections and comments on Licensees petitions". However, the Commission directs that the compliance with regard to installation of AMR metering on all LT connections having demand based tariff having load in excess of 25 HP be ensured during FY 2012-13.

Annexure-1 (List of Objectors)

LIST OF OBJECTORS OF EAST DISCOM

S. No.	Name of the Objector and Address			
1	Shri Ravidutt Singh, Bhartiya Kisan Sangh, Mahakaushal Prant, Sirmour Raod Khutehi, Near Panchvati Petrol Pump, Rewa			
2	Shri Ramesh Patel, Adhyaksh, Bhartiya Kisan Union, Vill & Post- Junwani Kalan, Teh. Sihora, Distt. Jabalpur - 483 225			
3	Shri Nirmal Lohiya, Tal Darwaza, Tikamgarh (M.P.)			
4	Shri Madanmohan Shakargaye, 2116, Wright Town, Jabalpur			
5	Shri C.L. Swarnkar, Ex. CE, MPSEB, Near Rachna Medical Store, Nehanagar, Makronia, Distt. Sagar			
6	Shri Rajnarayan Bhardwaj, Plot No. 453, Near Patel Aata Chakki, Sanjeevani Nagar, Gadha, Jabalpur			
7	Dr. P.G. Najpande, Nagrik Upbhokta Margdarshak Manch, 6/47, Ramnagar, Adhartaal, Jabalpur-482004			
8	Shri Pawan Jain, General Secretary, Madhya Pradesh Vidyut Mandal Abhiyanta Sangh, Shade No. 13, Vidyut Nagar, P.O. Rampur, Jabalpur			
9	M/s. Prism Cement Ltd. Mankahari, Satna (MP)			
10	Shri D.R. Jeswani, General Secretary, M/s. Mahakoshal Udyog Sangh, Industrial Area, Jabalpur 482010			
11	Shri Ravi Gupta, President, Mahakoshal Chamber of Commerce and Industries, 'Chamber Bhavan', Civic Centre, Jabalpur (M.P.)			
12	M/s. Jabalpur Entertainment Complexes Pvt. Ltd., South Avenue Mall, Adjoining Perfect Pottery, Narmada Road, Jabalpur 482008			
13	Shri Ratan Lal, Chief Electrical Distribution Engineer, Jabalpur			
14	The Chief Engineer (C&CM), M.P. Power Transmission Company Ltd., Block No.2, Shakti Bhawan, Rampur, Jabalpur-482 008			
15	M/s. Gyan Ganga, Institute of Technology & Sciences, 13, Wardhman Tower, Russel Chowk, Napier Town, Jabalpur – 482001			
16	Shri G.C. Jain, Vice President (Works), M/s. HJI - Division of Orient Paper Mills, Amlai Paper Mills, Pin: 484117, Dist. Anuppur (MP)			
17	Shri Shailendra Rajput, Shiv Nagar Damoh Naka, Jabalpur			
18	Shri Pankaj Pandey, Congress Parshad and Others, 975, Shakar Ghee Bhandar, Gadaphatak, Jabalpur (M.P.)			
19	Shri R.N. Dixit, Chairman, Upbhokta Sanrakshak Parishad, 348, Bioara Niwas, Sathiya Kuan, Jabalpur			

