

ANNUAL REVENUE REQUIREMENT FOR FY 2013-14 TO FY 2015-16 AND TARIFF PROPOSAL PETITION FOR FY 2013-14

Submitted By:

Madhya Pradesh Power Management Company Limited
Shakti Bhawan, Vidyut Nagar, Jabalpur



Madhya Pradesh Poorv Kshetra Vidyut Vitaran Company Limited
Block No. 7, Shakti Bhawan, Vidyut Nagar, Jabalpur



Madhya Pradesh Paschim Kshetra Vidyut Vitaran Company Limited
GPH Compound, Pologround, Indore



Madhya Pradesh Madhya Kshetra Vidyut Vitaran Company Ltd.
Bijlee Nagar Colony, Nishtha Parisar, Govindpura, Bhopal



**BEFORE THE HON'BLE MADHYA PRADESH
ELECTRICITY REGULATORY COMMISSION, BHOPAL**

Petition No. _____ of 2012

- (1) Madhya Pradesh Power Management Company Limited (MPPMCL)
Shakti Bhawan, Vidyut Nagar, Jabalpur (MP) ----- **Petitioner**
- (2) Madhya Pradesh Poorv Kshetra Vidyut Vitaran Company Limited (MPPoKVVCL)
Shakti Bhawan, Vidyut Nagar, Jabalpur (MP) ----- **Petitioner**
- (3) Madhya Pradesh Paschim Kshetra Vidyut Vitaran Company Limited (MPPaKVVCL)
GPH, Polo Ground, Indore (MP) ----- **Petitioner**
- (4) Madhya Pradesh Madhya Kshetra Vidyut Vitaran Company Limited (MPMKVVCL)
Nishtha Parisar, Bijlee Nagar, Govindpura, Bhopal (MP) ----- **Petitioner**

IN THE MATTER OF:

Filing of ARR application for the distribution and retail supply business for the year 2013-14 till year 2015-16 under tariff principles laid down in "The Madhya Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for supply and wheeling of Electricity and Methods and Principles of Fixation of Charges) Regulations, 2012 (RG -35 (I) of 2012)" by MPPMCL and MPPoKVVCL, MPPaKVVCL & MPMKVVCL as the Distribution Licensees.

The Petitioners above respectfully submits as under:-

1. Madhya Pradesh Power Management Company Ltd., (hereinafter referred to as the 'Petitioner', MPPMCL, 'the Company' or 'the Licensee'), is a Company incorporated under the Companies Act, 1956 and having its registered office at Block No.11, Shakti Bhawan, Vidyut Nagar, Jabalpur.
2. Madhya Pradesh Poorv Kshetra Vidyut Vitaran Company Ltd., (hereinafter referred to as the 'Petitioner', MPPKVVCL, 'the Company' or 'the Licensee'), is a Company incorporated under the Companies Act, 1956 and having its registered office at Block No.7, Shakti Bhawan, Vidyut Nagar, Jabalpur. The Petitioner is a deemed licensee under the Fifth Proviso to Section 14 of the Electricity Act, 2003. The area of supply of the Petitioner comprises Jabalpur, Rewa, Sagar and Shahdol Commissionerary within the State of Madhya Pradesh ('MP').
3. Madhya Pradesh Paschim Kshetra Vidyut Vitaran Company Ltd., (hereinafter referred to as the 'Petitioner', MPPaKVVCL, 'the Company' or 'the Licensee'), is a Company incorporated under the Companies Act, 1956 and having its registered office at GPH, Polo Ground, Indore. The Petitioner is a deemed licensee under the Fifth Proviso to Section 14 of the Electricity Act, 2003. The area of supply of the Petitioner comprises Indore and Ujjain Commissionerary within the State of Madhya Pradesh ('MP').
4. Madhya Pradesh Madhya Kshetra Vidyut Vitaran Company Ltd. (MPMKVVCL), (hereinafter referred to as the 'Petitioner', MPMKVVCL, 'the Company' or 'the Licensee'), is a Company incorporated under the Companies Act, 1956 and having its registered office at Nishtha Parisar, Bijlee Nagar Colony, Govindpura, Bhopal. The Petitioner is a deemed licensee under the Fifth Proviso to Section 14 of the Electricity Act, 2003. The area of supply of the Petitioner comprises Bhopal, Gwalior, Hoshangabad and Chambal Commissionerary within the State of Madhya Pradesh ('MP').

5. The Government of Madhya Pradesh ('GoMP' or 'State Government'), vide an Order No. 3679-FRS-18-13-2002 dated 31st May, 2005, published in the gazette of Madhya Pradesh dated 31st May 2005, have restructured the functions and undertakings of Generation, Transmission, Distribution and Retail Supply of electricity earlier carried out by the Madhya Pradesh State Electricity Board ('MPSEB' or the 'Board') and transferred the same to five Companies to function independently. The five Companies are as under: -
 - a) M.P. Power Generating Company Ltd., Jabalpur (MPPGCL)
 - b) M.P. Power Transmission Company Ltd., Jabalpur (MPPTCL)
 - c) M.P. Poorv Kshetra Vidyut Vitaran Company Ltd., Jabalpur (MPPoKVVCL)
 - d) M.P. Paschim Kshetra Vidyut Vitaran Company Ltd., Indore (MPPaKVVCL)
 - e) M.P. Madhya Kshetra Vidyut Vitaran Company Ltd. Bhopal (MPMKVVCL)
6. With effect from 1st June 2005, the Operation and Management Agreement that existed between Madhya Pradesh State Electricity Board and the Five Companies came to end with the issue of the said Order dated 31-05-2005. The three Discoms viz. MPPoKVVCL, Jabalpur, MPPaKVVCL, Indore and MPMKVVCL, Bhopal started functioning independently as Distribution Licensees in their respective area of license and from the said date, they are no longer operating as an agent of or on behalf of the Board, subject to Cash Flow Mechanism (CFM) provided in the said Order.
7. On June 3, 2006 GoMP, in exercise of its powers under Section 23 (Sub-section (1), (2) and (3)) and Section 56 (Sub-section (2)) of Madhya Pradesh Vidyut Sudhar Adhiniyam, 2000 read with Section 131 (Sub-sections (1), (2), (5), (6) and (7) of Electricity Act, 2003, effected the transfer of and vesting of the functions, properties, interests, rights and obligations of MPSEB relating to the Bulk Purchase and Bulk Supply of Electricity in the State Government and simultaneously re-transferred and re-vested the same to MP Power Trading Company Ltd. ('Tradeco' or 'MP Tradeco'). Since then, MP Tradeco is discharging the responsibilities of procurement of power in bulk and supplying to the three Electricity Distribution Companies (DISCOMs), including the Petitioner herein. The transfer was effected through "M.P. Electricity Reforms Transfer Scheme Rules 2006" (Transfer Scheme Rules) vide Notification No.3474 /FRS/17/XIII/2002 dtd 3rd June 2006 (Transfer Scheme Rules).
8. In accordance with GoMP decision, the name of MP Power Trading Company Ltd has been changed to MP Power Management Company Ltd. MPPMCL is the holding Company of the three electricity distribution companies (Discoms) of MP State, viz., M. P. Poorv Kshetra Vidyut Vitaran Company Ltd., M. P. Paschim Kshetra Vidyut Vitaran Company Ltd. and M. P. Madhya Kshetra Vidyut Vitaran Company Ltd. The Petitioner has been vested with several of functions and powers that were earlier vested with the erstwhile Madhya Pradesh State Electricity Board. The Registrar of Companies MP has issued the Certificate of Incorporation Consequent upon Change of Name on 10.04.2012.
9. GoMP has entrusted the MPPMCL with the responsibility inter alia of representing the Discoms before the Commission with regard to filing the tariff petition and facilitating all proceedings thereon. The Management and Corporate functions agreement signed by the MPPMCL with the three Discoms of MP also provide for the same.
10. MPPMCL has signed "Management and Corporate Functions Agreement" on 5th June 2012,, a copy of which is filed as Annexure- P/1, with the three Discoms of the State, wherein it has been agreed that the Petitioner shall perform inter alia the following functions of common nature for the Discoms:
 - In consultation with Discoms, undertake long-term/ medium-term/short-term planning and assessment of the power purchase requirements for the three Discoms and explore opportunities for power procurement as per the regulations of MPERC;
 - Allocation of power among the Discoms from the forthcoming projects as per retail tariff order and as per the GoMP notification and further instructions in this regard;
 - Economic, reliable and cost effective power procurement of Short-term, Medium-term and Long-term and sale of surplus power, if any, for the purpose of Banking / maximization of revenue;
 - Exploring opportunities for procurement of power on long-term and medium-term basis, procure power and finalizing Power Purchase Agreements (PPAs);
 - The expenses of MPPMCL have been considered to be included as part of power purchase cost of the Discoms.

11. Further, it is relevant to mention that the revenue expenditure of MPSEB for the year 2011-12 as detailed in the petition, which also now comes under the expenditure of MPPMCL. The aforesaid is on account of reorganization of erstwhile MP State Electricity Board as envisaged under provisions of Section 131 to 134 of the Electricity Act, 2003. Therefore, aforesaid expenses should be allowed on account of 'change in law'.
12. In the backdrop of the above facts and circumstances, the present application is being made by the MPPMCL along with the three Distribution Companies of MP State under Section 61 and Section 62 (1) (d) of the Electricity Act 2003 for determination of the tariff for the distribution and Retail Supply Business for the period FY 2013-14 following the regulations laid down by the Hon'ble Commission.
13. While filing the present ARR under the prevailing Regulation, MPPMCL along with the Discoms have endeavoured to comply with the various legal and regulatory directions and stipulations applicable, including the directions given by the Hon'ble Commission in the Business Rules of the Commission, the Guidelines, previous ARR and Tariff Orders and the Madhya Pradesh Electricity Regulatory Commission (Terms & Conditions for determination of Tariff) Regulation 2012 (hereinafter referred to as the "Regulation").
14. It is submitted that as soon as the retail tariff order becomes applicable, the cross subsidy surcharge, additional surcharge, wheeling charges and transmission charges in respect of open access customers should also be notified and made effective from the tariff application date. It is therefore, prayed to kindly issue the approach paper for determination of the cross subsidy surcharge, additional surcharge, wheeling charges and transmission charges also along with the retail tariff order for open access customers.
15. Based on the information available, the Petitioners have made sincere efforts to comply with the Regulations of the Hon'ble Commission and discharge its obligations to the best of its ability and resources at its command. However, should any further information of material significance become available during the process of determination, the petitioner may be permitted to reserve the right to file such additional information and consequently amend/ revise the petition.
16. The salient features of the ARR with additional submissions are as under:-

a. East Discom

The ARR for the year 2013-14 is **Rs. 7,103.36 Cr** and revenue at existing Tariff (Tariff income) works out to **Rs. 5,841.09 Cr** and Non-tariff income works out to **Rs. 68.43 Cr.** resulting in a Gap of **Rs. 1,262.27 Cr.** It is to mention here that this Gap does not include the True-up Costs of previous years and contribution towards terminal benefits trust. For the recovery of aforesaid gap, revision in existing tariff is also proposed due to which the additional revenue of **Rs. 602.55 Cr.** would be recovered. The remaining gap amount of **Rs 659.71 Cr.** is proposed to be treated as "Regulatory Asset" and proposed to be amortized over a period of 3 years starting from FY-15.

b. West Discom

The ARR for the year 2013-14 is **Rs. 9,445.01 Cr** and revenue at existing Tariff (Tariff income) works out to **Rs. 8,009.37 Cr** and Non-tariff income works out to **Rs. 65.06 Cr.** resulting in a Gap of **Rs. 1,435.65 Cr.** It is to mention here that this Gap does not include the True-up Costs of previous years and contribution towards terminal benefits trust. For the recovery of aforesaid gap, revision in existing tariff is also proposed due to which the additional revenue of **Rs. 599.69 Cr.** would be recovered. The remaining gap amount of **Rs 835.96 Cr.** is proposed to be treated as "Regulatory Asset" and proposed to be amortized over a period of 3 years starting from FY-15.

c. Central Discom

The ARR for the year 2013-14 is **Rs. 7,671.30 Cr** and revenue at existing Tariff (Tariff income) works out to **Rs. 6,150.86 Cr** and Non-tariff income works out to **Rs. 46.23 Cr.** resulting in a Gap of **Rs. 1,520.44 Cr.** It is to mention here that this Gap does not include the True-up Costs of previous years and contribution towards terminal benefits trust. For the recovery of aforesaid gap, revision in existing tariff is also proposed due to which the additional revenue of **Rs 674.62 Cr.** would be recovered. The remaining gap amount of **Rs**

845.82 Cr. is proposed to be treated as “Regulatory Asset” and proposed to be amortized over a period of 3 years starting from FY-15.

- d. Single formula for “Fuel & Power Purchase Cost Adjustment” has been proposed for recovery of any variation in fuel charges and recovery of incremental power purchase cost.

- 17. For the treatment of the above indicated partial revenue Gap, the Tariff Proposal for FY-2013-14 has been prepared and submitted in the relevant section of this petition.
- 18. Shri F.K. Meshram, Chief General Manager (Tariff) of MPPMCL; Shri P.K. Singh, Chief Engineer (Commercial) of MPPoKVVCL; Shri Kailash Shiva , Chief Engineer (Commercial) of MPPaKVVCL and Shri A.R. Verma, General Manager & Superintending Engineer (Commercial) of MPMKVVCL have been authorized to execute and file all the documents on behalf of the respective petitioners in this regard. Accordingly, the current filing is signed and verified by, and backed by the affidavit of respective authorized signatories.

PRAYER

In view of the aforesaid facts and circumstances, the Applicant requests that the Hon'ble Commission may be pleased to:

- (a) Take the accompanying ARR/Tariff petition of the above petitioners on record and treat it as complete;
- (b) Consider and approve petitioner's ARR amounting to **Rs. 7,103.36 Cr.** for East Discom, **Rs. 9,445.01 Cr.** for West Discom and **Rs. 7,671.30 Cr** for Central Discom for the year 2013-14 including all requested regulatory treatments in the filing.
- (c) Consider the aforesaid facts and circumstances the Hon'ble Commission may be pleased to allow expenses of MPPMCL as stated to be allowed and include them as a part of power purchase cost of three Discoms, to meet the ends of justice.
- (d) Consider and approve petitioners' Tariff proposal for FY-14.
- (e) Balance revenue gap of **Rs 659.71 Cr** for East Discom, **Rs 835.96 Cr** for West Discom and **Rs. 845.82 Cr.** for Central Discom may please be treated as "Regulatory Asset" and be amortized over a period of 3-years starting from FY-15.
- (f) Consider and determine the wheeling charges, cross subsidy surcharge, additional surcharge and transmission charges for open access customers on the basis of ARR petition for FY 2013-14 and make applicable w.e.f the application date of the revised tariff.
- (g) Condone any inadvertent omissions/ errors/ shortcomings and permit the petitioner to add/ change/ modify/ alter portion(s) of this filing and make further submissions as may be required at a later stage; and
- (h) Pass such an order as the Hon'ble Commission deems fit and proper as per the facts and circumstances of the case.

Date: - 31/12/2012

Shri F.K. Meshram, Chief General Manager (Tariff),
MP Power Management Co. Ltd., Jabalpur.

Shri P.K. Singh, Chief Engineer (Commercial)
MP Poorv Kshetra Vidyut Vitaran Co. Ltd., Jabalpur.

Shri Kailash Shiva , Chief Engineer (Commercial)
MP Paschim Kshetra Vidyut Vitaran Co. Ltd., Indore.

Shri A.R. Verma, GM & SE (Commercial)
MP Madhya Kshetra Vidyut Vitaran Co. Ltd., Bhopal.

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1. ESTIMATION OF SALES

1.1. Method adopted for Estimation of Sales

- 1.1.1. For the purpose of projection of sales, the distribution licensees have considered category wise and slab wise actual data of the sale of electricity, number of consumers, connected / contracted load, etc. of the preceding five years i.e. FY08, FY09, FY10, FY11, FY12 and available data of the FY13 i.e. up to the month of Oct'12.
- 1.1.2. The licensees, in the previous year's filing for remaining period of MYT i.e. FY 13, had projected the Sales based on the actual data of FY11. Since the actual data of FY12 is now available and it has been observed that the actual sales during FY12 have deviated significantly from the sales forecasted by the Licensee and those allowed by the Hon'ble Commission during the previous filings and considering the increase in supply hours particularly in the rural areas during the current year, the licensee feels that it will be appropriate to revise the sales forecast for FY-13 and thereafter project the sales for FY14.
- 1.1.3. The sales for FY '14 to FY '16 have been projected on the basis of the actual data of Number of Consumers, Connected Load and Consumption during the last 5 years and on the basis of revised estimate for FY'13.
- 1.1.4. The approach being followed is to analyse the Compound Annual Growth Rates (CAGRs) of each category and its sub-categories in respect of urban & rural consumers separately. After analysis of the data, appropriate / reasonable growth rates have been assumed for future consumer forecasts from the past CAGRs of the Category/Sub-category by the three Discoms.
- 1.1.5. The forecast also considers the impact of schemes / plans of licensee such as the RGGVY (Rajiv Gandhi Grameen Vidyutikaran Yojana), future Meterization Plan of urban domestic consumers and separation of feeders of Agricultural and other categories of consumers and increase in supply hours in rural areas. The projections for each tariff category and the relevant assumptions of the three Discoms have been discussed in the following sections. The overall sales forecast is as follows:

Table 1: Revised Estimate of Sales for FY13 and Sales Projection for FY14 (in MU)

		East Discom		West Discom		Central Discom	
TC	Category	FY13 (RE)	FY14	FY13 (RE)	FY14	FY13 (RE)	FY14
LV 1	Domestic	2,656.54	5,089.70	3,328.90	5,944.77	2,514.06	4,378.79
LV 2	Non-Domestic	539.06	637.58	723.54	824.42	626.23	821.91
LV 3.1	WW & Street Light	261.20	330.32	264.17	384.71	305.86	403.16
LV 4	LT Industrial	269.16	319.81	489.80	577.96	255.53	345.58
LV 5.1	Agriculture Irrigation Pumps	2,046.39	2,273.72	5,101.89	5,831.91	3,186.04	3,783.68
LV 5.2	Agriculture related Use	2.65	2.90	3.78	3.82	4.03	5.61
	Total (LT)	5,775.00	8,654.03	9,912.08	13,567.59	6,891.75	9,738.73
HV 1	Railway Traction	570.44	570.44	412.96	425.04	831.27	900.84
HV 2	Coal Mines	491.06	496.48	0.00	0.00	33.47	33.47
HV 3.1	Industrial	1,698.75	1,795.13	2,828.76	2,855.29	1,605.93	1,832.85
HV 3.2	Non-Industrial	228.60	249.89	373.26	404.59	301.88	334.24
HV 4	Seasonal	7.00	7.80	8.87	8.96	2.16	2.93
HV 5.1	Public Water Works	59.22	62.51	310.09	344.39	102.61	109.47
HV 5.1	Irrigation	4.02	4.23	0.12	0.13	0.00	0.00
HV 5.2	Other Agricultural	9.96	10.51	5.78	6.29	4.15	6.31
HV 6	Bulk Residential Users	342.94	396.96	7.04	7.17	166.62	184.50
HV 7	Bulk Supply to Exemptees	0.00	0.00	0.00	0.00	0.00	0.00
	Total (HT)	3,411.99	3,593.95	3,946.89	4,051.87	3,048.09	3,404.61
	TOTAL LT+HT	9,186.99	12,247.98	13,858.97	17,619.46	9,939.84	13,143.34

Table 2: Sales Projection for FY15, FY 16 (in MU)

		East Discom		West Discom		Central Discom	
TC	Category	FY 15	FY 16	FY 15	FY 16	FY 15	FY 16
LV 1	Domestic	6,391.47	8,109.40	6,879.17	7,980.17	5,453.83	6,769.49
LV 2	Non-Domestic	741.00	861.65	932.32	1,054.69	1,084.10	1,437.76
LV 3.1	WW & Street Light	422.18	544.99	473.40	586.32	543.45	754.96
LV 4	LT Industrial	383.88	465.49	634.47	697.13	517.25	881.33
LV 5.1	Agriculture Irrigation Pumps	2,530.71	2,855.30	6,672.29	7,640.33	4,624.38	5,830.35
LV 5.2	Agriculture related Use	3.18	3.48	3.86	3.90	8.50	13.82
	Total (LT)	10,472.41	12,840.32	15,595.52	17,962.53	12,231.51	15,687.71
HV 1	Railway Traction	570.44	570.44	437.48	450.28	976.62	1,059.18
HV 2	Coal Mines	502.29	508.55	0.00	0.00	33.47	33.47
HV 3.1	Industrial	1,900.58	2,016.01	2,882.78	2,911.32	2,125.38	2,505.39
HV 3.2	Non-Industrial	274.43	302.96	439.19	477.42	371.18	413.76
HV 4	Seasonal	8.75	9.86	9.05	9.14	4.03	5.61
HV 5.1	Public Water Works	66.01	69.73	382.54	424.99	118.18	131.34
HV 5.1	Irrigation	4.46	4.72	0.14	0.15	0.00	0.00
HV 5.2	Other Agricultural	11.14	11.86	6.84	7.45	9.82	15.58
HV 6	Bulk Residential Users	459.60	532.26	7.31	7.46	206.76	235.51
HV 7	Bulk Supply to Exemptees	0.00	0.00	0.00	0.00	0.00	0.00
	Total (HT)	3,797.70	4,026.38	4,165.34	4,288.20	3,845.44	4,399.84
	TOTAL LT+HT	14,270.11	16,866.70	19,760.86	22,250.74	16,076.95	20,087.55

1.2. Category-wise sales projection

1.2.1. LV -1: Domestic

1.2.1.1. Assumptions for Projections of Unmetered Domestic Sales

Before the issue of tariff order for FY-06, Hon'ble Commission had determined the tariff for un-metered domestic consumers based on Rs. per consumer per month irrespective of the realistic / assessed consumption. Subsequently, Hon'ble Commission had linked the tariff with the assessed consumption of un-metered consumers irrespective of realistic consumption and this assessed consumption has not been linked with the actual supply hours.

Subsequently, the Commission has decided that the billing for un-metered domestic connections should be done on the basis of assessed consumption of 77 units & 38 units per consumer per month in urban and rural areas respectively based on the average monthly consumption of metered consumers of general category during the year 2005-06.

Since then, the assessed consumption of 77 units per consumer per month for urban area has not been revised by the Commission in its subsequent tariff orders till FY-13. On the other hand, the assessed consumption of 38 units per consumer per month in rural areas has remained the same up to year FY-08 and thereafter, this has been reduced to 30 units per consumer per month in subsequent tariff order which has been further revised as 42 units per consumer per month in FY13.

It is submitted that after the year FY-06, there has been considerable change in the infrastructure of Discoms and the reliability as well as quality of the supply has improved considerably. The supply hours have also increased gradually on year on year basis and therefore, the average monthly consumption of metered & un-metered domestic consumers has increased considerably now, but due to regulatory constraints, the billing of un-metered domestic consumers is being done on the basis of assessed consumption approved by the Commission. Therefore, it would be appropriate that billing of un-metered domestic connections may be revised on the basis of the average monthly consumption of metered categories in respective urban and rural areas. Due to anticipated further increase in supply hours during FY-14, the average monthly metered consumption shall also increase.

Therefore, the projections of consumption of un-metered domestic connections in this petition have been considered as **136 units & 100 units /consumer /month in urban and rural areas respectively for East Discom and 163 & 100 units /consumer /month in urban and rural areas respectively for West Discom.** . This assessed consumption is based on the average consumption per consumer per month for metered connections in respective of urban & rural areas.

For Central Discom, the average metered consumption per month in urban area in the year 2011-12 comes out to 125 units whereas in rural area it is 47 units. The growth as seen from the data available upto Sept.12 comes out to 5.12% and 3.01% in urban & rural areas respectively. Due to this reason 100 units per month have been considered in rural area whereas in the urban area the actual growth rate seen in the metered connections in the first half of the year 2013-14 has been considered for projection in the years 2014-15 & 2015-16.

1.2.1.2. RGGVY

In addition to the rate of growth assumed as indicated above, the impact of implementation of the RGGVY has also been taken into account for future Consumer / Load / Consumption projections. The implementation roadmap of the RGGVY forms the basis of future projections by the Discoms and the same is detailed in the tables below:

Domestic RGGVY Assumption: East Discom			
Year	2012-13	2013-14	
Target (No. of consumers)	247,000	240,000	
The connected load for consumers added under the RGGVY has been taken as 300 watt per consumer. The consumption of the consumers has been assumed at par with the metered consumption per consumer per month of rural consumers.			

Domestic RGGVY Assumption: West Discom			
Year	2012-13	2013-14	2014-15
Target (No. of consumers)	108,164	104,228	41,691
Increase in Units Consumed(MU's)	86.96	254.87	304.90

Domestic RGGVY Assumption: Central Discom			
Year	2011-12	2012-13	2013-14
Target (No. of consumers)	57,269	69,915	12,576
The connected load for consumers added under the RGGVY has been taken as 300 watt per consumer. The consumption of the consumers has been assumed at par with the metered consumption per consumer per month of rural consumers.			

After factoring the growth in consumers due to the RGGVY and increase in assessed consumption for un-metered connections due to increase in supply hours, following projections has been arrived at for LV-1 category:

Table 3: LV-1 Domestic Unit Projection

Area	Sub Category	East Discom			West Discom			Central Discom		
		FY 14	FY 15	FY 16	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16
Urban	Metered	1,803.99	2,100.83	2,446.50	2,861.99	3,372.04	3,992.02	2,382.41	3,000.65	3,795.82
Urban	Un-metered	34.67	0.00	0.00	3.30	3.30	3.30	0.00	0.00	0.00
Urban	Temporary	21.64	28.78	38.27	44.67	48.34	52.38	23.27	34.73	51.82
Urban	Total	1,860.31	2,129.61	2,484.77	2,909.96	3,423.68	4,047.70	2,405.68	3,035.38	3,847.64
Rural	Metered	2,075.06	2,992.12	4,227.94	2,643.78	3,063.64	3,540.03	1,502.69	1,932.99	2,420.38
Rural	Un-metered	1,152.88	1,268.16	1,394.98	378.37	378.37	378.37	468.90	483.02	497.57
Rural	Temporary	1.45	1.57	1.70	12.67	13.48	14.07	1.53	2.44	3.91
Rural	Total	3,229.39	4,261.86	5,624.63	3,034.82	3,455.49	3,932.47	1,973.12	2,418.45	2,921.86
Total	Metered	3,879.06	5,092.95	6,674.44	5,505.77	6,435.69	7,532.04	3,885.10	4,933.64	6,216.20
Total	Un-metered	1,187.55	1,268.16	1,394.98	381.67	381.67	381.67	468.90	483.02	497.57
Total	Temporary	23.09	30.35	39.98	57.33	61.81	66.46	24.80	37.17	55.73
Total	Total	5,089.70	6,391.47	8,109.40	5,944.77	6,879.17	7,980.17	4,378.80	5,453.83	6,769.50

1.2.1.3. East Discom

The growth rates assumed for future projections are as given below:

Area	Category	Urban		Rural	
Metered	Consumer	5.87%	1 year growth has been considered.	20.00%	Due to feeder segregation scheme & expected 24 hrs supply, approx. 20% growth has been considered.
	Average Load (kW) per Consumer	0.73	Considered same as for FY-13 i.e. up to Oct'12.	0.23	Considered same as for FY-13 i.e. up to Oct'12.
	Average consumption per consumer per month	25.00%	For RE of FY-13 current year growth i.e. FY-13 up to Oct'12 has been considered and due to expected 24 hrs supply plan in THQ & DHQ growth of 25% has been considered in FY-14	93.00%	Due to feeder segregation scheme & expected 24 hrs supply, it is expected that the consumption pattern of rural domestic consumers will be 100 units per consumer/month therefore 93% growths has been considered.
Un-metered	Consumer	0.00%	No growth has been considered.	0.00%	No growth has been considered.
	Average Load per Consumer (in kW)	0.20	Considered same as for FY-13 i.e. up to Oct'12.	0.09	Considered same as for FY-13 i.e. up to Oct'12.
	Average consumption per consumer per month		77 units for FY-13 as per TO & 136 units for FY-14 i.e. at par with avg. units of metered consumers		42 units for FY-13 as per TO & 100 units for FY-14 i.e. at par with avg. units of metered consumers
Temporary	Consumer	20.60%	4 year CAGR has been considered.	4.46%	4 year CAGR has been considered.
	Average Load per Consumer (in kW)	1.11	Considered same as for FY-13 i.e. up to Oct'12.	1.09	Considered same as for FY-13 i.e. up to Oct'12.
	Average consumption per consumer per month	10.27%	1 year growth has been considered.	3.78%	1 year growth has been considered.

1.2.1.4. West Discom

a. **Growth Rates:**

The growth rates assumed for future projections are as given below

Area	Category	Urban		Rural	
Metered	Consumer	5.56%	3 year growth has been considered.	6.83%	Category-wide 2 year growth has been considered.
	Load	20.15%	2 year CAGR has been considered.	19.36%	Category-wide metered 3 year load growth has been considered.
	consumption	21.55%	Category-wide 1 Year CAGR has been considered.	28.71%	1 Year Rural Metered growth has been considered.

Un-metered	Consumer	0.00%	No growth has been considered.	0.00%	No growth has been considered.
	Load		Considered same as for FY-12.		Considered same as for FY-12.
	consumption		163 units per consumer for FY 13-14 i.e.at par with avg. units / consumers of metered consumers		100 units per consumer for FY-14 i.e. at par with avg. units / consumers of metered consumers in FY-13 and taking increased supply hours impact on it.
Temporary	Consumer	8.80%	2 year CAGR has been considered.	7.16%	2 year CAGR has been considered.
	Load	16.94%	2 year CAGR has been considered.	13.37%	3 year CAGR has been considered.
	consumption	10.30%	1 Year CAGR has been Considered.	10.30%	Same as considered in Rural Areas.

b. Demographics Impact:

MPERC has approved guidelines for development of infrastructure and serving new connection in under developed / developing colonies which will also increase considerable number of new connections in city and town areas. This will result in an increase in the demand for LV-1 connections. Schemes such as R-APDRP and feeder segregation are expected to help the discom tap this potential and will contribute further to the growth of this category which is not adequately covered by the past growth trend. The following table shows the untapped potential across the circles of West Discom:

S.No	District	Total Population			No of Housholds in FY 11 (actual as per census 2011)	No of Housholds in FY 14	No. of Consumer projected in FY14	Untapped Domestic Consumers	Additional Untapped Domestic Consumers for FY14
		2011	2013	2014					
		Actual	Estimated	Estimated	Actual	Estimated			
1	Indore	3272335	3363960	3458151	615334	650275	641256	9019	3006
2	Khandwa	1309443	1334322	1359674	265657	275848	169823	106025	35342
3	Burhanpur	756993	770619	784490	144154	149390	101144	48246	16082
4	Khargone	1872413	1911734	1951880	366578	382136	218586	163550	54517
5	Barwani	1385659	1418915	1452969	243061	254868	136326	118542	39514
6	Dhar	2184672	2234919	2286323	419813	439347	249271	190076	63359
7	Jhabua	1024091	1051741	1080138	207621	218984	177845	177671	59224
8	Alirajpur	728677	741793	755145	131747	136532			
9	Ujjain	1986597	2016396	2046642	384278	395893	286599	109294	36431
10	Dewas	1563107	1591243	1619885	304742	315811	197961	117850	39283
11	Shajapur	1512353	1536551	1561135	298266	307887	153740	154147	51382
12	Ratlam	1454483	1480664	1507316	293116	303763	216684	87079	29026
13	Mandsaur	1339832	1355910	1372181	284411	291278	207359	83919	27973
14	Neemuch	825958	836695	847572	175666	180263	116574	63689	21230
Total		21216613	21645462	22083501	4134444	4302275	2873167	1429108	476369

The Company is aiming to add this untapped potential in the control period. Hence starting with FY14 whole untapped potential will be added in next 3 years. The no. of consumers added in FY 14 and its impact on sales is as below:

Demographics Impact			
Financial Year	2013-14	2014-15	2015-16
Potential Consumers added in FY14	476369	476369	476369
Consumption (in MUs)	746.11	746.11	746.11

c. Feeder Separation Impact in Rural Sales:-

In order to provide 24 hours supply of electricity to rural areas from 2013 onwards as per the policy of the Madhya Pradesh government, the Discom has taken up the task of executing the feeder bifurcation scheme which is being financed by REC and ADB.

Currently, all consumers including agricultural consumers are being served through common 11 KV feeders in the rural areas. Due to inadequate availability of power and in order to control supply to agriculture pump-sets, supply to these areas is regulated. But as a result of common feeders feeding all the consumers in rural areas, regulated power supply is imposed in the entire rural area, thereby affecting the quality of life in rural domestic and other users.

To improve power supply to these users, which is an essential commodity to ensure better healthcare, income generation and education facilities, it has been decided to separate Agricultural pump-set load from other category of load and regulate the supply in an effective plan. For this, installation of parallel feeders is planned to provide reliable supply to the

domestic and other consumers in rural areas. Hence, MPPKVVCL has made an ambitious investment plan to improve the rural supply hours along with better load management in line with power availability of power. As per the plan of GoMP and MPPKVVCL, 24 HRS supply will be provided to all villages from 2013 onwards.

As a part of the feeder bifurcation scheme, the village load and irrigation load on the 11 kV rural feeders will be separated for which new 11kV parallel lines and other infrastructure will be put into place. As per the plan of the company, 100% of the 11kV rural feeder will be bifurcated at the starting of FY14. The bifurcated village load will be provided 24 Hrs supply for the purpose of non-agricultural use and the irrigation/agricultural load will be given 8 Hrs. Supply. Taking into the impact of these increased supply hours, the impact calculated on sales is as follows:-

Impact of Feeder Separation Scheme	
Financial Year	2013-14
Additional Consumption (in MUs)	865.57

1.2.2. LV -2: Non- Domestic

The future projections are as below:

Table 4: LV-2 Non-Domestic Unit Projection

Sub Category	East Discom			West Discom			Central Discom		
	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16
Metered	622.70	726.12	846.77	766.68	870.32	988.09	765.50	1,003.58	1,322.74
Temporary	14.88	14.88	14.88	57.74	62.00	66.60	56.40	80.52	115.02
Total	637.58	741.00	861.65	824.42	932.32	1,054.69	821.90	1,084.10	1,437.76

1.2.2.1. East Discom

The growth rates assumed for future projections are as given below:

Area	Category	Urban		Rural	
Metered	Consumer	4.09%	1 year growth has been considered.	4.27%	2 year CAGR has been considered
Metered	Average Load /Consumer	5.65%	1 year growth has been considered.	7.70%	Current year growth i.e. FY13 upto Oct'12 has been considered.
Metered	Average Unit/kW	6.47%	Current year growth i.e. FY13 upto Oct'12 has been considered.	12.25%	Current year growth i.e. FY13 upto Oct'12 has been considered.
Temporary	Consumer	0.00%	No growth has been considered.	0.00%	No growth has been considered.
Temporary	Average Load/Consumer	0.00%	No growth has been considered.	0.00%	No growth has been considered.
Temporary	Average Unit/kW	0.00%	No growth has been considered.	0.00%	No growth has been considered.

1.2.2.2. West Discom

The category-wise CAGR in consumption for 3 years is 15.79 % while the CAGR for the past two years has been significantly higher at 16.10 %. The high CAGR is due to increase in Non-Domestic activities in the major and cities/towns and identifying domestic connection for their Non-Domestic activities through intensive checking of consumers. It is expected that this category will register higher growth rates, due to following reasons:-

- Expansion of city areas:** Rapidly expanding city areas will result in increased commercial activity.
- Small shopping complexes:** Small shopping complexes are mushrooming particularly in Indore city and in Ujjain city. Many of these complexes have commercial shopping outlets, which will have to be several independent Non-domestic connections, on demand, as per the directions of MPERC.
- Indore is fast developing as educational hub of the state and many educational institutional are added every year. Many non-domestic activities associated with education centres and these institutions are expected to add to commercial use of electricity.

Taking consideration of above factors growth rates used for future projections are as tabulated below:

Area	Category	Urban		Rural	
Metered	Consumer	5.07%	3 year CAGR has been considered	5.12%	1 year CAGR has been considered
Metered	Load	14.60%	2 year CAGR has been considered	14.67%	Category-wide metered 3 year load growth has been considered
Metered	Consumption	13.44%	3 year CAGR has been considered	14.72%	Category-wide metered 3 year consumption growth has been considered
Temporary	Consumer	4.91%	Category-wide 1 year CAGR Used	5.39%	3 year CAGR Used.
Temporary	Load	14.95%	Category-wide 3 year CAGR Used	5.77%	1 year CAGR Used.
Temporary	Consumption	7.95%	1 year CAGR has been considered	0.00%	No growth considered.

Due to the increase in supply hours across the LT categories due to the Feeder segregation scheme, the additional sales expected due to increase in supply hours is as follows:-

Impact of Feeder Separation Scheme	
Financial Year	2013-14
Additional Consumption (in MU's)	5.72

1.2.2.3. Central Discom

The growth considered for future projection of this category is as follows:-

Category	%	Urban	%	Rural
Consumer	4.96	2Yr.CAGR	1.82	1Yr.CAGR
Av.Load/consumer	15	Due to expected increase in supply hrs. Moderate growth rate has been considered	30	Due to expected increase in supply hrs. Moderate growth rate has been considered
Av.Unit/KW/month	5		15	

1.2.3. LV -3.1: Public Water Works

Considering the anticipated increase in supply hours, the future projections are as below:

Table 5: LV-3.1 PWW Unit Projection

Sub Category	East Discom			West Discom			Central Discom		
	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16
Municipal Corp.	53.02	55.56	58.24	71.08	86.69	106.31	99.53	116.55	136.49
Nagar Panchayat	74.17	101.56	139.67	66.48	81.09	99.44	99.54	128.47	165.84
Gram Panchayat	57.12	79.52	110.71	74.84	91.27	111.93	44.05	76.03	134.83
Temporary	2.88	2.97	3.06	9.18	11.19	13.73	17.77	34.61	68.39
Total	187.19	239.61	311.67	221.58	270.25	331.41	260.89	355.66	505.55

1.2.3.1. East Discom

The following growth rates have been considered for future projections:

Area	Category	Urban		Rural	
Municipal Corporation	Consumer	1.57%	1 year growth has been considered	0.00%	No growth has been considered.
	Average Load/Consumer	2.95%	1 year growth has been considered	0.00%	No growth has been considered.
	Average Unit/kW	0.00%	No growth considered.	20.00%	Moderate growth has been considered.
Nagar Panchayat	Consumer	5.17%	1 year growth has been considered	10.84%	Current year growth i.e. FY13 up to Oct'12 has been considered.
	Average Load/Consumer	1.07%	1 year growth has been considered	33.12%	Current year growth i.e. FY13 up to Oct'12 has been considered.
	Average Unit/kW	25.96%	Current year growth i.e. FY13 up to Oct'12 has been considered.	10.70%	Current year growth i.e. FY13 up to Oct'12 has been considered.
Gram Panchayat	Consumer	15.92%	1 year growth has been considered	16.14%	Current year growth i.e. FY13 up to Oct'12 has been considered.
	Average Load/Consumer	3.52%	1 year growth has been considered	0.00%	No growth has been considered.
	Average Unit/kW	15.54%	2 year CAGR has been considered	20.00%	Moderate growth has been considered.
Temporary	Consumer	3.00%	Nominal growth has been considered.	3.00%	Nominal growth has been considered.
	Average Load/Consumer	0.00%	No growth has been considered.	0.00%	No growth has been considered.
	Average Unit/kW	0.00%	No growth has been considered.	0.00%	No growth has been considered.