LIST OF OBJECTORS OF WEST DISCOM			
S.No.	Name of the Objector and Address		
1	Shri Raghunath Vishwanath Patil, Chairman, Pragatisheel Kisan Sanghathan, Dapora Zila Burhanpur (M.P.)		
2	Shri Shiv Kumar Singh Kushwaha, Sanrakshak, Pragatisheel Kisan Sanghathan, Dapora, Zila Burhanpur (M.P.)		
3	Shri Tulsiram Silavat, MLA, Sanver, 80, Agrawal Nagar, Indore		
4	Shri Lokendra Dhangar, Gram Kesharpur, Teh.Anjad, Zila Badwani (M.P.)		
5	Shri Kadu Bhagwan Patil, Vill. Basad, Nepanagar, Distt. Burhanpur		
6	Shri Aatmaram Ganpatrao Patil, Vill. Basad, Nepanagar, Distt. Burhanpur		
7	Shri Madharao Ganpatrao Patil, Vill. Basad, Teh. Nepanagar, Distt. Burhanpur		
8	Shri Dhonduji Shripatrao, Vill. Basad, Teh. Nepanagar, Distt. Burhanpur		
9	Shri Manikrao Ganpatrao Patil, Vill. Basad, Teh. Nepanagar, Distt. Burhanpur		
10	Shri Gyaneshwar Patil, Vill. Basad, Teh. Nepanagar, Distt. Burhanpur		
11	Shri Anil Parasram Patil, Vill. Basad, Teh. Nepanagar, Distt. Burhanpur		
12	Shri Manohar Choudhary, Adhyaksh, Kisan Vikas Manch, Loni, Distt. Burhanpur		
13	Shri Madhukar Kashinath Choudhary, Loni, Distt. Burhanpur		
14	Shri Uday Eknath Choudhry, Loni Distt. Burhanpur		
15	Shri Eknath Tukaram Choudhary, Loni, Distt. Burhanpur		
16	Shri Shantaram Tukaram Choudhary, Loni Distt. Burhanpur		
17	Shri Naveen Kumar Patidar, 8, Sardar Patel Colony, Sindhipura, Burhanpur		
18	Shri S.M. Jain, President, M/s.All India Induction Furnaces Association, M.P. Chapter, C/o. Venus Alloys Pvt. Ltd., 67, Industrial Area, Mandsaur - 458001 (M.P.)		
19	Shri S.M. Jain, Director, M/s. Venus Alloys Pvt. Ltd., 67, Industrial Area, Mandsaur - 458001 (M.P.)		
20	Shri Pawan Singhania, Director, M/s. Jaideep Ispat & Alloys Pvt. Ltd., Unit-III, 669-670, Sector III, Pithampur, DistDhar (M.P.)- 454774		
21	Shri Vimal Todi, Director, M/s. Moira Steels Ltd., Village Sejwaya, Post - Ghatabillod, Dist. Dhar (M.P. – 454773		
22	Shri Vimal Todi, Director, M/s. Bharti Ingot Pvt. Ltd., 808, F, Sector-III, Pithampur, Dist. Dhar (M.P.) – 454773		
23	Shri Pankaj Bansal, Director, M/s. Shivangi Rolling Mills Pvt. Ltd., 16/9, Race Course Road, Tongia Compound, Indore (M.P.)		

24	Shri Inder Bir Singh Nayyar, Secretary, M/s. Indore Poultry Federation, 8/3, Vikas Rekha Complex, Khatiwala Tank, Indore		
25	Shri Sunil Mehta, M/s. Samrat Poultry, 73-D, Premnagar, Indore		
26	M/s. Choice Poultry Form, Vill. Tillore Khurd, Distt. Indore		
27	Shri Hemant Solanki, M/s. Indore Poultry, 110E, Bakhtawar Raw Nagar, Indore		
28	M/s. Ideal Farm, 330, Vishnupuri Annex. Indore		
29	M/s. Simran Farm Ltd, 1-B, Vikas Rekha Complex, Khatiwala Tank, Indore		
30	Shri Sunil Jaiswal, Orient Foods & Feeds, 145, Sundram Complex, Bhawarkuan Main Road, Indore		
31	Shri Ajay Jaiswal, M/s. Orient Traders, 16/2, Maulk Bagh Road, Indore		
32	Shri Darsan Singh, M/s. Sanjot Poultry, 66-67, Vishnupuri Annex, Indore		
33	Shri Shrichand Makhija, M/s. Highness Poultry, Satnam Villa, 117-Triveni Colony, Indore		
34	M/s. Trilok Poultry, 4-Vishnupuri, Gurukripa Apartments Ground Floor, Indore		
35	Shri Sunil Sachdev, M/s. Saket Poultry, 28/41, Veer Sawarkar Nagar, Prakash Avenue Plot No. 401, Indore		
36	Shri Kishore Goyal, President, M/s. Agrawal Parisad (Regd), 18 Vaibhav Chamber, 1st Floor, 7/1, Usha Ganj, Indore 452001		
37	Shri R. N. Sharma, Adhyaksh Varisth Nagrik Manch, 37, Prakash Nagar, Navlakha, Indore 452001		
38	MP Vidyut Mandal Pensioners Association, C-14/14, Mahakal Commercial Centre, Nanakheda, Ujjain 456001		
39	The Secretary, Vidyut Upbhokta Jagriti Samiti, 23/2, Shanku Marg, Freeganj, Ujjain		
40	Shri Sanjay Kumar Agrawal, M/s. Upbhokta Hith Prahari, 970, Manak Chowk, Mhow, Indore		
41	Shri Sushil Sharma, Pranthiya Mahamantri, Vidyut Mandal Karmachari Union M.P., 197, K Sector, A Scheme No.71, Gumasta Nagar, Main Road, Indore		
42	Shri Praveen Kumar Jain, 23/2, Shanku Marg, Freeganj, Ujjain		
43	Shri Kailash Khandelwal, M.P. Cotton Processors and Traders Association, C/s. Vikash Cotton Fibers, Verla Road, Sendhwa, Distt. Barwani 451666		
44	Shri Prahalad Tayal, Sendhwa Cotton Association, C/s. Pradeep Ctex, Verla Road, Sendhwa, Distt. Barwani 451666		
45	Shri Manjit Singh Chawala, Adhyaksh, Mandi Vyapari Sangh, Vyapari Vishranti Bhawan, Krishi Upaj Mandi Parisar, Bistan Road, Khargone, Distt. Khargone-451 001		

46	Dr. Gautam Kothari, Rashtra Kshetra Karma Nishtha Sangh "Rakshak", 231, Saket Nagar, Indore - 452 018			
47	Dr. Gautam Kothari, Pithampur Audhogik Sangathan, 231, Saket Nagar, Indore - 452 018			
48	Dr. Gautam Kothari, Hon. Secretary, M/s. Electricity Consumers Society, C/o All India Manufacturers Association (M.P. State Board), Industrial Estate, Pologround, Indore - 452 015			
49	Shri M.C. Rawat, Secretary, The Madhya Pradesh Textile Mills Association, 56/1, Jall Sabhagraha, South Tukoganj, Indore - 452 001 (M.P.)			
50	M/s. Idea Cellular Ltd C/o. 268, Anoop Nagar, Indore 452 008			
51	M/s. Kirloskar Brothers Ltd., Behind Railway Station, Dewas - 455 001			
52	M/s. Grasim Industries, (Chemical Division), Nagda. Distt. Ujjain			
53	Shri B.L. Jaju, President, M/s. MP Cold Storage, 115-B, Industrial State, Pologround, Indore			
54	Shri Yogendra Sharma, Commissioner, Indore Municipal Corporation, Indore			
55	Shri Kishore Kodwani, Vikash Mitra Dristi 2050, 301, Pushpdeep Apartment, 14, Sarvodaya Nagar, Indore			
56	Shri R.S. Goyal, 51, Prakash Nagar, Nemawar Road, Indore			
57	Shri R.C. Somani, Sukhraj, 67 C H Scheme, No.74 C Vijay Nagar, Indore			
58	M/s. Oasis Distilleries Limited, H-102, B-2, Metro Towers, Vijay Nagar, Indore-10			
59	M/s. Dhanlaxmi Solvex Pvt. Ltd., 201, Bansi Plaza, 581, M.G. Road, Indore - 452 001			
60	Shri Dilip Jain, M/s. Mahavir Cot Fibers, Pansemal Khetia, Distt. Barwani			
61	M/s. Kasyap Sweetners Limited, Chetanya Gram, Badnawar, Distt. Dhar 454660			
62	Shri Sanjay Mittal, M/s. Mittal Oil Industries, Pansemal Road, Khetia Distt. Barwani - 451 881			
63	Shri Sanjay Agrawal, Adhyaksh, Krishi Upaj Mandi Vyapari Sangh, Khetia, Distt. Barwani 451 881			
64	Shri Rasdeep Singh Chawla, M/s. Harman Cottex, Indore			
65	M/s. Millennium Structurals (I) Ltd. 101-103, Indore Trade Centre, 3/2, South Tukoganj, Indore 452006			
66	M/s. Powerage Towers Ltd., 101-103, Indore Trade Centre 3/2, South Tukoganj, Indore 452006			
67	M/s. Kapil Steels Limited, 101-103, Indore Trade Centre 3/2, South Tukoganj, Indore 452006			
68	Shri Manish Shrimali, M/s. Tirupati Fibers, Julwania Road, Khargone (M.P.)			