1.2.3.2. West Discom

LV-3.1 Growth Considered For Projection					
Area	Category	Urban		Rural	
Municipal Corporation	Consumer	14.58%	3 year Urban PWW consumer growth has been considered	8.49%	3 year Rural PWW consumer growth has been considered
	Load	12.73%	3 year Urban PWW load growth has been considered	7.48%	3 year Rural PWW load growth has been considered
	Consumption	23.10%	1 year Category-wide consumption growth has been considered	28.74%	1 year Rural PWW consumption growth has been considered
Nagar Panchayat	Consumer	14.58%	3 year Urban PWW consumer growth has been considered	8.49%	3 year Rural PWW consumer growth has been considered
	Load	12.73%	3 year Urban PWW load growth has been considered	7.48%	3 year Rural PWW load growth has been considered
	Consumption	23.10%	1 year Category-wide consumption growth has been considered	28.74%	1 year Rural PWW consumption growth has been considered
Gram Panchayat	Consumer	14.58%	3 year Urban PWW consumer growth has been considered	8.49%	3 year Rural PWW consumer growth has been considered
	Load	12.73%	3 year Urban PWW load growth has been considered	7.48%	3 year Rural PWW load growth has been considered
	Consumption	23.10%	1 year Urban PWW consumption growth has been considered	28.74%	1 year Rural PWW consumption growth has been considered
Temporary	Consumer	14.58%	3 year Urban PWW consumer growth has been considered	8.49%	3 year Rural PWW consumer growth has been considered
	Load	12.73%	3 year Urban PWW load growth has been	7.48%	3 year Rural PWW load growth has been

			considered		considered
	Consumption	23.10%	1 year Category-wide consumption growth has been considered	28.74%	1 year Rural PWW consumption growth has been considered

Due to the increase in supply hours across the LT categories due to the Feeder segregation scheme, the additional sales expected due to increase in supply hours is as follows:-

Impact of Feeder Separation Scheme	
Financial Year	2013-14
Additional Consumption (in MU's)	29.68

1.2.3.3. Central Discom

The projection for future years has been taken as follows:-

Particulars	Category	%	Urban		%	Rural
Consumer	Municipal Corp.	11.60	3 year CAGR	Municipal Corp.	0	The growth rate of past years is negative
	Nagar Panchayat	14.36	1year growth	Nagar Panchayat	0	
	Gram Panchayat	53.19	2year CAGR	Gram Panchayat	15.01	
	Temporary	44.70	2 Year CAGR	Temporary	4.01	
Av.Load/consumer	Municipal Corp.	4	Maximum Growth achieved during past 5 years taken(rounded off)	Municipal Corp.	1	Maximum Growth achieved during past 5 years taken(rounded off)
	Nagar Panchayat	1		Nagar Panchayat	4.50	
	Gram Panchayat	3		Gram Panchayat	1	
	Temporary	14		Temporary	9	
Av.Unit/KW/month	Municipal Corp.	1		Municipal Corp.	9	
	Nagar Panchayat	12		Nagar Panchayat	12	
	Gram Panchayat	38		Gram Panchayat	33	
	Temporary	23		Temporary	11	

1.2.4. LV -3.2: Street Light

Considering the anticipated increase in supply hours, the future projections are as below:

Table 6: LV-3.2 Street Light Unit Projection

Sub Category	East Discom			West Discom			Central Discom		
	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16
Municipal Corp.	65.24	81.88	102.78	89.85	111.89	140.40	78.99	105.99	142.21
Nagar Panchayat	66.89	84.93	107.96	53.14	66.18	83.04	60.21	76.36	96.86
Gram Panchayat	11.01	15.76	22.58	20.15	25.09	31.48	3.06	5.44	10.35
Total	143.13	182.57	233.32	163.14	203.16	254.92	142.26	187.79	249.42

1.2.4.1. East Discom

The following growth rates have been considered for future projections:

Area	Category	Urban		Rural	
Municipal Corporation	Consumer	9.77%	3 year CAGR has been considered	10.00%	Moderate growth has been considered
	Average Load/Consumer	4.61%	1 year growth has been considered	0.94%	3 year CAGR has been considered
	Average Unit/kW	9.30%	Current year growth i.e. FY13 upto Oct'12 has been considered.	20.00%	In view of expected increase in supply hours Moderate growth has been considered
Nagar Panchayat	Consumer	6.43%	3 year CAGR has been considered	10.00%	Moderate growth has been considered
	Average Load/Consumer	0.07%	3 year CAGR has been considered	20.00%	In view of expected increase in supply hours Moderate growth has been considered
	Average Unit/kW	18.63%	Current year growth i.e. FY13 upto Oct'12 has been considered.	20.00%	In view of expected increase in supply hours Moderate growth has been considered
Gram Panchayat	Consumer	11.51%	3 year CAGR has been considered	10.00%	Moderate growth has been considered
	Average Load/Consumer	8.28%	2 year CAGR has been considered	10.00%	In view of expected increase in supply hours Moderate growth has been considered
	Average Unit/kW	13.80%	1 year growth has been considered.	20.00%	In view of expected increase in supply hours Moderate growth has been considered

1.2.4.2. West Discom

LV-3.2 Growth Considered For Projection					
Area	Category	Urban		Rural	
Municipal Corporation	Consumer	13.37%	3 year Urban Street Light consumer growth has been considered	0.70%	3 year Rural Street Light consumer growth has been considered
	Load	13.96%	3 year Urban Street Light load growth has been considered	1.05%	3 year Rural Street Light load growth has been considered
	Consumption	25.78%	1 year Urban Street Light consumption growth has been considered	41.84%	1 year Rural Street Light consumption growth has been considered
Nagar Panchayat	Consumer	13.37%	3 year Urban Street Light consumer growth has been considered	0.70%	3 year Rural Street Light load growth has been considered
	Load	13.96%	3 year Urban Street Light load growth has been considered	1.05%	3 year Rural Street Light load growth has been considered
	Consumption	25.78%	1 year Urban Street Light consumption growth has been considered	41.84%	1 year Rural Street Light consumption growth has been considered
Gram Panchayat	Consumer	13.37%	3 year Urban Street Light consumer growth has been considered	0.70%	3 year Rural Street Light load growth has been considered
	Load	13.96%	3 year Urban Street Light load growth has been considered	1.05%	3 year Rural Street Light load growth has been considered
	Consumption	25.78%	1 year Urban Street Light consumption growth has been considered	41.84%	1 year Rural Street Light consumption growth has been considered

Due to the increase in supply hours across the LT categories due to the Feeder segregation scheme, the additional sales expected due to increase in supply hours is as follows:-

Impact of Feeder Separation Scheme	
Financial Year	2013-14
Additional Consumption (in MU's)	21.09

1.2.4.3. Central Discom

The growth rate for future projections has been taken as given below:-

Particulars	Category	%	Urban		%	Rural
Consumer	Municipal Corp.	19.66	1year CAGR	Municipal Corp.	0	The growth rate of past years is negative
	Nagar Panchayat	7.07	2year growth	Nagar Panchayat	0	
	Gram Panchayat	42.86	1year CAGR	Gram Panchayat	7.3	1year growth
Av.Load/consumer	Municipal Corp.	1	Maximum Growth achieved during past 5 years taken(rounded off)	Municipal Corp.	57	Maximum Growth achieved during past 5 years taken(rounded off).In case of negative growth zero has been taken
	Nagar Panchayat	14		Nagar Panchayat	0	
	Gram Panchayat	20		Gram Panchayat	3	
Av.Unit/KW/month	Municipal Corp.	11		Municipal Corp.	0	
	Nagar Panchayat	4		Nagar Panchayat	5	
	Gram Panchayat	23		Gram Panchayat	0	

1.2.5. LV -4.1: Non Seasonal Industrial

Considering the anticipated increase in supply hours, the future projections are as below:

Table 7: LV-4.1 Non-Seasonal Industrial Unit Projection

Sub Category	East Discom			West Discom			Central Discom		
	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16
Upto 25HP	193.57	240.36	301.42	291.21	317.47	346.52	142.31	162.22	184.91
Above 25HP to 100HP	92.08	107.05	124.90	257.59	285.90	317.39	74.71	83.47	93.31
Above 100HP	9.39	10.34	11.43	10.16	11.30	12.57	8.83	12.36	17.32
Temporary LT Ind.	2.50	2.50	2.50	2.36	2.38	2.40	10.22	15.93	24.86
Total	297.54	360.25	440.25	561.31	617.05	678.88	236.07	273.98	320.40

1.2.5.1. East Discom

The growth rates considered for future projections are as below:

Area	Category	Urban		Rural	
Upto 25HP	Consumer	3.57%	4 year CAGR has been considered	6.70%	4 year CAGR has been considered
	Average Load / Consumer	1.71%	Current year growth i.e. FY13 upto Oct'12 has been considered.	5.00%	Moderate growth has been considered
	Average Unit/kW	3.72%	Current year growth i.e. FY13 upto Oct'12 has been considered.	20.00%	In view of expected increase in supply hours Moderate growth has been considered
Above 25HP to 100 HP	Consumer	10.87%	4 year CAGR has been considered	3.00%	4 year CAGR has been considered
	Average Load / Consumer	1.60%	Current year growth i.e. FY13 upto Oct'12 has been considered.	5.00%	Moderate growth has been considered
	Average Unit/kW	0.00%	No growth has been considered.	20.00%	In view of expected increase in supply hours Moderate growth has been considered
Above 100HP	Consumer	1.68%	4 year CAGR has been considered	0.00%	No growth has been considered.
	Average Load / Consumer	0.63%	Current year growth i.e. FY13 upto Oct'12 has been considered.	0.00%	No growth has been considered.
	Average Unit/kW	2.58%	3 year CAGR has been considered	20.00%	In view of expected increase in supply hours Moderate growth has been considered
Temporary	Consumer	0.00%	No growth has been considered.	0.00%	No growth has been considered.
	Average Load/Consumer	0.00%	No growth has been considered.	0.00%	No growth has been considered.
	Average Unit/kW	0.00%	No growth has been considered.	0.00%	No growth has been considered.

1.2.5.2. West Discom

LV-4.1 Growth Considered For Projection					
Area	Category	Urban		Rural	
Upto 25HP	Consumer	3.92%	1 year Urban Non-Seasonal consumer growth has been considered	6.01%	1 year Rural Non-Seasonal consumer growth has been considered
	Load	8.33%	3 year Urban Non-Seasonal Load growth has been considered	7.09%	2 year Rural Non-Seasonal Load growth has been considered
	Consumption	11.35%	1 year Urban Non-Seasonal consumption growth has been considered	6.16%	3 year Rural Non-Seasonal consumption growth has been considered
Above 25HP to 100 HP	Consumer	3.92%	1 year Urban Non-Seasonal consumer growth has been considered	6.01%	1 year Rural Non-Seasonal consumer growth has been considered
	Load	8.33%	3 year Urban Non-Seasonal Load growth has been considered	7.09%	2 year Rural Non-Seasonal Load growth has been considered
	Consumption	11.35%	1 year Urban Non-Seasonal consumption growth has been considered	6.16%	3 year Rural Non-Seasonal consumption growth has been considered
Above 100HP	Consumer	3.92%	1 year Urban Non-Seasonal consumer growth has been considered	6.01%	1 year Rural Non-Seasonal consumer growth has been considered
	Load	8.33%	3 year Urban Non-Seasonal Load growth has been considered	7.09%	2 year Rural Non-Seasonal Load growth has been considered
	Consumption	11.35%	1 year Urban Non-Seasonal consumption growth has been considered	6.16%	3 year Rural Non-Seasonal consumption growth has been considered
Temporary	Consumer	1.00%	Due to large variations Nominal Growth rate considered.	1.00%	Due to large variations Nominal Growth rate considered.
	Load	1.00%	Due to large variations Nominal Growth rate considered.	1.00%	Due to large variations Nominal Growth rate considered.
	Consumption	1.00%	Due to large variations Nominal Growth rate considered.	1.00%	Due to large variations Nominal Growth rate considered.

Due to the increase in supply hours across the LT categories due to the Feeder segregation scheme, the additional sales expected due to increase in supply hours is as follows:-

Impact of Feeder Separation Scheme	
Financial Year	2013-14
Additional Consumption (in MU's)	36.46

1.2.5.3. Central Discom

The growth rate for future projections has been taken as given below:-

Particulars	Category	%	Urban	%	Rural
Consumer	Permanent LT Ind. Non Seasonal Upto 25HP	5.22	1year growth	1.71	1 year growth rate
	Permanent LT Ind. Non Seasonal >25HP to 100HP	6.24	1year growth	0	The growth rate of past years is negative
	Permanent LT Ind. Non Seasonal >100HP	40	1year growth	0	The growth rate of past years is negative
	Temporary LT Ind.	0	2 Year CAGR	0	The growth rate of past years is negative
Av.Load/consumer	Permanent LT Ind. Non Seasonal Upto 25HP	4	Due to expected increase in supply hrs. Moderate growth rate has been considered	0.00	Due to expected increase in supply hrs. Moderate growth rate has been considered
	Permanent LT Ind. Non Seasonal >25HP to 100HP	6		2.80	
	Permanent LT Ind. Non Seasonal >100HP	76		32.81	
	Temporary LT Ind.	84		37.98%	
Av.Unit/KW/month	Permanent LT Ind. Non Seasonal Upto 25HP	3.79	Due to expected increase in supply hrs. Moderate growth rate has been considered	12.94	Due to expected increase in supply hrs. Moderate growth rate has been considered
	Permanent LT Ind. Non Seasonal >25HP to 100HP	0.00		0.00	
	Permanent LT Ind. Non Seasonal >100HP	0.00		6.79	
	Temporary LT Ind.	0.00		11.61	

1.2.6. LV -4.2: Seasonal Industrial

The future projections are as below:

Table 8: LV-4.2 Seasonal Industrial Unit Projection

Sub Category	East Discom			West Discom			Central Discom		
	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16
Upto 25HP	10.51	11.61	12.93	3.92	4.08	4.24	64.95	151.74	354.93
Above 25HP to 100HP	11.62	11.88	12.17	11.96	12.54	13.16	38.33	68.97	124.28
Above 100HP	0.14	0.14	0.14	0.77	0.81	0.85	6.23	22.56	81.73
Total	22.27	23.63	25.24	16.64	17.43	18.25	109.51	243.27	560.94

1.2.6.1. East Discom

The growth rates considered for future projections are as below:

Area	Category	Urban		Rural	
Upto 25HP	Consumer	0.00%	No growth has been considered.	0.00%	No growth has been considered.
	Average Load / Consumer	1.47%	Current year growth i.e. FY13 upto Oct'12 has been considered.	5.00%	Moderate growth has been considered
	Average Unit/kW	2.95%	Current year growth i.e. FY13 upto Oct'12 has been considered.	20.00%	In view of expected increase in supply hours moderate growth has been considered
Above 25HP to 100 HP	Consumer	0.00%	No growth has been considered.	0.00%	No growth has been considered.
	Average Load / Consumer	0.27%	Current year growth i.e. FY13 upto Oct'12 has been considered.	5.00%	Moderate growth has been considered
	Average Unit/kW	0.91%	Current year growth i.e. FY13 upto Oct'12 has been considered.	20.00%	In view of expected increase in supply hours moderate growth has been considered
Above 100HP	Consumer	0.00%	No growth has been considered.	0.00%	No growth has been considered.
	Average Load / Consumer	0.00%	No growth has been considered.	0.00%	No growth has been considered.
	Average Unit/kW	0.00%	No growth has been considered.	0.00%	No growth has been considered.

1.2.6.2. West Discom

LV-4.2 Growth Considered For Projection					
Area	Category	Urban		Rural	
Upto 25HP	Consumer	3.29%	1 year Urban Seasonal consumer growth has been considered	0.00%	Same as for 2011-12, no growth considered
	Load	5.10%	Category-wide 3 year Seasonal Load growth has been considered	0.00%	Same as for 2011-12, no growth considered
	Consumption	5.26%	3 year Urban Seasonal consumption growth has been considered	0.78%	3 year Seasonal Rural consumption growth has been considered
Above 25HP to 100 HP	Consumer	3.29%	1 year Urban Seasonal consumer growth has been considered	0.00%	Same as for 2011-12, no growth considered
	Load	5.10%	Category-wide 3 year Seasonal Load growth has been considered	0.00%	Same as for 2011-12, no growth considered
	Consumption	5.26%	3 year Urban Seasonal consumption growth has been considered	0.78%	3 year Seasonal Rural consumption growth has been considered
Above 100HP	Consumer	3.29%	1 year Urban Seasonal consumer growth has been considered	0.00%	Same as for 2011-12, no growth considered
	Load	5.10%	Category-wide 3 year Seasonal Load growth has been considered	0.00%	Same as for 2011-12, no growth considered
	Consumption	5.26%	3 year Seasonal consumption growth has been considered	0.78%	3 year Seasonal Rural consumption growth has been considered

Due to the increase in supply hours across the LT categories due to the Feeder segregation scheme, the additional sales expected due to increase in supply hours is as follows:-

Impact of Feeder Separation Scheme	
Financial Year	2013-14
Additional Consumption (in MU's)	0.71

1.2.6.3. Central Discom

The growth rate for future projections has been taken as given below:-

Particulars	Category	%	Urban	%	Rural
Consumer	Permanent LT Ind. Non Seasonal Upto 25HP	0	The growth rate of past years is negative	0	The growth rate of past years is negative
	Permanent LT Ind. Non Seasonal >25HP to 100HP	0		0	
	Permanent LT Ind. Non Seasonal >100HP	0		0	
Av.Load/consumer	Permanent LT Ind. Non Seasonal Upto 25HP	9.07	Keeping in view the maximum growth rate in past 6 years & expected increase in supply hours, moderate growth has been taken	3.71	Keeping in view the maximum growth rate in past 6 years & expected increase in supply hours, moderate growth has been taken
	Permanent LT Ind. Non Seasonal >25HP to 100HP	4.97		9.10	
	Permanent LT Ind. Non Seasonal >100HP	2.84		0.00	The growth rate of past years is negative
Av.Unit/KW/month	Permanent LT Ind. Non Seasonal Upto 25HP	115.95		94.35	Due Keeping in view the maximum growth rate in past 6 years & expected increase in supply hours, moderate growth has been taken
	Permanent LT Ind. Non Seasonal >25HP to 100HP	72.68		34.37	
	Permanent LT Ind. Non Seasonal >100HP	252.25		0.00	

1.2.7. LV -5.1: Agricultural

The projections for LV 5.1 are as below:

Table 9: LV-5.1 Agricultural Unit Projection

Area	Sub Category	East Discom			West Discom			Central Discom		
		FY 14	FY 15	FY 16	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16
Urban	Metered General	98.04	98.04	98.04	44.17	53.78	65.49	97.30	122.09	153.88
Urban	Metered Temporary	0.00	0.00	0.00	2.62	3.34	4.25	0.00	0.00	0.00
Urban	Unmetered General	69.09	69.09	69.09	139.13	161.65	187.82	114.50	122.47	131.19
Urban	Unmetered Temporary	30.83	36.27	42.75	41.96	45.62	49.60	18.62	19.55	20.53
Urban	Total	197.96	203.39	209.88	227.87	264.39	307.16	230.42	264.11	305.60
Rural	Metered General	514.39	524.68	535.17	99.77	117.09	137.42	1,456.36	2,139.71	3,167.71
Rural	Metered Temporary	0.00	0.00	0.00	8.97	11.42	14.53	0.00	0.00	0.00
Rural	Unmetered General	744.79	759.68	774.88	4,080.02	4,740.59	5,508.11	1,543.39	1,611.70	1,687.29
Rural	Unmetered Temporary	816.58	1,042.95	1,335.37	1,415.28	1,538.80	1,673.10	553.51	608.87	669.75
Rural	Total	2,075.76	2,327.31	2,645.42	5,604.04	6,407.90	7,333.16	3,553.26	4,360.28	5,524.75
Total	Metered General	612.43	622.72	633.21	143.94	170.87	202.91	1,553.66	2,261.80	3,321.59
Total	Metered Temporary	0.00	0.00	0.00	11.60	14.76	18.78	0.00	0.00	0.00
Total	Unmetered General	813.88	828.77	843.97	4,219.14	4,902.24	5,695.93	1,657.89	1,734.17	1,818.48
Total	Unmetered Temporary	847.41	1,079.21	1,378.12	1,457.24	1,584.42	1,722.70	572.13	628.42	690.28
Total	Total	2,273.72	2,530.71	2,855.30	5,831.91	6,672.29	7,640.33	3,783.68	4,624.39	5,830.35

1.2.7.1. East Discom

The licensee has projected the assessed consumption of unmetered agricultural connections for FY-14 on the basis of existing billing benchmark i.e. 1560 units & 1200 units per HP per annum in urban and rural areas respectively with the month-wise segregation as already provided in tariff order FY13.

1.2.7.2. West Discom

- As the Unmetered Temporary connections varies throughout the year depending upon the season, the projection for unmetered temporary sales projection done on month wise basis. Except the Unmetered Temporary, the following growth rates have been used to project future growth in the category:

LV-5.1 Growth Considered For Projection (West Discom)					
Area	Category	Urban		Rural	
Metered General	Consumer	1.00%	Nominal Growth rate used.	1.00%	Nominal Growth rate used.
	Load	1.00%	Nominal Growth rate used.	1.00%	Nominal Growth rate used.
	Consumption	21.77%	1 year Metered General consumption growth has been considered	17.36%	3 year Metered General consumption growth has been considered
Metered Temporary	Consumer	1.00%	Nominal Growth rate used.	1.00%	Nominal Growth rate used.
	Load	1.00%	Nominal Growth rate used.	1.00%	Nominal Growth rate used.
	Consumption	27.27%	3 year Metered Temporary consumption growth has been considered	27.27%	3 year Metered Temporary consumption growth has been considered

b. Projection for Unmetered Temporary Consumers:-

The consumption in the unmetered temporary category cannot be adequately explained using year-end figures. Hence, a month-wise forecast approach has been adopted for the sub-category. Consumer growth month-on-month is assumed to be equal to 2 year CAGR of consumer growth on year on year basis of sub-category. Load is estimated taking a 2 year CAGR (5.75%) on average load of unmetered general consumer (4.99 HP in FY 13) and the consumption is estimated using the billing norm of 155units/HP/month for rural consumers and 175 units/HP/month for urban consumers from FY14.

1.2.7.3. Central Discom

The licensee has projected the assessed consumption of unmetered agricultural connections for FY-14 on the basis of proposed billing benchmark i.e. 1760 units & 1420 units per HP per annum in urban and rural areas respectively. The computation for the proposed norms has been elaborated below.