69	Shri S.K. Nilose, General Manager - Works, M/s. Divya Jyoti Industries Ltd. 92/3, Sapna Sangeeta Main Road, Near Tanisq Showroom, Indore
70	Shri Pawan Goyal, M/s. Pawan Cotton Industries, Verla Road, Sendhwa, Distt. Barwani
71	M/s. Masand Agro Equipments Pvt. Ltd., 70, Shastri Market, Indore (MP) - 452 007
72	Shri Ashok Badjatiya, President, M/s. Association of Industries, Madhya Pradesh
73	Shri Ashok Khandelia, President, M/s. Association of Industries, Dewas, 1/B/1, 1/B/2 A I.S. Gajra Industrial Area No.1, A.B. Road, Dewas
74	Shri Satish Mittal, President, M/s. Iron & Steel Re-Roller Association (Regd.), 61/1, Sanwer Road, Sector "F" Opp. Shri Ganesh Tol Kanta, Indore - 452015
75	Shri Sudhir Bhai Goyal, Executive Director, Sevadham Ashram, 104, Durga Plaza, Dewas Road, Freeganj, Ujjain.
76	Shri Harishankar Suryavanshi, Chairman, M/s. Indore Electric Contractor Association, 236, Sector-B, Slice-2, Scheme No.78, Near Ujala Electric, Indore (M.P.)
77	Shri Pramod Chourasia, Chairman, Vidyut Upbhokta Association, 23, Nagar Nigam Market, Zanjeer Chauraha, Indore (M.P.)
78	Shri Bal Krishna S/o Maniramji Rathore, Nandlal Chowk, Hathod, Zila Indore.
79	Shri Harilal Saini, Chairman, Upbhokta Manch, 900, Chota Bazaar, Mhow - 453 441 Zila Indore
80	Shri Kailash Yadav, Varishtha Parshad, Nagar Palik Nigam, Indore.
81	Shri Poonam Chand Bhandari, 28-A, Sai Nath Colony, Indore
82	Shri Mannalal Patidar, Franchisee, Rupakheda Vidyut Vitaran Samiti, Rupakheda

	LIST OF OBJECTORS OF CENTRAL DISCOM			
S.No.	Name of the objector and Address			
1	Shri Chandrakant Gaur, Madhya Kshetra Vidyut Prabhari, Bhartiya Kishan Sangh, D-104/4, Shivaji Nagar, Bhopal			
2	Shri Kantilal Bhuria, Shri Manak Agrawal, Shri P.C. Sharma, Shri Satyadev Katare, Shri Jodharam Gurjar, Shri Abhay Dubey, Shri J.P. Dhanopia, Shri Sanjay Aliya, Shri Munidra Dwivedi, Shri Shantilal Padiyar, Shri Haidaryar Khan, Shri Pramod Gugaliya and other members, Madhya Pradesh Congress Committee, Indira Bhavan, Shivaji Nagar, Bhopal			
3	Shri Suhas Virani, Secretary, Bhopal Hostel Owner's Association, C/o Vindhyashree Girls Hostel, 50, Zone-II, M.P. Nagar, Bhopal-462011			
4	Shri Omprakash Nahar, 168/10, Vihari Ji Marg, Datiya, M.P.			
5	Shri N.K.Jain, Advocate, B-6, Alkapuri, Bhopal 462024.			
6	Shri Kuldeep Singh Gautam, Halalpur, Post Bairagarh, Bhopal			
7	Shri Praveen Saxena, E-7/78, Arera Colony, Bhopal - 462016			
8	Dr. Ajay Gupta, M-233, Gautam Nagar, P.O. Govindpura, Bhopal-462023			
9	Shri Satish Govila, 10, Kantinagar, Gwalior – 474002			
10	The Director, Horticulture, Govt. of M.P., Bhopal			
11	Shri I.C. Jindal, Director, Magnum Iron & Steel Pvt. Ltd. A-4, Industrial Area, Banmore, Distt. Morena			
12	Shri Saurabh Agarwal, M/s. Saurabh Metals Pvt. Ltd., 45, Ancillary Industrial Estate, Habibganj, Bhopal - 462 024			
13	Shri Yogesh Goel, Authorized Representative, Govindpura Industries Association, Bhopal, Association Complex, Industrial Area, Govindpura, Bhopal - 462023 (MP)			
14	Shri C.B. Malpani, Gen. Secretary, M/s. Association of Industries, Plot No. 85-A, A Sector, Industrial Area, Mandideep 462 046			
15	Shri Vipin Kumar Jain, Secretary Gen. MP Small Scale Industries Organisation, E-2/30, Arera Colony, Bhopal - 462 016			
16	Shri Vijendra Puri, Secretary, M/s. Federation of Madhya Pradesh Chamber of Commerce & Industry, Udyog Bhawan, 2nd Floor, 129-A, Malviya Nagar, Bhopal - 462 003			
17	Shri S. Pal, Chief Executive, Vardhman Yarns, Plot No. A1-A6, Industrial Area, Phase-II, Satlapur, Mandideep - 462 046			
18	Shri Amish Dave, M/s. Tata Telly Services Limited, Chinar Fortune City, Near Vrindavan Dhaba, Hoshangabad Road, Bhopal - 462 026			

19	Shri Ashish Ghildiyal M/s. Viom Networks Ltd., 162, Modi Heights, 1st & 2nd Floor, Near PF Office, M.P. Nagar, Zone-II, Bhopal – 462011			
20	Dr. Praveen Agrawal, M/s. Madhya Pradesh Chamber of Commerce & Industry, Chamber Bhavan, Sanatan Dharm Mandir Road, Gwalior - 474009			
21	Shri Manish Harshe, B-10, Sarvdharm colony, Bhopal			
22	Shri Narendra Kumar Soni, Secretary, M.P. State, M/s. Laghu Udyog Bharti M.P., D-100/45, Shivaji Nagar, Bhopal - 462016 (M.P.)			
23	Shri Shrichandra Lalwani, Mahamantri, M.P. Atta Avan Masala Chakki Pisayee Mahasangh Samiti, 35, Main Bazaar, Jehangirabad, Bhopal			
24	Shri Firoz Alam, 108, Bright Colony, Idgah Hills, Bhopal			
25	The Principal, Miriam School for the Mentally Handicapped, B- Block, Asha Niketan Complex, E/6, Arera Colony, Bhopal (M.P.)			
26	Shri Ajay Gond, General Secretary, Rashtriya Jagran Manch, Mandir Shri Dharnidhar Pachisa Ghat, Fathegarh, Bhopal.			
27	Shri Rajendra Raj Saxena, 3, Netaji Subhash Lane, Jehangirabad, Bhopal.			
28	Shri P. Jetley C/o Kamal Rathi, Bhopal.			
29	Shri Ajay Shrivastava, Pradesh Mahamantri, Loktantrik Samajvadi Party, F48/10, South T.T. Nagar, Bhopal.			

TARIFF SCHEDULES

Annexure-2 (Tariff Schedules for Low Tension Consumers)

ANNEXURE TO THE TARIFF ORDER PASSED BY MPERC FOR FINANCIAL YEAR 2012-13

MADHYA PRADESH ELECTRICITY REGULATORY COMMISSION TARIFF SCHEDULES FOR LOW TENSION CONSUMERS

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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:

 $\underline{LV~1.1}$ (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

(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	340	40 per connection	25 per connection
51 to 100 units	385	65 per connection	40 per connection

Slabs of monthly consumption	Energy charges with telescopic benefit (paise per unit)	Monthly Fixed Charges (in Rs)	
	Urban/ Rural areas		
101 to 300 units	480	75 for each 0.5 KW of authorised	50 for each 0.5 KW of authorised
		load	load
301 to 500 units	520	80 for each 0.5 KW of authorised load	70 for each 0.5 KW of authorised load
Above 500 units	550	85 for each 0.5 KW of authorised load	70 for each 0.5 KW of authorised load

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

<u>Note:</u> 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).	675	300 for each one KW of sanctioned or connected or recorded load whichever is highest	200 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.	675	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 @ 420 per unit	75 per connection
Un-metered connection in rural areas	42 units @ 340 per unit	30 per connection