1.2.7.4. Norms of Unmetered Agricultural Sales

- a.** In the tariff order for FY-06, Hon'ble Commission had decided that the billing for un-metered permanent agricultural rural connections should be done on the basis of assessed consumption of 100 units per HP per month based on the average yearly consumption of 1200 units per HP for minimum 6 Hrs. of 3-phase supply. Thereafter, this yearly assessed consumption of 1200 units per HP in respect of permanent un-metered agricultural consumers in rural area remained un-changed in the subsequent tariff orders of the Commission till FY12 even after substantial increase in the supply hours over the prescribed minimum 6 hrs of 3-phase supply. The assessed yearly consumption of un-metered agricultural connections in urban area has been increased slightly in FY-08 up to the level of 1560 units per HP and this level has been maintained till FY12.

It is submitted that **there has been considerable strengthening in the infrastructure of Discom and thus the reliability and the quality of supply has improved considerably. The supply hours have also increased on year on year basis** and thus the average monthly consumption of agricultural consumers has gone up considerably, but due to regulatory constraints, the billing of un-metered agricultural consumers is being done on the basis of assessed consumption as approved by the Commission. Therefore, it would be just and appropriate that benchmark of billing of un-metered agricultural connections be raised, considering the increased supply hours.

- b.** It is evident from above that **the tariff for un-metered agricultural consumers is not based on the actual/realistic consumption.** The licensees are required to raise the bill to the consumers on the basis of provisions of tariff order only, but the consumers resort to indiscriminate use of electricity and the actual consumption depends directly upon the actual average supply hours maintained by the licensee for the farmers.
- c.** Here it is pertinent to mention that the level of assessment of consumption of un-metered agricultural connections in Gujarat is 1700 units/HP/ year, in Rajasthan 1945 units/kW/ year, in Maharashtra is 1804 units / HP / Yr., in Haryana it is 1680 units / HP / Yr. and in Chhattisgarh it is 1650 units / HP / Yr. The level of assessment of consumption of un-metered agricultural connection in MP is much lower than the above states.
- d.** The Hon'ble Commission may kindly consider the principal of billing norm as per increased supply hours in unmetered agriculture consumers as laid down by APTEL in Review Petition RP/10 arising out from Appeal 145/09. Hon'ble Commission was also kind enough to exercise Prudence-Check in this issue and arriving in final Conclusion, which states-

*"However, considering diversity in usage of electricity across the consumer base and also considering local interruptions of supply below 11 kV feeders, it would not be proper to assume that all the agriculture load remains on par for the full period when the supply is extended. Hence, a discounting factor of 20% is considered to assess actual usage of agriculture supply beyond six hours (considering weekly off for one day in a week) during November, 2006 to March, 2007 in this order and the additional units consumed by agricultural unmetered load over six hours supply is assessed accordingly. **The units which are considered to be consumed over 6 hours in a week (considering weekly off for one day in a week) are 93.33 units per kW in a month or 15.56 units/hour/kw.***

*17. Since the billing benchmarks for temporary connections in FY 2006-07 (130 units/HP/month) were considered as 16% more than the actual consumption (112 units) hence, **the units considered as consumed per hour per kW by temporary agriculture connections during extended supply hours (as per the directions of GoMP) in this order are 18.05 units/hour/kw.***

- e.** Furthermore, the rate and total quantum of energy consumed by pumps depends upon the capacity (or the so called connected load) of the pumps. There are several plausible reasons due to which the capacity of pumps gets enhanced without proper entry in the consumers' ledger of the licensee. Some reasons are:
- Non-use of ISI / BEE star rated pump motors, frictionless PVC pipe and foot valves and shunt capacitors of appropriate rating
 - Rewinding of pumps on burning of windings, making it of higher capacity than the nominal name plate ratings
 - Sometimes low voltage conditions warrant higher capacity pump to maintain required discharge of water.
 - Being billed for lower consumption than the actual consumption;
 - Increase in the cultivation area needing increase in discharge of water.
 - Change in cropping pattern.

This obviously results in the under estimation of the unmetered irrigation pump consumption. There are practical difficulties and technical constraints in re-rating and checking of each and every pump installation, because these installations are mostly of temporary nature and are removed during the monsoon. The inevitable end result ultimately disfavors the licensee Discom and results in under estimation of consumption, under-recovery of both revenue and other legitimate costs.

f. Review of normative specific consumption for billing due to enhancement of pump capacity:

The irrigation pumps are usually available in the capacities of 3-HP, 5-HP, and 7.5-HP and 10-HP. Thus, a consumer intending to enhance the capacity of his pump has to enhance it to the next higher capacity available. Thus, the percentage increase in the capacities on switching over to the next higher capacities available is as follows:

- i. 3 HP to 5 HP – 67 % increase
- ii. 5 HP to 7.5 HP – 50 % increase
- iii. 7.5 HP to 10 HP – 33 % increase

It is very clear, that the % increase in pump capacity and hence the probable increase in consumption for the same duration of use is very substantial in each case. Even if only a small proportion of consumers, say 20%, enhance their pump capacities to the next higher ones (not unauthorized), its impact on the increase in consumption is very significant - say of the order of 10 %. As per the records, majority (97%) of irrigation pumps have nominal capacities up to 5 HP. Thus, the enhancement in capacity and probable consumption shall lie in the range of 50% to 60% in most of the cases.

Therefore, it seems quite reasonable and expedient to **allow a 20% increase in the normative specific consumption** (i.e., consumption per HP) so that, the adverse impact of under estimation of unmetered irrigation pumps consumption is minimized. It is submitted, that, this enhanced quantum of energy consumption, as per the revised “billing norm”, may be taken into cognizance and allowed to be recovered including the power costs. This would sustain the financial health of the Discoms.

In the year 2013-14, the Discoms intend to maintain an average 3-phase supply of 8 Hrs. to the agricultural consumers. Thus due to anticipated increase in supply hours in FY -14, the actual consumption would increase further. Therefore, the projections of annual consumption of un-metered agricultural connections need to be review, revised and **proposed as 1760 & 1420 units /HP in urban and rural areas respectively.** This assessed consumption is based on the following assumption:

- i. 1 HP = 0.746 kW
- ii. Per day use of pump = 8 Hrs (in Rural area)
= 10 Hrs (in Urban area)
- iii. No. of days in a month = 30 days
- iv. Months of use of pump = 8 months
- v. Per HP consumption (in Rural area) in KWH = $0.746 \times 8 \times 30 \times 8 = 1432$ units
say 1420 units per HP per annum
- vi. Per HP consumption (in Urban area) = KWH = $0.746 \times 10 \times 30 \times 8 = 1790$ units
say 1760 units per HP per annum

The above calculations are based on the ideal condition of the correctness of the sanctioned load of the consumer. In fact the actual working load of the consumer is usually higher than on the records of the licensee due to reasons discussed above.

1.2.8. LV 5.2: Other than Agricultural use

The future projections are as follows:

Table 10: LV-5.2 Other than Agricultural Use - Projection of Consumption (MU)

Sub Category	East Discom			West Discom			Central Discom		
	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16
Upto 3HP	0.80	0.88	0.97	0.61	0.62	0.62	0.43	0.43	0.43
>3HP to 5HP	0.35	0.38	0.42	0.69	0.69	0.70	0.82	0.96	1.16
>5HP to 10HP	0.53	0.58	0.64	1.76	1.78	1.80	1.97	2.82	4.38
>10HP to 20HP	0.25	0.27	0.30	0.30	0.30	0.30	0.74	1.26	2.22
>20HP	0.85	0.94	1.03	0.44	0.44	0.45	1.64	3.03	5.62
Temporary	0.12	0.12	0.12	0.03	0.03	0.03	0.01	0.01	0.01
Total	2.90	3.18	3.48	3.82	3.86	3.90	5.61	8.51	13.82

1.2.8.1. East Discom

Nominal growth of 10% has been used for the projection of consumers, load & consumption

1.2.8.2. West Discom

As the huge variation shown in this category across consumers, connected load and sales, thus a nominal 1% growth has been taken in all respect i.e. consumers, connected load and sales.

1.2.8.3. Central Discom

The growth rates considered for this category is as mentioned below:

Particulars	Category	%	Urban	%	Rural
Consumer	Permanent Other Agr. Upto 3HP	0.00%	Negative growth in past years	0.00%	Negative growth in past years
	Permanent Other Agr. >3HP to 5HP	45.45%	1 year growth	1.28%	1 year growth
	Permanent Other Agr. >5HP to 10HP	85.71%	1 year growth	0.00%	1 year growth
	Permanent Other Agr. >10HP to 20HP	100.00%	1 year growth	37.50%	1 year growth
	Permanent Other Agr. >20HP	24.57%	5 year growth	88.13%	1 year growth
	Temporary Other Agr.	0	Negative growth in past years	0	Negative growth in past years
.Load/consumer	Permanent Other Agr. Upto 3HP	1.33	Actual as observed in the year 2011-12	1.63	Actual as observed in the year 2011-12
	Permanent Other Agr. >3HP to 5HP	3.75		3.70	
	Permanent Other Agr. >5HP to 10HP	6.31		6.81	
	Permanent Other Agr. >10HP to 20HP	9.38		12.00	
	Permanent Other Agr. >20HP	21.83		18.12	
	Temporary Other Agr.	0.00		3.00	
Unit/KW/month	Permanent Other Agr. Upto 3HP	235.97	Actual as observed in the year 2011-12	155.92	Actual as observed in the year 2011-12
	Permanent Other Agr. >3HP to 5HP	97.00		72.81	
	Permanent Other Agr. >5HP to 10HP	96.48		60.91	
	Permanent Other Agr. >10HP to 20HP	108.63		57.60	
	Permanent Other Agr. >20HP	41.63		81.97	
	Temporary Other Agr.	87.70		74.60	

1.2.9. HV 1: Railway Traction

The future projections are as follows:

Table 11: HV-1 Railway Traction Projection

	East Discom			West Discom			Central Discom		
	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16
Total Units (MU)	570.44	570.44	570.44	425.04	437.48	450.28	900.84	976.62	1,059.18

1.2.9.1. East Discom

No growth has been considered for future projections.

1.2.9.2. West Discom

HV-1 Growth Considered For Projection					
Area	Category	Urban		Rural	
220 kV	Consumer	0.00%	None of the Railway Consumer is at this voltage level in the Company.	0.00%	None of the Railway Consumer is at this voltage level in the Company.
	Load (kW)	0.00%	None of the Railway Consumer is at this voltage level in the Company.	0.00%	None of the Railway Consumer is at this voltage level in the Company.
	Units (MU)	0.00%	None of the Railway Consumer is at this voltage level in the Company.	0.00%	None of the Railway Consumer is at this voltage level in the Company.
132 kV	Consumer	3.23%	Category-Wide 3 year CAGR has been Used	3.23%	Category-Wide 3 year CAGR has been Used
	Load (kW)	3.76%	Category-Wide 3 year CAGR has been Used	3.76%	Category-Wide 3 year CAGR has been Used
	Units (MU)	2.93%	Category-Wide 2 year CAGR has been Used	2.93%	Category-Wide 2 year CAGR has been Used

1.2.9.3. Central Discom

The basis of projections for future years is given below:-

Category	Voltage	%	Urban	%	Rural
Consumer	220	0.00%	Only one consumer added in past 6 years	0.00%	No growth observed in past 6 years
	132	0.00%		0.00%	
Load	220	0.00%	No substantial growth was observed	0.00%	No substantial growth was observed
	132	0.00%		0.00%	
Unit	220	0.00%	No consumer in urban area	11.96%	5 year CAGR taken
	132	9.26%	1 year growth taken	4.13%	1 year growth taken

1.2.10. HV -2: Coal Mines

The future projections are as follows:

Table 12: HV-2 Coal Mines Projection

Sub Category	East Discom			West Discom			Central Discom		
	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16
132 kV	205.38	205.38	205.38	0.00	0.00	0.00	0.00	0.00	0.00
33 kV	283.56	289.38	295.63	0.00	0.00	0.00	32.20	32.20	32.20
11 kV	7.53	7.53	7.53	0.00	0.00	0.00	1.27	1.27	1.27
Total	496.48	502.29	508.55	0.00	0.00	0.00	33.47	33.47	33.47

1.2.10.1. East Discom

The following growth rates have been considered for future projections:

Area	Category	Urban		Rural	
132 kV	Consumer	0.00%	No growth has been considered	0.00%	No growth has been considered
	Load (kW)	0.00%	No growth has been considered	0.00%	No growth has been considered
	Units (MU)	0.00%	No growth has been considered	0.00%	No growth has been considered
33 kV	Consumer	0.00%	No growth has been considered	0.00%	No growth has been considered
	Load (kW)	2.65%	2 year CAGR has been considered	5.81%	1 year growth has been considered
	Units (MU)	0.00%	No growth has been considered	7.45%	2 year CAGR has been considered
11 kV	Consumer	0.00%	No growth has been considered	0.00%	No growth has been considered
	Load (kW)	0.00%	No growth has been considered	0.00%	No growth has been considered
	Units (MU)	0.00%	No growth has been considered	0.00%	No growth has been considered

1.2.10.2. West Discom

This category has not been included in the sales forecast as the West Discom does not currently have any consumer in this category.

1.2.10.3. Central Discom

No substantial growth was observed in this category.

1.2.11. HV-3: Industrial and Non-Industrial

The future projections are as follows:

Table 13: HV-3 Industrial and Non-Industrial Projection

	Sub Category	East Discom			West Discom			Central Discom		
		FY 14	FY 15	FY 16	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16
Industrial - Unit (MU)	132 kV	1,225.38	1,298.48	1,379.68	637.63	637.63	637.63	707.80	946.62	1,268.38
	33 kV	493.63	522.60	553.27	2,097.25	2,114.55	2,132.03	1,057.95	1,099.67	1,143.79
	11 kV	76.12	79.50	83.06	120.41	130.60	141.66	67.11	79.09	93.22
	Total	1,795.13	1,900.58	2,016.01	2,855.29	2,882.78	2,911.32	1,832.86	2,125.38	2,505.39
Non Industrial - Unit (MU)	132 kV	0.00	0.00	0.00	32.60	35.70	39.11	0.13	0.13	0.14
	33 kV	176.36	197.40	222.26	271.39	300.45	332.78	252.56	283.64	319.93
	11 kV	73.53	77.03	80.70	100.61	103.04	105.53	81.55	87.41	93.69
	Total	249.89	274.43	302.96	404.59	439.19	477.42	334.24	371.18	413.76

1.2.11.1. East Discom

Growth considered for projection (Industrial)

Area	Category	Urban		Rural	
132 kV	Consumer	12.62%	3 year CAGR has been considered	0.00%	No growth has been considered
	Load (kW)	13.49%	4 year CAGR has been considered	6.32%	1 year growth has been considered
	Units (MU)	11.08%	Nominal growth has been considered	0.00%	No growth has been considered
33 kV	Consumer	12.06%	4 year CAGR has been considered	1.92%	Current year growth i.e. FY13 upto Oct'12 has been considered.
	Load (kW)	3.17%	4 year CAGR has been considered	1.37%	3 year CAGR has been considered
	Units (MU)	5.55%	4 year CAGR has been considered	6.20%	1 year growth has been considered
11 kV	Consumer	23.53%	Current year growth i.e. FY13 upto Oct'12 has been considered.	0.00%	No growth has been considered
	Load (kW)	4.01%	4 year CAGR has been considered	4.49%	4 year CAGR has been considered
	Units (MU)	3.42%	4 year CAGR has been considered	8.82%	1 year growth has been considered

HV- 3.2 Growth considered for projection (Non-Industrial)

Area	Category	Urban		Rural	
132 kV	Consumer	0.00%	No growth has been considered	0.00%	No growth has been considered
	Load (kW)	0.00%	No growth has been considered	0.00%	No growth has been considered
	Units (MU)	-100.00%	No growth has been considered	0.00%	No growth has been considered
33 kV	Consumer	0.00%	No growth has been considered	5.33%	4 year CAGR has been considered
	Load (kW)	5.04%	Current year growth i.e. FY13 upto Oct'12 has been considered.	31.76%	4 year CAGR has been considered
	Units (MU)	7.06%	Current year growth i.e. FY13 upto Oct'12 has been considered.	27.06%	4 year CAGR has been considered
11 kV	Consumer	8.06%	2 year CAGR has been considered	0.00%	No growth has been considered
	Load (kW)	6.02%	4 year CAGR has been considered	0.00%	No growth has been considered
	Units (MU)	4.73%	4 year CAGR has been considered	5.12%	2 year CAGR has been considered

1.2.11.2. West Discom

HV-3.1 Growth Considered For Projection (Industrial)					
Area	Category	Urban		Rural	
132 kV	Consumer	0.00%	No growth has been considered.	0.00%	No growth has been considered.
	Load (kW)	0.00%	No growth has been considered.	0.00%	No growth has been considered.
	Units (MU)	0.00%	No growth has been considered.	0.00%	No growth has been considered.
33 kV	Consumer	7.87%	Subcategory-wide 1 year consumer growth of pertaining voltage-level has been considered.	7.87%	Subcategory-wide 1 year consumer growth of pertaining voltage-level has been considered.
	Load (kW)	1.00%	Due to large variations nominal growth has been considered.	1.00%	Due to large variations nominal growth has been considered.
	Units (MU)	1.00%	Due to large variations nominal growth has been considered.	1.00%	Due to large variations nominal growth has been considered.

11 kV	Consumer	4.95%	Subcategory-wide 1 year consumer growth of pertaining voltage-level has been considered.	4.95%	Subcategory-wide 1 year consumer growth of pertaining voltage-level has been considered.
	Load (kW)	4.90%	Subcategory-wide 1 year Load growth of pertaining voltage-level has been considered.	4.90%	Subcategory-wide 1 year Load growth of pertaining voltage-level has been considered.
	Units (MU)	8.46%	Subcategory-wide 1 year consumption growth of pertaining voltage-level has been considered.	8.46%	Subcategory-wide 1 year consumption growth of pertaining voltage-level has been considered.

HV-3.2 Growth Considered for Projection (Non-Industrial)					
Area	Category	Urban		Rural	
132 kV	Consumer	0.00%	No growth considered	0.00%	No growth considered
	Load (kW)	0.00%	No growth considered	0.00%	No growth considered
	Units (MU)	9.53%	Category-wide 1 year CAGR considered.	9.53%	Category-wide 1 year CAGR considered.
33 kV	Consumer	9.04%	1 year CAGR considered	9.04%	1 year CAGR considered
	Load (kW)	8.57%	2 year CAGR considered	8.57%	2 year CAGR considered
	Units (MU)	11.25%	Category-wide 2 year CAGR considered.	11.25%	Category-wide 2 year CAGR considered.
11 kV	Consumer	9.48%	2 year CAGR considered	9.48%	2 year CAGR considered
	Load (kW)	5.56%	2 year CAGR considered	5.56%	2 year CAGR considered
	Units (MU)	2.44%	2 year CAGR considered.	2.44%	2 year CAGR considered.

HV-3.3 Growth Considered for Projection					
Area	Category	Urban		Rural	
132 kV	Consumer	0.00%	No growth considered	0.00%	No growth considered
	Load (kW)	0.00%	No growth considered	0.00%	No growth considered
	Units (MU)	0.00%	No growth considered	0.00%	No growth considered
33 kV	Consumer	1.00%	Nominal growth considered.	1.00%	Nominal growth considered.
	Load (kW)	6.23%	1 year CAGR considered	6.23%	1 year CAGR considered
	Units (MU)	0.00%	No growth considered	0.00%	No growth considered
11 kV	Consumer	1.00%	Nominal growth considered.	1.00%	Nominal growth considered.
	Load (kW)	1.00%	Nominal growth considered.	1.00%	Nominal growth considered.
	Units (MU)	1.00%	Nominal growth considered.	1.00%	Nominal growth considered.

As the Power Intensive Industries is added in Tariff Order of FY12 hence the historical trends are available in this subcategory for limited period. Also the consumers of this subcategory tends to go for Open Access, hence no growth is presumed in this category and the sales is considered same as in the FY13

1.2.11.3. Central Discom

The basis of projections of HT Industrial Category for future years is given below:-

Category	Voltage	%	Urban	%	Rural
Consumer	132	12.50%	One year growth has been taken	0.00%	No growth was observed
	33	10.86%		8.22%	One year growth has been taken
	11	20.65%		0.00%	No growth was observed
Load	132	31.10%	One year growth has been taken	0.00%	No growth was observed
	33	4.96%		7.90%	One year growth has been taken
	11	16.67%		42.53%	One year growth has been taken
Unit	132	34.78%	One year growth has been taken	1.44%	One year growth has been taken
	33	2.40%		8.54%	
	11	17.89%		0.00%	No growth was observed

The basis of projections of HT Non-Industrial Category for future years is given below:-

Category	Voltage	%	Urban	%	Rural
Consumer	132	0.00%	No growth was observed	0.00%	No growth was observed
	33	10.51%		18.75%	One year growth has been taken
	11	13.82%		0.00%	No growth was observed
Load	132	0.00%	One year growth has been taken	0.00%	No growth was observed
	33	6.43%		27.33%	One year growth has been taken
	11	10.77%		0.00%	No growth was observed
Unit	132	1.25%	One year growth has been taken	0.00%	No growth was observed
	33	10.46%		41.89%	
	11	7.28%		0.00%	No growth was observed

1.2.12. HV -4: Seasonal

The future projections are as follows:

Table 14: HV-4 Seasonal – Projections

Sub Category	East Discom			West Discom			Central Discom		
	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16
33 kV	7.44	8.32	9.35	7.85	7.93	8.01	2.16	3.17	4.66
11 kV	0.36	0.43	0.51	1.11	1.12	1.13	0.77	0.85	0.95
Total	7.80	8.75	9.86	8.96	9.05	9.14	2.93	4.02	5.61

1.2.12.1. East Discom

Growth considered for projection

Area	Category	Urban		Rural	
33 kV	Consumer	0.00%	No growth has been considered	0.00%	No growth has been considered
	Load (kW)	0.00%	No growth has been considered	0.00%	No growth has been considered
	Units (MU)	18.53%	4 year CAGR has been considered	2.41%	1 year growth has been considered
11 kV	Consumer	0.00%	No growth has been considered	0.00%	No growth has been considered
	Load (kW)	0.00%	No growth has been considered	0.00%	No growth has been considered
	Units (MU)	30.27%	2 year CAGR has been considered	6.67%	3 year CAGR has been considered

1.2.12.2. West Discom

As the huge variations in growth have been shown in this category, a nominal growth of 1% is taken to project under this category in all respect i.e. consumers, connected load and consumption.

1.2.12.3. Central Discom

The basis of projections of HT Seasonal Category for future years is given below:-

Category	Voltage	%	Urban	%	Rural
Consumer	132	0.00%	No growth was observed	0.00%	No growth was observed
	33	100.00%	One ye One year growth has been taken	0.00%	
	11	0.00%	No growth was observed	0.00%	
Load	132	0.00	No growth was observed One	0.00%	No growth was observed
	33	135.77%	One year growth has been taken	0.00%	
	11	9.82%	One year growth has been taken	0.00%	
Unit	132	0.00%	No growth was observed	0.00%	No growth was observed
	33	47.54%	One year growth has been taken	46.73%	No One year growth has been taken
	11	11.02%		0.00%	No growth was observed

1.2.13. HV -5 Water Works, Lift Irrigation & Other than Agricultural

The future projections are as follows:

Table 15: HV-5 Projections

	Sub Category	East Discom			West Discom			Central Discom		
		FY 14	FY 15	FY 16	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16
Water Works - Units (MU)	132 kV	0.00	0.00	0.00	270.61	302.59	338.36	13.56	13.56	13.56
	33 kV	54.98	58.28	61.77	60.80	65.88	71.38	81.47	86.14	91.07
	11 kV	7.53	7.73	7.95	12.99	14.07	15.25	11.77	13.44	15.36
	Total	62.51	66.01	69.73	344.39	382.54	424.99	106.80	113.14	119.99
Irrigation - Units (MU)	132 kV	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	33 kV	3.81	3.95	4.10	0.13	0.14	0.15	2.54	4.92	11.23
	11 kV	0.42	0.51	0.62	0.00	0.00	0.00	0.12	0.12	0.12
	Total	4.23	4.46	4.72	0.13	0.14	0.15	2.66	5.04	11.35
Other than Agricultural - Units (MU)	132 kV	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	33 kV	9.94	10.47	11.06	6.29	6.84	7.45	4.82	7.54	12.04
	11 kV	0.57	0.68	0.80	0.00	0.00	0.00	1.49	2.27	3.54
	Total	10.51	11.14	11.86	6.29	6.84	7.45	6.31	9.81	15.58

1.2.13.1. East Discom

Growth Considered For Projection (Water Works)

Area	Category	Urban		Rural	
33 kV	Consumer	0.00%	No growth has been considered	0.00%	No growth has been considered
	Load (kW)	0.00%	No growth has been considered	0.00%	No growth has been considered
	Units (MU)	5.89%	2 year CAGR has been considered	6.17%	Current year growth i.e. FY13 upto Oct'12 has been considered.
11 kV	Consumer	0.00%	No growth has been considered	0.00%	No growth has been considered
	Load (kW)	0.00%	No growth has been considered	0.00%	No growth has been considered
	Units (MU)	0.00%	No growth has been considered	13.40%	Current year growth i.e. FY13 upto Oct'12 has been considered.

Growth Considered For Projection (Irrigation)

Area	Category	Urban		Rural	
33 kV	Consumer	0.00%	No growth has been considered	0.00%	No growth has been considered
	Load (kW)	0.00%	No growth has been considered	0.00%	No growth has been considered
	Units (MU)	0.00%	No growth has been considered	3.73%	1 year growth has been considered
11 kV	Consumer	0.00%	No growth has been considered	0.00%	No growth has been considered
	Load (kW)	0.00%	No growth has been considered	0.00%	No growth has been considered
	Units (MU)	0.00%	No growth has been considered	20.81%	1 year growth has been considered

Growth Considered For Projection (Other than Agriculture)

Area	Category	Urban		Rural	
33 kV	Consumer	0.00%	No growth has been considered	0.00%	No growth has been considered
	Load (kW)	0.00%	No growth has been considered	0.00%	No growth has been considered
	Units (MU)	1.35%	2 year CAGR has been considered	15.83%	3 year CAGR has been considered
11 kV	Consumer	0.00%	No growth has been considered	0.00%	No growth has been considered
	Load (kW)	0.00%	No growth has been considered	0.00%	No growth has been considered
	Units (MU)	17.41%	2 year CAGR has been considered	22.82%	Current year growth i.e. FY13 upto Oct'12 has been considered.

1.2.13.2. West Discom

HV-5.1 Water Works Growth Considered For Projection (Water Works)					
Area	Category	Urban		Rural	
132 kV	Consumer	0.00%	No growth considered	0.00%	No growth considered
	Load (kW)	0.00%	No growth considered	0.00%	No growth considered
	Units (MU)	11.82%	Subcategory wide 1 year CAGR considered.	11.82%	Subcategory wide 1 year CAGR considered.
33 kV	Consumer	6.54%	2 year CAGR considered	6.54%	2 year CAGR considered
	Load (kW)	1.00%	Nominal growth rate considered,	1.00%	Nominal growth rate considered,
	Units (MU)	8.36%	1 year category wide CAGR considered.	8.36%	1 year category wide CAGR considered.
11 kV	Consumer	1.00%	Nominal growth rate has been considered,	1.00%	Nominal growth rate has been considered,
	Load (kW)	1.00%	Nominal growth rate considered,	1.00%	Nominal growth rate considered,
	Units (MU)	8.36%	1 year category wide CAGR considered.	8.36%	1 year category wide CAGR considered.

HV-5.1 Growth Considered For Projection (Irrigation)					
Area	Category	Urban		Rural	
132 kV	Consumer	0.00%	No growth considered	0.00%	No growth considered
	Load (kW)	0.00%	No growth considered	0.00%	No growth considered
	Units (MU)	0.00%	No growth considered	0.00%	3 year CAGR considered
33 kV	Consumer	9.68%	Category wide 1 year CAGR used.	9.68%	Category wide 1 year CAGR used.
	Load (kW)	4.48%	Category wide 1 year CAGR used.	4.48%	Category wide 1 year CAGR used.
	Units (MU)	8.36%	Category wide 1 year CAGR used.	8.36%	Category wide 1 year CAGR used.
11 kV	Consumer	0.00%	No growth considered	0.00%	No growth considered
	Load (kW)	0.00%	No growth considered	0.00%	No growth considered
	Units (MU)	0.00%	No growth considered	0.00%	No growth considered

HV-5.2 Growth Considered For Projection (Other than Agriculture)					
Area	Category	Urban		Rural	
33 kV	Consumer	11.11%	1 year CAGR considered.	11.11%	1 year CAGR considered.
	Load (kW)	10.33%	1 year CAGR considered.	10.33%	1 year CAGR considered.
	Units (MU)	8.83%	Category-wide 1 year CAGR considered	8.83%	Category-wide 1 year CAGR considered
11 kV	Consumer	0.00%	No growth considered	0.00%	No growth considered
	Load (kW)	0.00%	No growth considered	0.00%	No growth considered
	Units (MU)	0.00%	No growth considered	0.00%	No growth considered

1.2.13.3. Central Discom

The basis of projections of HT Water works & lift Irrigation Category for future years is given below:-

Category	Voltage	%	Urban	%	Rural
Consumer	132	0.00%	No growth was observed	0.00%	No growth was observed
	33	15.63%	One year growth has been taken	0.00%	
	11	5.00%		0.00%	
Load	132	0.00%	No growth was observed	0.00%	No growth was observed
	33	22.67%	One year growth has been taken	0.00%	
	11	6.26%	One year growth has been taken	0.00%	
Unit	132	0.00%	No growth was observed	0.00%	No growth was observed
	33	5.74%	One year growth has been taken	5.30%	One year growth has been taken
	11	15.31%		0.00%	No growth was observed

The basis of projections of HT other than agricultural use Category for future years is given below:-

Category	Voltage	%	Urban	%	Rural
Consumer	132	0.00%	No growth was observed	0.00%	No growth was observed
	33	33.33%	One year growth has been taken	50.00%	One year growth has been taken
	11	0.00%	No growth was observed	0.00%	No growth was observed
Load	132	0.00%	No growth was observed	0.00%	No growth was observed
	33	35.93%	One year growth has been taken	23.81%	One year growth has been taken
	11	0.00%	No growth was observed	0.00%	No growth was observed
Unit	132	0.00%	No growth was observed	0.00%	No growth was observed
	33	40.34%	One year growth has been taken	88.45%	One year growth has been taken
	11	0.00%	No growth was observed	61.14%	One year growth has been taken

1.2.14. HV -6: Bulk Residential users

The future projections are as follows:

Table 16: HV-6 Bulk Residential user – Projections

Sub	East Discom			West Discom			Central Discom		
Category	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16
33 kV	361.46	418.44	484.53	1.17	1.25	1.34	171.86	187.04	204.01
11 kV	35.50	41.16	47.73	6.00	6.06	6.12	12.64	19.71	31.50
Total	396.96	459.60	532.26	7.17	7.31	7.46	184.50	206.75	235.51

1.2.14.1. East Discom

Growth Considered For Projections:

Area	Category	Urban		Rural	
33 kV	Consumer	0.00%	No growth has been considered	0.00%	No growth has been considered
	Load (kW)	0.00%	No growth has been considered	0.00%	No growth has been considered
	Units (MU)	15.00%	Moderate growth considered	20.00%	Moderate growth considered
11 kV	Consumer	0.00%	No growth has been considered	0.00%	No growth has been considered
	Load (kW)	0.00%	No growth has been considered	0.00%	No growth has been considered
	Units (MU)	15.00%	Moderate growth considered	20.00%	Moderate growth considered

1.2.14.2. West Discom

The growth rate used to project is as follows:-

Area	Category	Urban		Rural	
33 kV	Consumer	0.00%	No growth considered	0.00%	No growth considered
	Load (kW)	0.00%	No growth considered	0.00%	No growth considered
	Units (MU)	6.88%	1 year category-wide growth rate considered.	6.88%	1 year category-wide growth rate considered.
11 kV	Consumer	9.14%	3 year category-wide growth rate considered.	9.14%	3 year category-wide growth rate considered.
	Load (kW)	1.00%	Nominal growth considered	1.00%	Nominal growth considered
	Units (MU)	1.00%	Nominal growth considered	1.00%	Nominal growth considered

1.2.14.3. Central Discom

The basis of projections of HT 6.1 Category for future years is given below:-

Category	Voltage	%	Urban	%	Rural
Consumer	33	5.00%	One year growth has been taken	0.00%	No growth was observed
	11	0.00%	No growth was observed	0.00%	No growth was observed
Load	33	0.00%		0.00%	
	11	2.51%	One year growth has been taken	0.00%	No growth was observed
Unit	33	4.69%	One year growth has been taken	14.88%	One year growth has been taken
	11	9.65%		68.99%	

The basis of projections of HT 6.2 Category for future years is given below:-

Category	Voltage	%	Urban	%	Rural
Consumer	33	0.00%	No growth was observed	0.00%	No growth was observed
	11	0.00%		0.00%	No growth was observed
Load	33	0.00%		0.00%	
	11	0.00%	No growth was observed	0.00%	No growth was observed
Unit	33	15.00%	Keeping in view the likely increase in supply hours & inconsistency in past year growth rate, moderate growth have been taken	15.00%	Keeping in view the likely increase in supply hours & inconsistency in past year growth rate, moderate growth have been taken
	11	15.00%		15.00%	

1.2.15. HV -7: Bulk Supply to Exemptees

This category has not been included in the sales forecast as the three Discoms do not currently have any consumer in this category.

2. ENERGY REQUIREMENT AT DISCOM BOUNDARY

2.1. Conversion of annual sales to monthly sales

The annual sales of the Discoms are converted into monthly sales using the sales profile observed in the past years for each Discom. This profile is then used to compute monthly sales for FY'14 to FY'16. The profiling for all Discoms is given in the table below:

Table 17: Month-Wise Sales Profiles of Discoms

	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
East Discom	7%	7%	7%	8%	8%	8%	8%	10%	9%	10%	9%	9%
West Discom	7%	8%	8%	8%	8%	8%	8%	9%	9%	9%	9%	9%
Central Discom	7%	8%	8%	8%	8%	8%	8%	9%	10%	10%	8%	8%

2.2. MPPTCL Losses

For computation of the Intra-State Transmission Losses (MPPTCL Losses), the actual data has been taken from the MP-SLDC online portal for the past **12 months (52 weeks)** and the average of the same has been taken for the future years. The computed average is **4.30%** and the same has been assumed to be constant for the MYT period.

Table 18: MPPTCL Losses: Past Data from MP-SLDC

	Jan12	Feb12	Mar12	Apr12	May12	Jun12	Jul12	Aug12	Sep-12	Oct12	Nov12	Dec12	Average
MPPTCL Losses	4.70%	4.70%	4.70%	4.70%	4.70%	4.70%	4.70%	3.50%	4.25%	3.75%	3.75%	3.50%	4.30%

2.3. Distribution Losses

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” on 29th November'12 for the tariff period from FY 2013-14 to FY 2015-16. The distribution loss level trajectory as specified in the Regulations is given in the table below:

Table 19: Loss level targets (%) for Discoms (as per MPERC regulations)

Loss Targets	FY '14	FY '15	FY '16
East Discom	23.00%	20.00%	18.00%
West Discom	20.00%	18.00%	16.00%
Central Discom	23.00%	21.00%	19.00%

2.3.1. **Conversion of annual Distribution loss levels to monthly losses**

The annual distribution loss trajectory is converted into monthly loss trajectory based on the standard deviations of monthly losses from the cumulative annual losses during the past 5 years. Due to this methodology, the annual energy requirement at the Discom boundary is grossed up by a higher loss figure than observed as per the GoMP loss trajectory.

In this method, the actual monthly loss levels and the cumulative annual loss of the Discom for the past years is taken. The standard deviation of loss levels of each month from the cumulative annual average is calculated. The monthly standard deviations are then used to calculate the monthly loss levels using the annual MPERC trajectory loss level.

Using this monthly loss level trajectory and assuming constant transmission losses of 4.30% every month, the energy requirement is computed for all three Discoms at the state boundary as shown in table below:

Table 20: Monthly energy requirement at Sate Boundary (MU) for FY'14- FY'16

Monthly energy requirement at Sate Boundary - FY '14													
East Discom	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Total
Sales profile	8%	8%	8%	8%	8%	8%	8%	9%	10%	9%	8%	8%	100%
Sales (MUs)	857	857	857	980	980	980	980	1,225	1,102	1,225	1,102	1,102	12,248
Distribution loss	23.44%	22.83%	18.81%	20.76%	23.39%	23.32%	24.79%	24.26%	24.87%	24.33%	20.78%	24.43%	23.00%
Transmission loss	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%
Energy requirement at state boundary	1,170	1,161	1,103	1,292	1,337	1,335	1,361	1,690	1,533	1,691	1,454	1,524	16,653
West Discom	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Total
Sales profile	7%	8%	8%	8%	8%	8%	8%	9%	9%	9%	9%	9%	100%
Sales (MUs)	1,233	1,410	1,410	1,410	1,410	1,410	1,410	1,586	1,586	1,586	1,586	1,586	17,619
Distribution loss	23.23%	23.85%	17.40%	9.20%	7.44%	11.54%	27.60%	29.42%	23.67%	25.48%	21.80%	19.38%	20.00%
Transmission loss	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%
Energy requirement at state boundary	1,679	1,934	1,783	1,622	1,591	1,665	2,034	2,348	2,171	2,224	2,119	2,055	23,226
Central Discom	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Total
Sales profile	7%	8%	8%	8%	8%	8%	8%	9%	10%	10%	8%	8%	100%
Sales (MUs)	920	1,051	1,051	1,051	1,051	1,051	1,051	1,183	1,314	1,314	1,051	1,051	13,143
Distribution loss	22.92%	22.13%	21.54%	21.38%	22.98%	22.93%	24.19%	24.42%	23.98%	24.63%	23.06%	21.83%	23.00%
Transmission loss	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%
Energy requirement at state boundary	1,247	1,411	1,400	1,398	1,427	1,426	1,449	1,635	1,807	1,822	1,428	1,406	17,856
Monthly energy requirement at Sate Boundary - FY '15													
East Discom	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Total
Sales profile	8%	8%	8%	8%	8%	8%	8%	9%	10%	9%	8%	8%	100%
Sales (MUs)	999	999	999	1,142	1,142	1,142	1,142	1,427	1,284	1,427	1,284	1,284	14,270
Distribution loss	20.44%	19.83%	15.81%	17.76%	20.39%	20.32%	21.79%	21.26%	21.87%	21.33%	17.78%	21.43%	20.00%
Transmission loss	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%
Energy requirement at state boundary	1,312	1,302	1,240	1,451	1,499	1,497	1,525	1,894	1,718	1,896	1,632	1,708	18,673
West Discom	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Total

Sales profile	7%	8%	8%	8%	8%	8%	8%	9%	9%	9%	9%	9%	100%
Sales (MUs)	1,383	1,581	1,581	1,581	1,581	1,581	1,581	1,778	1,778	1,778	1,778	1,778	19,761
Distribution loss	21.23%	21.85%	15.40%	7.20%	5.44%	9.54%	25.60%	27.42%	21.67%	23.48%	19.80%	17.38%	18.00%
Transmission loss	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%
Energy requirement at state boundary	1,835	2,114	1,953	1,780	1,747	1,826	2,220	2,561	2,373	2,429	2,317	2,249	25,404
Central Discom	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Total
Sales profile	7%	8%	8%	8%	8%	8%	8%	9%	10%	10%	8%	8%	100%
Sales (MUs)	1,125	1,286	1,286	1,286	1,286	1,286	1,286	1,447	1,608	1,608	1,286	1,286	16,077
Distribution loss	20.92%	20.13%	19.54%	19.38%	20.98%	20.93%	22.19%	22.42%	21.98%	22.63%	21.06%	19.83%	21.00%
Transmission loss	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%
Energy requirement at state boundary	1,487	1,683	1,670	1,667	1,701	1,700	1,727	1,949	2,153	2,171	1,703	1,677	21,288
Monthly energy requirement at Sate Boundary - FY '16													
East Discom	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Total
Sales profile	8%	8%	8%	8%	8%	8%	8%	9%	10%	9%	8%	8%	100%
Sales (MUs)	1,181	1,181	1,181	1,349	1,349	1,349	1,349	1,687	1,518	1,687	1,518	1,518	16,867
Distribution loss	18.44%	17.83%	13.81%	15.76%	18.39%	18.32%	19.79%	19.26%	19.87%	19.33%	15.78%	19.43%	18.00%
Transmission loss	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%
Energy requirement at state boundary	1,513	1,501	1,431	1,674	1,728	1,726	1,758	2,183	1,980	2,185	1,884	1,969	21,531
West Discom	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Total
Sales profile	7%	8%	8%	8%	8%	8%	8%	9%	9%	9%	9%	9%	100%
Sales (MUs)	1,558	1,780	1,780	1,780	1,780	1,780	1,780	2,003	2,003	2,003	2,003	2,003	22,251
Distribution loss	19.23%	19.85%	13.40%	5.20%	3.44%	7.54%	23.60%	25.42%	19.67%	21.48%	17.80%	15.38%	16.00%
Transmission loss	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%
Energy requirement at state boundary	2,015	2,321	2,148	1,962	1,926	2,012	2,435	2,806	2,605	2,665	2,546	2,473	27,913
Central Discom	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Total
Sales profile	7%	8%	8%	8%	8%	8%	8%	9%	10%	10%	8%	8%	100%
Sales (MUs)	1,406	1,607	1,607	1,607	1,607	1,607	1,607	1,808	2,009	2,009	1,607	1,607	20,088
Distribution loss	18.92%	18.13%	17.54%	17.38%	18.98%	18.93%	20.19%	20.42%	19.98%	20.63%	19.06%	17.83%	19.00%
Transmission loss	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%
Energy requirement at state boundary	1,812	2,051	2,037	2,032	2,073	2,072	2,104	2,374	2,623	2,645	2,075	2,044	25,941

3. ASSESSMENT OF AVAILABILITY

This section details the power purchase availability and cost thereof for the future years for the state of Madhya Pradesh. The forecast takes into account the following aspects:

- Current long term allocated generation capacity of MP
- New generating Capacities coming in future years both for MP Genco, Central Sector, Joint venture, UMPP and under competitive bidding
- Impact of generation capacity allocation in WR and ER
- Performance of plants in past three years

Based on all the above factors a detailed forecast for power purchase scenario has been worked out which is described in the subsequent sections.