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	520	90 per KW	60 per KW	
OPTIONAL Demand based tariff for Contract demand above 10KW	520	180 per KW or 144 per kVA of billing demand	120 per KW or 96 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, Parlours, All Offices, Hospitals and medical care facilities including Primary Health Centers, clinics, nursing homes belonging to either Govt. or public or 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.), bottling plants, marriage gardens, marriage houses, advertisement services, advertisement boards/ hoardings, training or coaching institutes, petrol pumps and service Stations, tailoring shops, laundries, gymnasiums, health clubs, telecom towers for mobile communication 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)	Monthly Fixed charges (in Rs)		
Urban/ Rural areas		Urban areas	Rural areas	
On all units if monthly consumption is not more than 50 units	540	50 per KW	30 per KW	
On all units in case monthly consumption exceeds 50 units	600	85 per KW	60 per KW	
OPTIONAL Demand based tariff for contract demand above 10 KW	525	190 per KW or 152 per kVA of billing demand	120 per KW or 96 per kVA of billing demand	
Temporary connections including Multi point temporary connection at LT for Mela*	715	130 per KW or part thereof of sanctioned or connected or recorded load whichever is highest	85 per KW or part thereof of sanctioned or connected or recorded load whichever is highest	

Sub category	Energy charges (paise/unit)	Fixed charges (in Rs)	
	Urban/ Rural areas	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	715 (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. 50 for each KW or part thereof of sanctioned or connected or recorded load whichever is highest for each 24 hours duration or part thereof	Rs. 30 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	450		
Three Phase	650		
Dental X-ray machine	50		

^{*}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 paisa 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. shall not fall in this category. These shall be 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 entire consumption shall be billed for purpose for which the tariff is higher.

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: For Public Water Works and Street Light

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	365	140	No	
Municipality/ Nagar Panchayat	365	120	Minimum Charges	
Gram Panchayat	365	50		
Temporary supply	1.3 times the applicable tariff			
LV 3.2 Street light				
Municipal Corporation/ Cantonment board	375	230	No	
Municipality/ Nagar Panchayat	375	210	Minimum Charges	
Gram Panchayat	375	50	1	

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 are verified 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.

<u>Tariff Schedule – LV-4</u> <u>LT INDUSTRIAL</u>

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 to produce other end products of milk other than chilling, pasteurization etc.)

Tariff: For Non seasonal and seasonal consumers

	Category of consumers	Monthly Fixed Charges (in Rs.)		Energy Charges (paise per unit) –	
		Urban Areas	Rural Areas	Urban / Rural Area	
4.1	Non seasonal consum	ners			
4.1 a	LT industries having connected load up to 25 HP	90 per HP	30 per HP	400	
4.1b (i)	Demand based tariff (Contract demand and connected load up to 100HP)	220 per kW or 176 per kVA of billing demand	110 per kW or 88 per kVA of billing demand	510	
4.1b (ii)	Demand based tariff (Contract demand up to 100 HP and connected load more than 100 HP but not exceeding 150 HP)	300 per kW or 240 per kVA of billing demand	210 per kW or 168 per kVA of billing demand	525	
4.1 c	Demand based tariff (Contract demand more than 100 HP and up to 150 HP with connected not exceeding 150 HP) * (for existing consumers only)	300 per kW or 240 per kVA of billing demand	210 per kW or 168 per kVA of billing demand	525-	

	Category of consumers	Monthly Fixed Charges (in Rs.)		Energy Charges (paise per unit) –
		Urban Areas	Rural Areas	Urban / Rural Area
4.1 d	Temporary connection	1.3 times of the applicat	ble 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
		Normal tariff as for	Normal tariff as for	
		Non-seasonal	Non-seasonal	120 % of
		consumers on 10 % of	consumers on 10 %	normal tariff as
4.2 b	4.2 b During Off -season	contract demand or	of contract demand	for Non-
		actual recorded	or actual recorded	seasonal
		demand, whichever is	demand, whichever is	consumers
		more	more	

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 2012-13 within 60 days of issue of tariff order and inform the same to the licensee. 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 connections for nurseries, farms growing flowers/ plants/ saplings/ fruits, mushroom and grasslands.

The tariff **LV-5.3** shall apply to connection for fisheries ponds, aquaculture, sericulture, hatcheries, poultry farms, cattle breeding farms and those dairy units only where extraction of milk and its processing such as chilling, pasteurization etc. is done.