3.1. Details of Existing Generation Capacities

3.1.1. Central Sector Stations Allocated to MP

The Central sector stations which are allocated to MP are listed in the table below with details of the capacity allocation to the state.

Table 21: Central Sector Stations allocated to MP¹

Central Sector Station	Region	Capacity (MW)	MP Share (MW)	MP Share (%)
NTPC-Korba	WR	2,100.00	489.06	23%
NTPC-Vindychal I	WR	1,260.00	444.61	35%
NTPC-Vindychal II	WR	1,000.00	320.55	32%
NTPC-Vindychal III	WR	1,000.00	249.06	25%
NTPC-Kawas	WR	656.20	140.00	21%
NTPC-Gandhar	WR	657.37	117.00	18%
KAPP	WR	440.00	111.26	25%
TAPS	WR	1,080.00	233.26	22%
NTPC - Farakka	ER	1,600.00	0.00	0%
NTPC - Talcher	ER	1,000.00	0.00	0%
NTPC - Kahalgaon	ER	840.00	0.00	0%
NTPC - Sipat Stage II	WR	1,000.00	192.06	19%
NTPC - Kahalgaon 2	ER	1,500.00	73.95	5%
Total		14,133.57	2,370.81	

It should be noted that the infirm allocation is subject to change as per WRPC/ERPC directives from time to time; therefore for forecasting the availability from the stations the latest allocation has been assumed to be constant over the MYT period.

The table below provides details of the station-wise ex-bus energy (MUs) sent out² during last three years i.e. FY '10, FY '11 and FY '12. For FY '13, the actual ex-bus availability has been taken till Aug'12 and the projection of availability for other months of FY'13 and FY'14 – FY'16 have been done based on the average availability of past three years. The table below also provides details of the projection for FY'13 to FY'16.

Table 22: Past and Projected ex-bus availability of Central Sector stations

Station	Historical Data - Past Ex-Bus Availability			Projected Ex-Bus Availability			
	FY '10	FY '11	FY '12	FY '13	FY '14	FY '15	FY '16
NTPC-Korba	3,482	3,697	3,170	3,396	3,421	3,329	3,382

¹ The state allocation for Western Region Station has been done by Western Regional Power Committee in their letter No.WRPC/Comml-I/6/Alloc/2012/684 dated 24th May, 2012

² As per the monthly reports of WRPC and ERPC

NTPC-Vindychal I	3,164	3,267	3,152	3,144	3,188	3,161	3,164
NTPC-Vindychal II	2,339	2,458	2,289	2,300	2,349	2,313	2,321
NTPC-Vindychal III	1,814	2,003	1,897	1,912	1,937	1,915	1,922
NTPC-Kawas	781	758	572	654	662	629	648
NTPC-Gandhar	709	666	461	580	569	537	562
KAPP	204	311	865	628	601	698	643
TAPS	909	1,286	1,378	1,411	1,358	1,382	1,384
NTPC - Farakka	32	0	0	0	0	0	0
NTPC - Talcher	19	0	0	0	0	0	0
NTPC - Kahalgaon	13	0	0	0	0	0	0
NTPC - Sipat Stage II	1,276	1,522	1,554	1,479	1,518	1,517	1,505
NTPC - Kahalgaon 2	267	415	311	345	357	338	347
Total	15,009	16,383	15,649	15,850	15,961	15,820	15,877

3.1.2. Bilateral and Joint Venture Stations

The tables below detail the allocation of Bilateral and Joint Venture Stations to MP, past ex-bus MUs sent out by these stations during last three years i.e. FY '10, FY '11 and FY '12 and the projections for FY'13-FY'16 (actual data till Aug'12 and the projection of availability for other months of FY'13 and FY'14 – FY'16 have been done based on the average availability of past three years).

Table 23: Allocation of Bilateral and Joint Venture Stations

Station	Region	Capacity (MW)	MP Share (MW)	MP Share (%)
NHDC - Indira Sagar	State	1,000.00	1,000.00	100%
Sardar Sarovar	WR	1,450.00	826.50	57%
Omkareshwar HPS	State	520.00	520.00	100%
DVC (MTPS, CTPS)	ER	500.00	200.00	40%
Total		3,470.00	2,546.50	

Table 24: Past and Projected ex-bus availability of Bilateral and Joint Venture stations

Station	Historical Data - Past Ex-Bus Availability			Projected Ex-Bus Availability			
	FY '10	FY '11	FY '12	FY '13	FY '14	FY '15	FY '16
NHDC - Indira Sagar	2,112	2,196	3,277	2,761	2,745	2,928	2,811
Sardar Sarovar	1,395	2,002	2,424	2,046	2,157	2,209	2,137
Omkareshwar HPS	938	1,074	1,366	1,223	1,221	1,270	1,238
DVC (MTPS, CTPS)	399	691	1,054	1,881	1,717	1,551	1,716
Total	4,845	5,962	8,121	7,910	7,840	7,957	7,902

3.1.3. MPGenco Stations

The table below provides projection of the availability for MPGenco stations for future years till FY'16.

Table 25: Projected Ex-bus MUs of MPGenco stations for FY '13-FY '16 (MU)

Station	FY '13	FY '14	FY '15	FY '16
ATPS - Chachai-PH 1&2	728	514	539	594
STPS - Sarani-PH 1, 2 & 3	4,731	4,561	4,491	4,595
SGTPS - Bir'pur - PH 1 & 2	4,179	3,933	4,053	4,055
SGTPS - Bir'pur - Extn	3,458	3,471	3,478	3,469
ATPS - Chachai-Extn	1,305	1,376	1,414	1,365
CHPS-Gandhi Sagar	101	97	114	104
CHPS-RP Sagar & Jawahar Sagar	203	227	249	226
Pench THPS	218	237	249	235
Banasgar Tons HPS	1,306	1,209	1,344	1,286

Banasgar Tons HPS-Bansagar IV (Jhinna)	74	62	77	71
Birsingpur HPS	26	35	35	32
Bargi HPS	383	438	450	424
Rajghat HPS	41	40	47	43
Marhi Khera HPS	62	83	103	82
Total	16,814	16,284	16,644	16,580

3.2. Capacity Addition Plan

The capacity addition plan for the state which includes MPGenCo capacity addition, ISGS stations and other JV and case-1 addition capacity is presented in the table below. The table is limited to the plants which are expected to be operational in the years FY'13-FY'16.

Table 26: Capacity Addition Plan during FY '14-FY '16

No.	Name of Project	Unit	Capacity (MW)	MP's share (MW)	Schedule
1	Singaji TPP Phase -1, Khandwa (Share = 100%)	Unit 1	600.00	600.00	Sep-13
2		Unit 2	600.00	600.00	Oct-13
3	Satpura TPP Extension, Betul (Share = 100%)	Unit 10	250.00	250.00	Feb-13
4		Unit 11	250.00	250.00	Sep-13
5	Sipat Stage - 1, Bilaspur (NTPC)	Unit 2	660.00	111.24	May-12
6		Unit 3	660.00	111.24	Aug-12
7	NTPC Mouda STPS Satge -1, Nagpur (NTPC)	Unit 1	500.00	78.00	Mar-13
8		Unit 2	500.00	78.00	Sep-13
9	Vindhyanal Mega Project, Stage - 4, Sidhi (NTPC)	Unit 1	500.00	128.00	Apr-13
10		Unit 2	500.00	128.00	Dec-13
11	Vindhyanal Mega Project, Stage - 5, Sidhi (NTPC)	Unit 1	500.00	128.00	Sep-15
12	DVC Durgapur Steel TPS	Unit 1	500.00	50.00	Jul-12
13		Unit 2	500.00	50.00	Dec-12
14	UMPP Sasan, Sidhi	Unit 1 & 2	1,320.00	495.00	Oct-13
15		Unit 3 & 4	1,320.00	495.00	Jun-14
16		Unit 5 & 6	1,320.00	495.00	Oct-14
17	Essar Power, Sidhi	Unit 1	600.00	150.00	Oct-14
18	Bina Power, Sagar	Unit 1	250.00	175.00	Sep-12
19		Unit 2	250.00	175.00	Feb-13
20	Jaiprakash Power, Nigri	Unit 1	660.00	248.00	Sep-13
21		Unit 2	660.00	247.00	Dec-13
22	MB Power, Anuppur	Unit 1	600.00	210.00	Nov-13
23		Unit 2	600.00	210.00	Apr-14
24	DB Power, Singrauli	Unit 1	660.00	231.00	Apr-14
25	Shri Maheshwar HEP, Khargone (Capacity per Unit 40 MW, Due to uncertainty, availability is as ZERO till further decision)	Unit 1 & 2	80.00	0.00	Apr-14
26		Unit 3 & 4	80.00	0.00	Jun-14
27		Unit 5 & 6	80.00	0.00	Sep-14
28		Unit 7 & 8	80.00	0.00	Jan-15
29		Unit 9 & 10	80.00	0.00	Apr-15
30	BLA Power, Narsinghpur	Unit 1	45.00	16.00	Apr-12
31		Unit 2	45.00	16.00	Apr-14
32	M/s Jhabua Power, Seoni	Unit 1	600.00	210.00	Dec-13
33	M/s Lanco TPS, Amarkantak		300.00	300.00	Dec-12
34	IPPs - Concessional Energy		200.00	200.00	Sep-14
35	Renewable Energy (Wind, Solar, Bio etc.)		120.00	120.00	Mar-13
36	Renewable Energy (Wind, Solar, Bio etc.)		300.00	300.00	Mar-14
	Total		16,770.00	6,735.48	

3.2.1. Assumptions for projecting availability from the future capacities

The assumptions used for forecasting the availability from the future capacities is explained as below:

- PLF considered for Coal based stations is 85%-88% depending on the station (after discussions with MPGenco)
- PLF considered for Gas based and Atomic power stations is 68%
- Auxiliary consumption considered for Coal based stations is 7.5%
- Auxiliary consumption considered for Gas based and Atomic power stations is 12%
- The availability has been forecasted based on the month of operation in a particular year.

Based on the above assumptions the forecast has been done for the future years till FY '16 for the additional capacities.

3.3. Overall availability

The overall availability for MP State (from stations allocated to Discoms as well as stations allocated to MPPMCL) based on the discussions above is presented below:

Table 27: Overall availability for FY'14- FY'16 (MU)

Station	FY '13	FY '14	FY '15	FY '16
NTPC-Korba	3,396	3,421	3,329	3,382
NTPC-Vindychal I	3,144	3,188	3,161	3,164
NTPC-Vindychal II	2,300	2,349	2,313	2,321
NTPC-Vindychal III	1,912	1,937	1,915	1,922
NTPC-Kawas	654	662	629	648
NTPC-Gandhar	580	569	537	562
KAPP	628	601	698	643
TAPS	1,411	1,358	1,382	1,384
NTPC - Farakka	0	0	0	0
NTPC - Talcher	0	0	0	0
NTPC - Kahalgaon	0	0	0	0
NHDC - Indira Sagar	2,761	2,745	2,928	2,811
Sardar Sarovar	2,046	2,157	2,209	2,137
Omkareshwar HPS	1,223	1,221	1,270	1,238
ATPS - Chachai-PH 1&2	728	514	539	594
STPS - Sarani-PH 1, 2 & 3	4,731	4,561	4,491	4,595
SGTPS - Bir'pur - PH 1 & 2	4,179	3,933	4,053	4,055
CHPS-Gandhi Sagar	101	97	114	104
CHPS-RP Sagar & Jawahar Sagar	203	227	249	226
Pench THPS	218	237	249	235
Banasgar Tons HPS	1,306	1,209	1,344	1,286
Banasgar Tons HPS-Bansagar IV (Jhinna)	74	62	77	71
Birsingpur HPS	26	35	35	32
Bargi HPS	383	438	450	424
Rajghat HPS	41	40	47	43
Marhi Khera HPS	62	83	103	82
RSEB (Chambal,Satpura)	417	408	397	407
UPPCL (Rihand,Matatila,Rajghat)	185	174	190	183
Others 1 (Wind & CPP)	323	254	285	287
NTPC - Sipat Stage II	1,479	1,518	1,517	1,505
NTPC - Kahalgaon 2	345	357	338	347
DVC (MTPS, CTPS)	1,881	1,717	1,551	1,716
SGTPS - Bir'pur - Extn	3,458	3,471	3,478	3,469
ATPS - Chachai-Extn	1,305	1,376	1,414	1,365
Total	41,499	40,920	41,292	41,237

Allocated to MPPMCL					
NTPC Korba - III		532	494	501	509
IPP Torrent		581	581	577	580
NTPC Sipat Stage - 1	Unit 1	679	504	504	562
Singaji TPP Phase -1, Khandwa (Share = 100%)	Unit 1	0	1,455	4,008	4,022
	Unit 2	0	1,215	3,921	4,022
Satpura TPP Extension, Betul (Share = 100%)	Unit 10	102	1,436	1,603	1,607
	Unit 11	0	600	1,602	1,607
Sipat Stage - 1, Bilaspur (NTPC)	Unit 2	503	706	706	708
	Unit 3	372	706	706	708
NTPC Mouda STPS Satge -1, Nagpur (NTPC)	Unit 1	0	428	495	497
	Unit 2	0	180	495	497
Vindhyanchal Mega Project, Stage - 4, Sidhi (NTPC)	Unit 1	146	756	813	815
	Unit 2	0	146	756	815
Vindhyanchal Mega Project, Stage - 5, Sidhi (NTPC)	Unit 1	0	0	0	296
DVC Durgapur Steel TPS	Unit 1	173	318	318	318
	Unit 2	57	295	318	318
UMPP Sasan, Sidhi	Unit 1 & 2	0	1,002	3,235	3,318
	Unit 3 & 4	0	0	2,032	3,318
	Unit 5 & 6	0	0	996	3,239
Essar Power, Sidhi	Unit 1	0	0	60	196
Bina Power, Sagar	Unit 1	502	1,122	1,122	1,125
	Unit 2	71	1,005	1,122	1,125
Jaiprakash Power, Nigri	Unit 1	0	601	1,657	1,662
	Unit 2	0	296	1,536	1,656
MB Power, Anuppur	Unit 1	0	338	1,339	1,408
	Unit 2	0	0	1,097	1,408
DB Power, Singrauli	Unit 1	0	0	1,206	1,548
Shri Maheshwar HEP, Khargone (Capacity per Unit 40 MW, Due to uncertainty, availability is as ZERO till further decision)	Unit 1 & 2	0	0	0	0
	Unit 3 & 4	0	0	0	0
	Unit 5 & 6	0	0	0	0
	Unit 7 & 8	0	0	0	0
	Unit 9 & 10	0	0	0	0
BLA Power, Narsinghpur	Unit 1	0	90	103	103
	Unit 2	0	0	81	103
M/s Jhabua Power, Seoni	Unit 1	0	252	1,306	1,408
M/s Lanco TPS, Amarkantak		360	1,821	1,945	1,950
IPPs - Concessional Energy		0	0	485	1,299
Renewable Energy (Wind, Solar, Bio etc.)		1	209	209	210
Renewable Energy (Wind, Solar, Bio etc.)		0	1	523	524
TOTAL		4,079	16,557	37,377	43,484
Grand Total		45,577	57,478	78,669	84,721

3.3.1. Discoms' Capacity Allocation

The Discom wise allocation including the specific allocation of 200 MW to Bundelkhand Region as per the GoMP notification No. 2660/F-3-24/2009/XIII dated 29th March'12 does not take into account the specific allocation of 200MW to Bundelkhand Region. The table below details the capacity allocations including the 200 MW specific allocations:

Table 28: Capacity allocation to Discoms as per GoMP notification (in % including specific allocation of 200 MW to Bundelkhand Region)

Station	East Discom	West Discom	Central Discom
NTPC-Korba	39.39%	32.98%	27.63%
NTPC-Vindychal I	36.05%	29.66%	34.29%
NTPC-Vindychal II	35.61%	32.19%	32.19%
NTPC-Vindychal III	32.76%	35.86%	31.38%
NTPC-Kawas	35.00%	40.00%	25.00%
NTPC-Gandhar	32.00%	38.00%	30.00%
KAPP	32.62%	35.94%	31.44%
TAPS	33.97%	35.21%	30.81%
NTPC - Farakka	0.00%	0.00%	0.00%
NTPC - Talcher	0.00%	0.00%	0.00%
NTPC - Kahalgaon	0.00%	0.00%	0.00%
NHDC - Indira Sagar	22.00%	53.00%	25.00%
Sardar Sarovar	32.00%	43.00%	25.00%
Omkareshwar HPS	30.00%	45.00%	25.00%
Lanco Amarkantak	29.89%	38.27%	31.84%
ATPS - Chachai-PH 1&2	27.00%	33.00%	40.00%
STPS - Sarani-PH 1, 2 & 3	29.00%	32.00%	39.00%
SGTPS - Bir'pur - PH 1 & 2	28.00%	32.00%	40.00%
CHPS-Gandhi Sagar	23.00%	27.00%	50.00%
CHPS-RP Sagar & Jawahar Sagar	20.00%	30.00%	50.00%
Pench THPS	20.00%	40.00%	40.00%
Banasgar Tons HPS	30.00%	40.00%	30.00%
Banasgar Tons HPS-Silpara	30.00%	40.00%	30.00%
Banasgar Tons HPS-Devloned	30.00%	40.00%	30.00%
Banasgar Tons HPS-Bansagar IV (Jhinna)	30.00%	40.00%	30.00%
Birsingpur HPS	30.00%	50.00%	20.00%
Bargi HPS	25.00%	50.00%	25.00%
Rajghat HPS	20.00%	40.00%	40.00%
Marhi Khera HPS	30.00%	50.00%	20.00%
Mini-Micro HPS	29.89%	38.27%	31.84%
RSEB (Chambal,Satpura)	29.89%	38.27%	31.84%
UPPCL (Rihand,Matatila,Rajghat)	29.89%	38.27%	31.84%
MSEB(Pench)	29.89%	38.27%	31.84%
GridCo (Hirakud)	29.89%	38.27%	31.84%
Others 1 (Wind & CPP)	29.89%	38.27%	31.84%
NTPC - Sipat Stage II	39.42%	34.61%	25.96%
NTPC - Kahalgaon 2	27.00%	53.00%	20.00%
DVC (MTPS, CTPS)	33.00%	53.00%	14.00%
SGTPS - Bir'pur - Extn	28.00%	32.00%	40.00%
ATPS - Chachai-Extn	27.00%	33.00%	40.00%
Weighted Average	29.89%	38.27%	31.84%

3.4. PGCIL Losses

The Inter-State transmission losses have been computed separately for Eastern Region and Western Region stations. For the Western Region, past data (26 weeks of FY '13, till 16th Dec'12) as available on the PGCIL website has been taken and an average loss level of **3.69%** has been used for FY'13-FY'16. Similarly, for Eastern Region, transmission line losses for the MP allocated stations have been taken and an average loss level of **2.50%** has been considered for FY'13-FY'16.

3.5. Energy Balance

3.5.1. Energy Requirement vis-à-vis Availability and Management of Shortfall

It is submitted that, the energy requirement at Ex-bus of the three Discoms have been estimated so that Discom-wise shortfall or surplus of energy could be ascertained for planning the power procurement, if required, from the other sources. The Discom-wise Ex-bus energy requirement is more than the energy availability from the sources already allocated to the Discoms and from MPPMCL allocated stations for FY '13, FY'14 to FY'16.

There would be a shortfall in MUs for the State as a whole which is required to be met through the short term sources. Since the rates of short term energy are generally high and volatile and tend to vary according to time of the day / season, medium term power procurement tender has been finalized for **400MW** round-the -clock (RTC) power from October'12 till March'14 for all the three Discoms since it is more prudent and cost effective. Accordingly, the Discom-wise break-up of energy envisaged to be procured from various sources is shown in table below

Table 29: Ex-Bus Purchases by Discoms from Various Sources

Particulars	East Discom			
	FY '13	FY '14	FY '15	FY '16
Energy Requirement Ex-Bus	12,890	16,903	18,920	21,780
Purchase from Discom Allocated Stations	12,308	12,767	12,839	12,844
Purchase from MPPMCL Stations	248	3,637	6,081	8,748
Shortfall	334	499	0	187
Purchase from MTPP	131	366	0	0
Balance through STPP	203	133	0	187
Particulars	West Discom			
	FY '13	FY '14	FY '15	FY '16
Energy Requirement Ex-Bus	19,036	23,481	25,655	28,167
Purchase from Discom Allocated Stations	15,117	15,021	15,171	15,140
Purchase from MPPMCL Stations	2,163	7,301	10,484	12,770
Shortfall	1,756	1,159	0	256
Purchase from MTPP	705	828	0	0
Balance through STPP	1,051	331	0	256
Particulars	Central Discom			
	FY '13	FY '14	FY '15	FY '16
Energy Requirement Ex-Bus	14,257	18,059	21,489	26,143
Purchase from Discom Allocated Stations	13,090	13,133	13,283	13,252
Purchase from MPPMCL Stations	570	4,199	8,206	12,674
Shortfall	596	726	0	216
Purchase from MTPP	273	546	0	0
Balance through STPP	323	180	0	216
Particulars	MP State			
	FY '13	FY '14	FY '15	FY '16
Energy Requirement Ex-Bus	46,183	58,442	66,064	76,089
Purchase from Discom Allocated Stations	40,515	40,920	41,292	41,237

Purchase from MPPMCL Stations	2,982	15,137	24,772	34,193
Shortfall	2,686	2,385	0	659
Purchase from MTPP	1,108	1,740	0	0
Balance through STPP	1,578	645	0	659

3.5.2. Management of Incidental Surplus Energy

It is observed that some energy from the long term sources may remain available incidentally as a surplus. It is also reckoned that some energy from the medium term sources may also remain un-utilized in some months.

Hon'ble Commission in its tariff order for FY-13 has stated that if in some months, the availability remains un-utilized by the Discoms, this surplus energy should be used for Banking with other States so that shortfall if any in the requirement during Rabi season could be met from the Banked Power itself i.e. without any cost implication. The same approach for management of this incidental surplus energy from long-term and medium-term sources has been envisaged by the Discoms for FY'14 to FY'16, which may please be considered.

4. POWER PURCHASE COSTS

4.1. Estimation of Station-Wise Costs

The forecasts for cost of power purchase for future years takes into account the following aspects:

- Fixed and Variable costs have been taken as per the previous approved costs as well as expected future costs projected by the MPPMCL/ MPGenco.
- The fuel cost escalation price has been taken as per the CERC order on inflation index.
- The other costs i.e. taxes, incentive, MOPA charges, ED and Cess have been taken as per the bills raised by NTPC for past financial years.

4.1.1. Details of Costs for Existing Stations

4.1.2. Fixed Costs

The Fixed Costs of **MP Genco stations** for FY '13 to FY '16 have been kept at the same level as that of FY '12 and as approved by the Commission in its Multi Year Tariff Order dated 3rd March 2010.

For **Central Sector Stations** (for which capacity allocation percentage to each individual Discom has been defined by GoMP), fixed Costs as approved by Central Electricity Regulatory Commission Orders for each individual station till FY '14 have been taken. For FY'15 and FY'16, fixed costs have been assumed to be at same level as that of FY'14. The table below details the petitions issued by CERC for all the stations.

Table 30: CERC Tariff Orders for Central Sector Stations

Station	Total Capacity MW	Petition No.	Order Dated
Korba Stage - I & II	2,100.00	264 of 2009	12.10.2012
Korba Stage - III	500.00	247 of 2010	3.5.2012
Vindhyachal Stage - I	1,260.00	227 of 2009	11.10.2012
Vindhyachal Stage - II	1,000.00	258 of 2009	25.5.2012
Vindhyachal Stage - III	1,000.00	260 of 2009	28.5.2012
Kawas Gas PS	656.20	285 of 2009	30.12.2011
Gandhar Gas PS	657.37	226 of 2009	30.12.2012
Sipat Stage - I	1,980.00	28 of 2011	6.9.2012
Sipat Stage - II	1,000.00	316 of 2009	6.7.2011
Kahalgaon Stage- II	1,500.00	282 of 2009	13.4.2012
Chandrapura DVC		339 of 2010	10.10.2012

4.1.3. Variable Costs

Variable costs (including FPA) for MPGenco & Central Generating Stations have been adopted as the paid for FY '12. These costs are then escalated at the annual rates specified by the **CERC in its notification dated 8th October'12.**

Fuel Price Adjustment (FPA) and other variable charges are taken from FY '12 bill and have been escalated in the same manner as variable cost per unit. FY '13 costs have been taken as base values since these costs are typically paid towards the end of the financial year and hence, FY '13 data is not available. This is included in the variable component of the generation cost. Also, for Central Sector stations, an **additional ED/Cess of 8paise/unit** has been considered from FY '13 onwards. This is included in the variable component of the generation cost.

For new upcoming stations, costs of Central stations have been taken been estimated by MPPMCL and for state stations, costs have been taken from MPGenco.

The following table provides a summary of fixed and variable costs of each of the stations that have been considered for determining the power purchase cost for FY '13 onwards till FY'16.

Table 31: Fixed and Variable Costs of Existing Stations

Station	Fixed Charges (Rs. Cr.)	Variable Charge (Rs./ kWh)	FPA Charges (Rs./kWh)	Other Charges (excluding income tax and including addl. ED/Cess @8p/unit) (Rs. / kWh)	Total Variable Charge (Rs. / kWh)
NTPC-Korba	188.92	1.00	-	0.03	1.03
NTPC-Vindychal I	197.97	1.84	-	0.33	2.17
NTPC-Vindychal II	174.09	1.74	-	0.25	1.99
NTPC-Vindychal III	204.22	1.75	-	0.27	2.02
NTPC-Kawas	96.96	2.71	0.00	0.23	2.95
NTPC-Gandhar	95.56	2.53	0.04	0.17	2.74
KAPP	0.11	2.18	0.10	0.04	2.31
TAPS	-	2.82	-	0.02	2.84
NTPC - Farakka	-	-	-	-	-
NTPC - Talcher	-	-	-	-	-
NTPC - Kahalgaon	-	-	-	-	-
NHDC - Indira Sagar	516.14	0.32	-	0.14	0.46
Sardar Sarovar	188.93	0.95	-	0.21	1.16
Omkareshwar HPS	288.88	0.28	-	0.17	0.45
ATPS - Chachai-PH 1&2	24.34	1.49	-	0.02	1.51
STPS - Sarani-PH 1, 2 & 3	227.72	1.91	-	0.01	1.92
SGTPS - Bir'pur - PH 1 & 2	303.71	2.56	-	0.01	2.57
CHPS-Gandhi Sagar	2.04	0.37	-	0.48	0.85
CHPS-RP Sagar & Jawahar Sagar	-	1.51	-	-	1.51
Pench THPS	6.39	0.29	-	0.00	0.30
Banasgar Tons HPS	55.35	0.77	-	0.14	0.91
Banasgar Tons HPS-Bansagar IV (Jhinna)	4.70	1.39	-	-	1.39
Birsingpur HPS	2.01	1.35	-	0.02	1.37
Bargi HPS	5.46	0.28	-	0.16	0.43
Rajghat HPS	1.88	1.04	-	0.25	1.29
Marhi Khera HPS	11.12	2.32	-	0.00	2.32
RSEB (Chambal,Satpura)	-	4.19	-	0.08	4.27
UPPCL (Rihand,Matatila,Rajghat)	-	-	-	0.08	0.08
Others 1 (Wind & CPP)	-	3.86	-	-	3.86
NTPC - Sipat Stage II	178.43	0.92	-	0.08	1.01
NTPC - Kahalgaon 2	63.54	2.44	-	-	2.44
DVC (MTPS, CTPS)	177.21	1.10	1.31	0.04	2.45
SGTPS - Bir'pur - Extn	368.54	2.41	-	0.00	2.42
ATPS - Chachai-Extn	176.21	1.29	-	-	1.29

4.1.4. Details of Costs for Future Capacities

For all the future capacities which are proposed to be commissioned in future the rates as per the PPAs have been considered. The table below provides details of the costs considered for new capacities upcoming in FY '14-FY'16.

Table 32: Fixed and Variable Costs of Future Capacities

Name of Project	Fixed Charges (Rs. Cr.)	Variable Charge (Rs./ kWh)	Remarks
Singaji TPP Phase -1, Khandwa (Share = 100%)	240.00	3.50	Fixed and Variable Charges after discussions with MPPMCL and MPGenCo. The variable cost is escalated @CERC rates from FY13 onwards.
Satpura TPP Extension, Betul (Share = 100%)	96.00	3.00	
Sipat Stage - 1, Bilaspur (NTPC)	48.00	1.24	Based on existing cost of NTPC Sipat Stage - 1, Unit 1
NTPC Mouda STPS Satge -1, Nagpur (NTPC)	72.00	1.24	Based on existing cost of NTPC Sipat Stage - 1, Unit 1
Vindhyanchal MegaProject, Stage - 4, Sidhi	57.00	2.06	Fixed Cost is linked to MP share in MW (per MW cost on basis of

(NTPC)			existing Vindhyachal plants).
Vindhyachal MegaProject, Stage - 5, Sidhi (NTPC)	79.00	Rs. 2.37 for FY'16	Variable Cost is based on the average of existing three stages of Vindhyachal plants. The variable cost is escalated @CERC rates from FY13 onwards
DVC Durgapur Steel TPS	44.00	1.22	Based on costs of existing DVC plants
UMPP Sasan, Sidhi	0.00	1.28	As per discussions with MPGenco
Essar Power, Sidhi	0.00	3.80	As per discussions with MPGenco. The variable cost is escalated @CERC rates from FY13 onwards
Bina Power, Sagar			
Jaiprakash Power, Nigri			
MB Power, Anuppur			
DB Power, Singrauli			
Shri Maheshwar HEP, Khargone	0.00	0.00	Since the availability is considered zero due to risk factors, tariff is taken as nil
BLA Power, Narsinghpur	0.00	3.80	As per discussions with MPGenco. The variable cost is escalated @CERC rates from FY13 onwards
M/s Jhabua Power, Seoni			
M/s Lanco TPS, Amarkantak			
IPPs - Concessional Energy			
Renewable Energy (Wind, Solar, Bio etc.)	0.00	8.00	Based on the competitive bidding rates for Renewable Energy in MP

4.2. Estimation of Other Power Purchase Costs

4.2.1. PGCIL Costs: Inter-State Transmission Charges

The PGCIL charges to be paid by MP consist of charges to be paid for transmission system of WR and ER. The estimate of inter-state transmission cost for existing stations has been considered as per the methodology used by the Licensee. The estimate for these costs have been estimated as approximately as **Rs. 686 Crs for FY '14, Rs. 741 Crs for FY '15 and Rs. 801 Crs for FY '16**. These costs have then been allocated to Discoms in ratio of the power procured by each Discom from Central Sector Stations as shown in table below:

Table 33: PGCIL Costs: Inter-State Transmission Charges

Discom	% allocated			PGCIL Costs		
	FY '14	FY '15	FY '16	FY '14	FY '15	FY '16
East Discom	30.95%	30.83%	30.90%	212.17	228.39	247.40
West Discom	38.89%	38.94%	38.95%	266.63	288.52	311.84
Central Discom	30.16%	30.23%	30.15%	206.76	223.98	241.43
Total	100.00%	100.00%	100.00%	685.56	740.89	800.67

4.2.2. MPPTCL Costs: Intra-State Transmission Charges

For the purpose of calculation of intra-state transmission costs, the MPPTCL Costs have been taken as per the actual expenditure (excluding the true-up amount), the details of which have been provided to the Discoms. The SLDC charges are added to the provided costs so as to arrive at total MPPTCL costs for the three Discoms, shown in the table below:

Table 34: MPPTCL Costs: Intra State Transmission Charges

Sr.No.	Particulars	FY14 (estimated)	FY15 (estimated)	FY16 (estimated)
1	O&M Expenses	351.08	384.61	422.57
2	Depreciation	315.89	348.56	398.45
3	Interest & Finance charges	144.33	176.79	223.33
4	Interest on working capital	56.04	65.30	73.23
5	Terminal Benefits**	677.32	848.14	979.07
6	Return on Equity	370.34	440.55	454.64
7	MPERC Fees & Taxes	0.89	0.89	0.89

8	Prior period adj./charges written off	-	-	-
9	Total Sr. no. 1 to 7	1,915.89	2,264.84	2,552.18
10	Less Non- tariff income	5.00	5.00	5.00
11	Net Annual Fixed Cost	1,910.89	2,259.84	2,547.18
	Approved true-up for FY'10	53.99	-	-
	SLDC Charges	9.29	10.22	11.23
	Total MPPTCL Costs	1,974.17	2,270.06	2,558.41
	TRUE-UP AMOUNT EXPECTED - Not included in Discoms ARR	661.00	60.00	-

The above detailed costs have then been allocated to the three Discoms as per the weighted average of capacity allocation of stations to the Discoms as shown in table below:

Table 35: MPPTCL Costs: Allocation to Discoms

Discom	FY '14	FY '15	FY '16
East Discom	542.93	622.19	701.20
West Discom	754.42	868.61	978.94
Central Discom	676.82	779.26	878.26
Total	1,974.17	2,270.06	2,558.41

4.2.3. MPPMCL Other Costs

The details of the MPPMCL expenses that have been allocated to Discoms for the MYT years are related to the various roles, responsibilities and administrative functions of MPPMCL and have been detailed in the **Chapter 8** (MPPMCL petition to the Hon'ble Commission). These expenses are allocated to the three Discoms based on the average capacity allocation of existing stations.

The details of these expenses and Discoms allocation for FY'12-FY'16 are given in the table below:

Table 36: MPPMCL Other Costs: Details and Discoms Allocation

Particulars	Cost incurred during FY-12	Estimated Cost for FY-13	Estimated Cost for FY-14	Estimated Cost for FY-15	Estimated Cost for FY-16
Purchase of Power	204.71	10.71	11.79	12.96	14.26
Inter-State Transmission Charges	61.84	66.74	72.04	77.75	83.91
Deprecation Expenses	1.87	2.06	2.26	2.49	2.74
Interest and Finance Charges	30.31	72.70	84.20	71.70	64.20
Repairs and Maintenance Expenses	1.30	1.80	1.94	2.10	2.26
Employee Expenses	40.32	37.00	38.11	39.25	40.43
A&G Expenses	9.63	10.39	11.22	12.11	13.07
Other Expenses	21.97	23.71	25.59	27.62	29.81
Total	371.95	225.12	247.15	245.98	250.69
Less:					
Income	207.91	167.97	167.97	167.97	167.97
Net Expenses	164.04	57.15	79.18	78.01	82.72
MPPMCL Costs allocated to Discoms					
East Discom	50.06	17.08	21.68	21.36	22.65
West Discom	61.24	21.87	30.30	29.86	31.66
Central Discom	52.74	18.20	27.19	26.79	28.41
Total	164.04	57.15	79.18	78.01	82.72

4.2.4. Medium Term Power Purchase Cost

As explained in the earlier sections that the current long term availability will not be able to fulfil the requirement for FY'13 and FY'14. Hence, medium term power procurement tender has been finalized for **400MW** round-the –

clock (RTC) power from October'12 till March'14 for all the three discoms. The per unit rate for Medium Term Power will be **Rs. 4.11 /unit for first 100 MW** and **Rs. 4.19 /unit for remaining 300 MW**, giving an average rate of **Rs. 4.17 /unit**.

For FY '14, this 400MW translates into **3,504 MU** at the total cost of **Rs. 1,461 crores**. This annual cost has then been divided amongst the three Discoms based on the shortage of a particular Discom out of the total shortage for the state during FY '14.

4.2.5. Short Term Power Purchase Cost

In certain months, even after covering the gap through medium term power procurement, the gap still exists hence this would necessitate the purchase of power through short term sources. This balance deficit is proposed to be bridged through short term power purchase and the rate assumed for power procured through short term power purchase is taken as **Rs. 5.00/unit** based on the current trends in the market.

4.3. Total Power Purchase Costs

Based on the various cost components discussed above, the tables below detail the total power purchase cost for MP state and for each of the discoms.

Table 37: Total Power Purchase Costs - FY'13 to FY'16

	Particulars	East Discom			
		FY '13	FY '14	FY '15	FY '16
A	Ex-bus Units Purchased (MU)	12,890	16,903	18,920	21,780
B	Fixed Cost (Rs. Crs.)	1,072.56	1,079.73	1,079.73	1,079.73
C	Variable Cost (Rs. Crs.)	2,342.28	3,589.18	3,625.53	4,156.95
D	MPPMCL costs	17.08	21.68	21.36	22.65
E = B+C+D	Total Power Purchase Cost - Ex Bus (Rs. Crs.)	3,431.92	4,690.60	4,726.63	5,259.34
E/A	Rate of Power Purchase (Rs. / kWh)	2.66	2.78	2.50	2.41
H	External Losses (MU)	235	250	247	249
I	Inter State Transmission Cost (Rs. Crs.)	205.94	212.17	228.39	247.40
J = (A - H)	Units Purchased at State Periphery (MU)	12,655	16,653	18,673	21,531
K = (I + E)	Total Power Purchase Cost at State Boundary (Rs. Crs.)	3,637.86	4,902.77	4,955.02	5,506.74
J/K	Rate of Power Purchase at State Boundary (Rs. / kWh)	2.87	2.94	2.65	2.56
L	Intra State Transmission Cost - MPTransco including SLDC (Rs. Crs.)	499.84	542.93	622.19	701.20
M = (K+L)	Total Power Purchase Cost at Discom Interface (Rs. Crs.)	4,137.70	5,445.70	5,577.21	6,207.95
N	Transmission Loss (MU)	545	717	804	927
O = (K - N)	Units Purchased at Discom Boundary (MU)	12,110.36	15,935.89	17,869.07	20,604.27
O/M	Rate of Power Purchase at Discom Boundary (Rs. / kWh)	3.42	3.42	3.12	3.01
	Particulars	West Discom			
		FY '13	FY '14	FY '15	FY '16
A	Ex-bus Units Purchased (MU)	19,036	23,481	25,655	28,167
B	Fixed Cost (Rs. Crs.)	1,383.94	1,390.94	1,390.94	1,390.94
C	Variable Cost (Rs. Crs.)	4,327.34	5,242.22	4,798.07	5,245.19
D	MPPMCL costs	21.87	30.30	29.86	31.66
E = B+C+D	Total Power Purchase Cost - Ex Bus (Rs. Crs.)	5,733.15	6,663.46	6,218.87	6,667.78
E/A	Rate of Power Purchase (Rs. / kWh)	3.01	2.84	2.42	2.37
H	External Losses (MU)	251	254	251	253
I	Inter State Transmission Cost (Rs. Crs.)	251.55	266.63	288.52	311.84
J = (A - H)	Units Purchased at State Periphery (MU)	18,785	23,226	25,404	27,913
K = (I + E)	Total Power Purchase Cost at State Boundary (Rs. Crs.)	5,984.70	6,930.09	6,507.39	6,979.63
J/K	Rate of Power Purchase at State Boundary (Rs. / kWh)	3.19	2.98	2.56	2.50
L	Intra State Transmission Cost - MPTransco including SLDC (Rs. Crs.)	567.25	754.42	868.61	978.94
M = (K+L)	Total Power Purchase Cost at Discom Interface (Rs. Crs.)	6,551.95	7,684.52	7,376.00	7,958.57
N	Transmission Loss (MU)	809	1,000	1,093	1,201
O = (K - N)	Units Purchased at Discom Boundary (MU)	17,976.70	22,226.33	24,310.26	26,711.98
O/M	Rate of Power Purchase at Discom Boundary (Rs. / kWh)	3.64	3.46	3.03	2.98
	Particulars	Central Discom			
		FY '13	FY '14	FY '15	FY '16
A	Ex-bus Units Purchased (MU)	14,257	18,059	21,489	26,143
B	Fixed Cost (Rs. Crs.)	1,084.11	1,089.76	1,089.76	1,089.76
C	Variable Cost (Rs. Crs.)	2,795.76	3,964.60	4,205.11	5,052.50
D	MPPMCL costs	18.20	27.19	26.79	28.41
E = B+C+D	Total Power Purchase Cost - Ex Bus (Rs. Crs.)	3,898.06	5,081.55	5,321.66	6,170.67
E/A	Rate of Power Purchase (Rs. / kWh)	2.73	2.81	2.48	2.36

H	External Losses (MU)	197	203	201	202
I	Inter State Transmission Cost (Rs. Crs.)	176.89	206.76	223.98	241.43
J = (A - H)	Units Purchased at State Periphery (MU)	14,059	17,856	21,288	25,941
K = (I + E)	Total Power Purchase Cost at State Boundary (Rs. Crs.)	4,074.95	5,288.31	5,545.63	6,412.09
J/K	Rate of Power Purchase at State Boundary (Rs. / kWh)	2.90	2.96	2.61	2.47
L	Intra State Transmission Cost - MPTransco including SLDC (Rs. Crs.)	543.23	676.82	779.26	878.26
M = (K+L)	Total Power Purchase Cost at Discom Interface (Rs. Crs.)	4,618.18	5,965.13	6,324.90	7,290.36
N	Transmission Loss (MU)	605	769	916	1,117
O = (K - N)	Units Purchased at Discom Boundary (MU)	13,453.93	17,087.65	20,371.81	24,824.60
O/M	Rate of Power Purchase at Discom Boundary (Rs. / kWh)	3.43	3.49	3.10	2.94
	Particulars	MP State			
		FY '13	FY '14	FY '15	FY '16
A	Ex-bus Units Purchased (MU)	46,183	58,442	66,064	76,089
B	Fixed Cost (Rs. Crs.)	3,540.61	3,560.43	3,560.44	3,560.44
C	Variable Cost (Rs. Crs.)	9,465.37	12,796.01	12,628.72	14,454.64
D	MPPMCL costs	57.15	79.18	78.01	82.72
E = B+C+D	Total Power Purchase Cost - Ex Bus (Rs. Crs.)	13,063.13	16,435.61	16,267.16	18,097.79
E/A	Rate of Power Purchase (Rs. / kWh)	2.83	2.81	2.46	2.38
H	External Losses (MU)	684	707	700	703
I	Inter State Transmission Cost (Rs. Crs.)	634.37	685.56	740.89	800.67
J = (A - H)	Units Purchased at State Periphery (MU)	45,499	57,735	65,365	75,386
K = (I - E)	Total Power Purchase Cost at State Boundary (Rs. Crs.)	13,697.50	17,121.17	17,008.05	18,898.46
J/K	Rate of Power Purchase at State Boundary (Rs. / kWh)	3.01	2.97	2.60	2.51
L	Intra State Transmission Cost - MPTransco including SLDC (Rs. Crs.)	1,610	1,974	2,270	2,558
M = (K+L)	Total Power Purchase Cost at Discom Interface (Rs. Crs.)	15,307.83	19,095.34	19,278.11	21,456.87
N	Transmission Loss (MU)	1,958	2,485	2,813	3,245
O = (K - N)	Units Purchased at Discom Boundary (MU)	43,540.98	55,249.88	62,551.13	72,140.85
O/M	Rate of Power Purchase at Discom Boundary (Rs. / kWh)	3.52	3.46	3.08	2.97

5. O&M EXPENSES - DISCOMS

The O&M expenses based on the provisions of the regulation are as below:-

5.1. Employee Costs

As per the provision of regulation, employee costs have been calculated as below:-

Table 38: Employee Cost -As per provision of Regulation (Rs. Cr.)