Tariff: For Agricultural and other than agricultural use

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	320
b)	Above 300 units up to 750 units in the month	NIL	375
b)	Rest of the units in the month	NIL	400
c)	Temporary connections	NIL	400
d)	DTR metered group consumers	NIL	300
5.2	Other than agricultural use- horticulture activity		
a)	First 300 units per month	NIL	320
b)	Above 300 units up to 750 units in the month	NIL	375
b)	Rest of the units in the month	NIL	400
c)	Temporary connections	NIL	400
5.3	For other than agricultural use		
a)	Up to 25 HP in urban areas	55 per HP	375
b)	Up to 25 HP in rural areas	20 per HP	375

S. No.	Sub-Category	Monthly Fixed charges (In Rs.)	Energy charges (paise per unit)
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	450
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	450

Basis of billing of energy of un-metered consumption of category LV 5.1:

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 to Sept	Oct to March	April to Sept	Oct to March	
	Permanent	90	170	50	150	
Three Phase	Temporary	175		155		
	Permanent	90	180	60	160	
Single Phase	Temporary	190		170		

Terms and conditions:

- 1.1 Agricultural 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 threshing 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.
- 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 labeled motors for pump sets	15 paise per unit
2.	ISI / BEE star labeled motors for pump sets and use of frictionless PVC pipes and foot valve	30 paise per unit
3.	ISI / BEE star labeled 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.

1.3 **Minimum consumption**

- (i) **For Metered agricultural consumers (LV-5.1 and LV-5.2):** The consumer shall guarantee a minimum consumption of 30 units per HP or part thereof of connected load per month for the months from April to September and 90 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 month.
- (ii) For other than agricultural use (LV-5.3):
- 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.
- 1.4 **Additional Charge for Excess Demand:** Shall be billed as given in the General Terms and Conditions of Low Tension tariff.

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.
- 1.6 One lamp up to 40 W is permitted at or near the pump in the power circuit.
- 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.
- 1.8 Other terms and conditions shall be as specified under General Terms and Conditions.

Madhya Pradesh Electricity Regulatory Commission

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 paisa shall be ignored and 50 paisa upwards shall be rounded off 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: Unless specified otherwise, 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. However for loads less than one kW/HP, it shall be treated as one kW/HP.

5. Method of billing of minimum consumption:

A. For metered agricultural consumers and other than agricultural consumers horticulture activity - LV 5.1 and LV 5.2: The consumer shall be billed minimum monthly consumption (kWh) specified for his category for the month in which his actual consumption is less than prescribed minimum consumption.

B. For other consumers where applicable:

- 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 is 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. 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 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.

	Actual	Cumulative	Higher	Already	
	cumulative	minimum	of 2	billed in	To be billed in
	consumption	consumption *	and 3	the year	the month = $(4-5)$
Month	(kwh)	(kwh)	(kwh)	(kwh)	(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.
- **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 lack. 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) paisa per unit shall be levied for the consumption of the entire installation during the month. However, no welding surcharge shall be levied when recorded power factor is 0.8 or more.
- (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 %	12 paise per unit concession on the normal energy
load factor on contract demand	charges for all energy consumption over and above
	25% load factor during the billing month
For load factor above 30% and up to 40 %	In addition to load factor concession available up to
load factor on contract demand	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	In addition to load factor concession available up to
contract demand	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:

	Monthly consumption X 100	
Load factor $(\%) = -$		
(11)	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.

- (I) 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 1.00 % 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.
- (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 2012-13

MADHYA PRADESH ELECTRICITY REGULATORY COMMISSION TARIFF SCHEDULES FOR HIGH TENSION CONSUMERS

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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	265	500

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 2012-13. 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	505	545	465
	33 kV supply	515	525	445
	132 kV supply	525	515	435
	220 kV supply	535	505	425

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
For supply at 220 / 132 kV	1620
For supply at 33 / 11 kV	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, 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)	ior consumption	Energy charges for consumption in excess of 50% load factor (Paise / unit)
3.1	Industrial			
	11 KV supply	225	510	450

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)
	33 KV supply	370	500	400
	132 KV supply	470	460	380
	220/400 KV supply	500	440	370
3.2	Non-Industrial			
	11 KV supply	190	540	465
	33 KV supply	300	515	450
	132 KV supply	425	480	415
3.3	Shopping Malls			
	11 KV supply	190	540	465
	33 KV supply	280	520	455
	132 KV	400	480	410
3.4	Power intensive industries			
	33 KV supply	435	395*	395
	132 KV supply	560	375*	375

^{*}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:

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
E on same la st	Rolling Mills	1200
For supply at 220/132 kV	Educational institutions	720
220/132 K V	Others	1800
E	Educational institutions	600
For supply at 33 / 11 kV	Contract demand up to 100 kVA	600
11 KV	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:

1 a1 1111.			
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	250	490	425
33 KV supply	280	480	410
During Off-Season			
11 KV supply	Rs. 250 on 10% of contract demand or actual recorded demand during the season, whichever is higher	588 i.e. 120% of seasonal energy charges	Not applicable
33 KV supply	Rs. 280 on 10% of contract demand or actual recorded demand during the season, whichever is higher	576 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 2012-13 within 60 days of issue of tariff order and inform the same to the licensee. 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)	0.
5.1	Public Water Works, Group In	rigation and Lift Irrigation S	chemes
	11 kV supply	170	400
	33 kV supply	190	380
	132 kV supply	210	360
5.2	Other than agricultural use		
	11 kV supply	190	405
	33 kV supply	210	385
	132 kV supply	230	370

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. that of 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 20 % 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	011011 800 (1101) 11 111 01	50% load factor	Energy charges for consumption in excess of 50% load factor
1	For Tariff Sub-Cate	 		(Paise / unit)
	202 202222 202 200			
	11 kV supply	215	465	410
	33 kV supply	230	440	390
	132 kV supply	245	425	375
2				,
	For Tariff Sub-Cate	gory 6.2	,	
	11 kV supply	145	470	415
	33 kV supply	150	460	405
	132 kV supply	155	445	390

Specific Terms and Conditions:

- (a) 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.
- **(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) 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.
- (d) Other terms and conditions shall be as specified under General Terms and Conditions of High Tension Tariff.

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Tariff Schedule – HV - 7

BULK SUPPLY TO EXEMPTEES

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 so	ection 13 of Electricity A	ct 2003
(a)	Co operative Societies having mixed use	240	350
(b)	Mixed domestic and agriculture use in rural areas notified by State Government (maximum 10 % non domestic use permitted)	140	290
(c)	Mixed domestic and non domestic use (limited to 10 % of total) in urban areas	180	350

Terms and Conditions:

- (a) 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.
- **(b)** Other terms and conditions shall be as specified under General Terms and Conditions of Tariff.

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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 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

1.7 **Rounding off:** All bills will be rounded off to the nearest rupee i.e. up to 49 paisa shall be ignored and 50 paisa upwards shall be rounded off 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%	5 (five percent)
Above 99 %	7 (seven percent)

1.9 Load factor calculation and load factor incentive

1) The **load factor** shall be calculated as per the following formula:

- 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 0.10 % for every 1% increase in LF above 75% on the energy charges for incremental consumption above 75% load factor	=(x-75)*0.10

Example,

- Consumer having 72% load factor would not be getting any incentive on energy charges
- Consumer having 82% load factor will get incentive of [0.10 * (82-75) %] = 0.7% 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 other Government levies) 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 lack. 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 consumer 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 consumer 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 kVA- 210 kVA)= 40 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

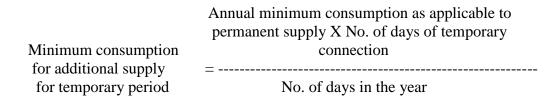
Example for fixed charges billing for excess demand: If the contract demand of a consumer is 100 kVA and the maximum demand recorded in the billing month is 140 kVA, the consumer shall be billed towards fixed charges as under:-

- 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.290 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.398 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 1.00 % 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:



(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	Billing Demand
	Demand (kVA)	(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)

Contract demand (Permanent)

A =-----X Total consumption

Deemed contract demand

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 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.
- 1.19 The existing 33KV consumer with contract demand exceeding 10,000 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.
- 1.20 The existing 132KV consumer with contract demand exceeding 50,000 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.
- 1.21 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 as amended from time to time. Part of a month will be reckoned as full month for purpose of billing.
- 1.22 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.
- 1.23 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.
- 1.24 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.
- 1.25 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.

- 1.26 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.
- 1.27 All conditions prescribed herein shall be applicable notwithstanding if any contrary provisions, exist in the agreement entered into by the consumer with the licensee.
- 1.28 Terms and Conditions for Tariff to be made applicable for generators already 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 period on each occasion.
 - (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 only be made available after commissioning of plant and in the event of outages for annual planned maintenance, other maintenance, forced outages of generating units or also in the event of separation of generator from grid.
 - (vi) The synchronization with the grid, power shall be provided for a maximum period of 2 hours on each occasion. This time limit shall not be applicable to start up activity
 - (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.

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