Particular	East Discom			West Discom			Central Discom		
	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16
Employees Expenses excluding arrears, DA, Terminal Benefits and incentives	344.00	354.00	365.00	325.00	334.00	344.00	307.49	316.71	326.21
Arrears	34.00	34.00	14.17	30.00	30.00	10.00	29.52	29.52	12.30
DA	282.08	325.68	372.30	249.63	300.76	354.72	253.68	305.63	360.46
Incentive/Bonus to the Employees	0.00	0.00	0.00	0.09	0.10	0.11	0.33	0.35	0.38
Employee Cost for merged REC Society	0.00	0.00	0.00	11.58	12.84	14.17	0.00	0.00	0.00
Total	660.08	713.68	751.47	616.30	677.69	723.00	591.01	652.21	699.36

As per the provision of the para 34.1 of the regulation, norms of employee cost notified in the regulation excludes dearness allowance, pension, terminal benefits and incentive to be paid to employees and hence, these are considered over & above the cost notified in the regulation.

5.1.1. East Discom

- 14% increase during the year in two six monthly instalment of 6% & 8% is assumed in DA which will result in approx. 10% increase during the FY 14. Further increase of 10% per year is considered for FY 15 & FY 16 also.
- At present DA is 72% therefore DA for FY 14 is considered as 82% of basic pay.

5.1.2. West Discom

5.1.2.1. Major assumption considered for calculation of above Employee Cost:

- For the calculation of the DA, basic pay increased by 3% over FY 2011-12 for calculation of basic pay for the Control period.
- The state government had increased DA time to time as mentioned below-

	Jul, 09	Nov,09	Jan,10	Apr,10	Jul,10	Oct,10	Apr,11	Oct,11	Apr,12	Sep,12	Nov,12
DA increase	4%	3%	3%	3%	2%	8%	10%	6%	7%	7%	7%

- Looking to the above past growing trend of the Dearness allowance 7% increase considered in the Dearness allowance in every six month. Accordingly 82.50%, 96.50% and 110.50% average DA rate considered for the FY 2013-14, FY 2014-15 and FY 2015-16.
- On account of terminal benefits, only cash outflow has been considered as per the provision of the MPERC (Term & condition for allowing pension & Terminal benefits Liabilities of personnel of the Board and Successor Entities) Regulations, 2012.
- Incentive/ Bonus to be paid to the employees considered as per the previous trend in the Audited Accounts.
- Cost on account of Sixth pay arrear considered as notified in the regulation.

5.1.2.2. Licensee requested to the Hon'ble Commission to review the norms due to the following reasons:

- It is submitted that most of the employee working in the company have been transferred from MPSEB to Discom & their service conditions cannot be changed in view of the provision of the Electricity Act 2003 and Transfer Scheme

Rules. Therefore petitioner respectfully submits that employee cost is a committed and un-avoidable hence should be treated as uncontrollable factor.

- b. Because of all round shortage of staff, the company has recently started recruiting in some crucial cadres like Assistant Engineers, Junior Engineers, Line staff etc. Thus the additional expenses on salaries is required to incurred in this control period for fresh recruitment during the control period as well as recruitment made before the control period and presently imparting the training.
- c. Two REC (Pandhana & Manasa) societies have been merged into the Discom therefore Discom is required to incur additional employee cost on the employees of REC society. However no employee cost considered on this account in the regulation. Based on past actual data licensee is expected to incur cost amounting to Rs. 11.58 Cr which is not reflected in the regulation.

5.2. Administrative & General Expenses

As per the provision of regulation, A&G expenses have been calculated as below:-

Table 39: Administrative and General Expenses-As per Regulation (Rs. Cr.)

Particulars	East Discom			West Discom			Central Discom		
	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16
A&G Expenses excluding MPERC fees and Taxes	112.78	121.73	131.38	92.71	100.07	108.00	105.71	107.75	116.67
Taxes payable to Government	0.00	0.00	0.00	5.02	5.85	6.69	1.02	1.10	1.19
Total	112.78	121.73	131.38	97.73	105.92	114.69	106.73	108.85	117.86

5.2.1. West Discom

5.2.1.1. Major assumption considered for calculation of above A&G Expenses:

- a. As per the provision of the Para 34.1 of the regulation, norms of A&G expenses notified in the regulation excludes Fees paid to the MPERC and Taxes payable to the government.
- b. In view of above Fees paid to the MPERC and Taxes payable to the government considered over & above the cost notified in the regulation.

5.3. Repair and Maintenance Expenses

As per the provision of regulation, R&M expenses have been calculated as below:-

Table 40: Repair and Maintenance Expenses-As per Regulation (Rs. Cr.)

Particulars	East Discom			West Discom			Central Discom		
	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16
Opening GFA of FY year	4,063.62	5,640.76	7,203.63	4,190.50	5,613.74	6,934.96	4,312.55	4,997.40	5,337.10
R&M Expenses as 2.3% of GFA	93.46	129.74	165.68	96.38	129.12	159.50	85.67	116.20	144.16

5.4. Other Items of O&M Expenses

5.4.1. Terminal Benefits (Pension, Gratuity and Leave Encashment) Provision

The Terminal Benefit of the employees have been calculated as per the provisions of “MPERC (Terms and Conditions for allowing pension and terminal benefits liabilities of personnel of Board and successor entities) regulations, 2012 (G-38 of 2012)” notified in the MP gazette notification dated 20th April 2012.

In view of provisions of the MPERC (Terms and Conditions for allowing pension and terminal benefits liabilities of personnel of Board and successor entities) regulations, 2012, Discoms claim both provision as per the rate prescribed in actuary report & actual cash out flow on account of terminal benefits.

According to actuarial valuation the liability as on 31st March'2009 for the three Discoms was determined In addition to this liability, the Actuary valuation has prescribed the following percentage for the Future contribution rate (as a % age of Basic Pay + Grade pay + DA) required to be made by the three Discoms for meeting the liabilities arising due to future service:

Table 41: Future Contribution rate of liability on account of Actuary

Assumption	East Discom				West Discom				Central Discom			
	Gratuity	Pension	Leave Encashment	Total	Gratuity	Pension	Leave Encashment	Total	Gratuity	Pension	Leave Encashment	Total
Contribution rate	4.95%	21.73%	0.77%	27.45%	4.67%	20.28%	0.59%	25.54%	4.56%	20.15%	0.54%	25.25%
Discount rate	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%

According to the above prescribed methodology, liability for FY '13 to FY '16 has been worked out and this liability is pertaining to all the employees of licensee, eligible for such benefits. Terminal Benefits calculations are provided in table below:

Table 42: Calculation of Terminal Benefits (Rs. Crores)

Particular	FY 2013 - East Discom						FY 2013 - West Discom						FY 2013 - Central Discom					
	Pension		Gratuity		Leave encashment		Pension		Gratuity		Leave encashment		Pension		Gratuity		Leave encashment	
Provision as on 31.03.2012	612.65		114.61		49.41		602.64		111.25		27.56		592.37		129.58		63.54	
Discount @ 7%	7.00%	42.89	7.00%	8.02	7.00%	3.46	7.00%	42.19	7.00%	7.79	7.00%	1.93	7.00%	41.47	7.00%	9.07	7.00%	4.45
Current Service cost																		
Yearly salary	377.28		377.28		377.28		486.44		486.44		486.44		344.68		344.68		344.68	
Contribution	21.73%	81.98	4.95%	18.68	0.77%	2.91	20.28%	98.65	4.67%	22.72	0.59%	2.87	20.15%	69.45	4.56%	15.72	0.54%	1.86
Total Provision for FY 2013		124.87		26.70		6.36		140.83		30.50		4.80		110.92		24.79		6.31

	FY 2014 - East Discom						FY 2014 - West Discom						FY 2014 - Central Discom					
	Pension		Gratuity		Leave encashment		Pension		Gratuity		Leave encashment		Pension		Gratuity		Leave encashment	
Provision as on 31.03.2013	737.52		141.31		55.78		743.48		141.75		32.35		703.29		154.37		69.85	
Discount @7%	7.00%	51.63	7.00%	9.89	7.00%	3.90	7.00%	52.04	7.00%	9.92	7.00%	2.26	7.00%	49.23	7.00%	10.81	7.00%	4.89
Current Service cost																		
Yearly salary	414.72		414.72		414.72		552.22		552.22		552.22		379.90		379.90		379.90	
Contribution	21.73%	90.12	4.95%	20.53	0.77%	3.19	20.28%	111.99	4.67%	25.79	0.59%	3.26	20.15%	76.55	4.56%	17.32	0.54%	2.05
Total Provision for FY 2014		141.75		30.42		7.10		164.03		35.71		5.52		125.78		28.13		6.94
	FY 2015 - East Discom						FY 2015 - West Discom						FY 2015 - Central Discom					
	Pension		Gratuity		Leave encashment		Pension		Gratuity		Leave encashment		Pension		Gratuity		Leave encashment	
Provision as on 31.03.2014	879.27		171.73		62.87		907.51		177.47		37.88		829.07		182.50		76.79	
Discount @7%	7.00%	61.55	7.00%	12.02	7.00%	4.40	7.00%	63.53	7.00%	12.42	7.00%	2.65	7.00%	58.03	7.00%	12.77	7.00%	5.38
Current Service cost																		
Yearly salary	461.28		461.28		461.28		612.42		612.42		612.42		418.80		418.80		418.80	
Contribution	21.73%	100.24	4.95%	22.83	0.77%	3.55	20.28%	124.20	4.67%	28.60	0.59%	3.61	20.15%	84.39	4.56%	19.10	0.54%	2.26
Total Provision for FY 2015		161.78		34.85		7.95		187.72		41.02		6.26		142.42		31.87		7.64
Particular	FY 2016 - East Discom						FY 2016 - West Discom						FY 2016 - Central Discom					
	Pension		Gratuity		Leave encashment		Pension		Gratuity		Leave encashment		Pension		Gratuity		Leave encashment	
Provision as on 31.03.2015	1,041.05		206.58		70.83		1,095.24		218.49		44.14		971.49		214.37		84.43	
Discount @7%	7.00%	72.87	7.00%	14.46	7.00%	4.96	7.00%	76.67	7.00%	15.29	7.00%	3.09	7.00%	68.00	7.00%	15.01	7.00%	5.91
Current Service cost																		
Yearly salary	543.60		543.60		543.60		675.73		675.73		675.73		461.69		461.69		461.69	
Contribution	21.73%	118.12	4.95%	26.91	0.77%	4.19	20.28%	137.04	4.67%	31.56	0.59%	3.99	20.15%	93.03	4.56%	21.05	0.54%	2.49
Total Provision for FY 2016		191.00		41.37		9.14		213.71		46.85		7.08		161.03		36.06		8.40

The table given below indicates the actual provisions made against this liability in the annual accounts of the company from FY 2009-10 to FY 2011-12 and projected for FY 2012-13 to FY 2015-16:

Table 43: Terminal Benefits Liability for Discoms (Rs. Cr.)

Particular	East Discom				West Discom				Central Discom			
	Gratuity	Pension	Leave Encashment	Total Liability	Gratuity	Pension	Leave Encashment	Total Liability	Gratuity	Pension	Leave Encashment	Total Liability
Past Service Liability as determined by actuary (From 01.06.2005 to 31st March'2009)	57.57	362.25	21.39	441.21	52.41	348.76	19.95	421.12	52.54	325.54	21.02	399.10
2009-10	15.36	67.44	2.38	85.18	23.40	101.60	2.96	127.96	18.82	10.03	5.26	34.11
2010-11	19.58	85.93	12.48	117.98	17.08	73.64	2.21	92.93	17.29	76.81	14.09	108.19
2011-12	22.10	97.03	13.17	132.30	18.36	78.65	2.44	99.44	18.03	77.47	17.31	112.81
2012-13	26.70	124.87	6.36	157.93	30.50	140.83	4.80	176.14	22.91	102.53	5.87	131.30
Total upto 2013	141.31	737.52	55.78	934.61	141.75	743.48	32.35	917.59	129.59	592.38	63.55	785.51
2013-14	30.42	141.75	7.10	179.26	35.71	164.03	5.52	205.27	24.79	110.92	6.31	142.02
2014-15	34.85	161.78	7.95	204.59	41.02	187.72	6.26	235.01	28.13	125.78	6.94	160.85
2015-16	41.37	191.00	9.14	241.51	46.85	213.71	7.08	267.63	31.87	142.42	7.64	181.93
Total up 2016	247.95	1,232.05	79.97	1,559.97	265.34	1,308.94	51.22	1,625.50	214.38	971.50	84.43	1,270.32

The terminal benefits provision have not been included in the computation of final ARR. Instead, the terminal benefits (Cash Outflow) have been included as a part of employee expense as detailed in the next section.

5.4.2. Terminal Benefits (Cash Outflow)

As per the provisions of regulation,

The liability towards the pension and other Terminal Benefits of the Pensioners and Personnel of the Board and its Successor Entities shall comprise of the following:

(i). Cash outflow in each fiscal year for making payment to all the Pensioners including Existing Pensioners subject to the provision of Regulation 3 (8)

Discoms claim actual cash outflow as detailed below in this tariff petition as part of employee expenses. For calculation of the Cash outflow for the control period, actual cash outflow of FY 2011-12 increased by 7.93% yearly.

Table 44: Terminal Benefits (Cash Outflow) of Discoms (Rs. Cr.)

Particulars	East Discom			West Discom			Central Discom		
	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16
Pension	152.88	174.05	203.14	161.09	173.87	187.65	121.40	131.03	141.42
Gratuity	10.96	60.37	102.11	52.46	56.63	61.12	42.55	45.93	49.57
Leave Encashment	3.75	20.63	34.90	15.57	16.81	18.14	17.48	18.87	20.37
PF/ GTIS/NPS e.t.c	1.16	6.40	10.83	4.39	4.74	5.12	2.19	2.37	2.56
Total	168.75	261.46	350.99	233.52	252.04	272.03	183.62	198.20	213.92

5.4.3. MPERC fees

MPERC Fees has been projected as per the provisions of the regulation:

Table 45: MPERC fees

Particulars	East Discom			West Discom			Central Discom		
	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16
MPERC Fees	0.48	0.54	0.62	0.67	0.73	0.80	0.51	0.61	0.74

5.5. Gist of O&M Expenses

The Gist of O&M expenses as per the provisions of the regulation is summarized as below:-

Table 46: Gist of O&M expenses-As per Regulation (Rs. Crores)

Particulars	East Discom			West Discom			Central Discom		
	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16
Employee Cost (including arrears, DA and others)	660.08	713.68	751.47	616.30	677.69	723.00	591.01	652.21	699.36
A&G Expenses	112.78	121.73	131.38	97.73	105.92	114.69	106.73	108.85	117.86
R&M expenses	93.46	129.74	165.68	96.38	129.12	159.50	85.67	116.20	144.16
Other Item of O&M expenses									
Terminal Benefit (Cash Outflow)	168.75	261.46	350.99	233.52	252.04	272.03	183.62	198.20	213.92
MPERC Fees	0.48	0.54	0.62	0.67	0.73	0.80	0.51	0.61	0.74
Total O&M expenses	1,035.55	1,227.14	1,400.14	1,044.60	1,165.50	1,270.02	967.54	1,076.06	1,176.03

6. INVESTMENT PLAN – DISCOMS

6.1.1. Capital Investment Plan

The three Discoms are undertaking various projects in coming years for system strengthening and reduction of distribution losses. The focus is on creation of new 33/11 kV S/s, bifurcation of overloaded 33 kV feeders, feeder bifurcation as 11 kV level of agricultural feeder, Addl. / Aug of PTRs, Installation of DTRs, conversion of bare LT line into AB Cables and replacement of service lines etc.

The overall distribution loss of the system is the sum of technical and commercial losses. The technical losses are mainly due to poor infrastructure which needs strengthening, renovation and up-gradation of the capacity of lines, sub-stations and associated infrastructures. The commercial losses are mainly due to pilferage of energy which can also be reduced to large extent by re-engineering of the system which requires capital investment and directed efforts. We are working on both the issues and the distribution losses have also come down but not upto the normative loss level.

Scheme wise Capital Expenditure Plan of Discoms for FY 2013 to FY 2016 is given in table below:

Table 47: Capital expenditure Plan (Rs. Crores)

Name of Scheme	East Discom			
	FY 13	FY 14	FY 15	FY 16
New Ag Pumps-Kisan Anudan Yojna	48.00	62.40	65.52	68.80
System Strengthening (STN / TSP / SCSP)	115.53	411.63	507.69	519.00
ADB	168.30	158.48	46.23	4.28
Feeder Bifurcation -ADB	250.90	448.45	96.43	0.00
Feeder Bifurcation -REC	360.00	242.68	38.17	0.00
New EAP Scheme	0.00	58.80	88.41	67.52
RGGVY	120.00	174.00	78.96	10.74
R-APDRP(A+B)	285.02	340.07	67.20	0.00
Miscellaneous	20.00	25.00	25.00	25.00
Total	1,367.74	1,921.51	1,013.61	695.34
Name of Scheme	West Discom			
	FY 13	FY 14	FY 15	FY 16
ADB	120.00	113.65	24.81	0.00
TSP and SCSP	169.35	345.21	425.00	462.00
GOMP (Equity)	0.00	230.14	0.00	0.00
FSP - ADB Loan	250.00	374.64	0.00	0.00
FSP Equity	61.38	0.02	0.00	0.00
New Agricultural pumps	87.00	92.30	96.00	106.00
Grant for Simhashta Mela	17.51	20.39	26.06	26.23
PFC Loan (ADB Counter Funds)	55.70	0.00	0.00	0.00
REC Loan (FS) Phase - I	393.62	0.00	0.00	0.00
ADB Loan (FS) Phase - II	0.00	0.00	0.00	0.00
RAPDRP (GOI)	184.74	188.16	0.00	0.00
JBIC	0.00	0.00	0.00	0.00
Others (New EAP)	0.00	0.00	70.00	70.00
RGGVY	110.90	107.38	32.90	27.23
Grant from DFID	0.00	0.00	0.00	0.00
Total	1,450.20	1,471.89	674.77	691.46
Name of Scheme	Central Discom			
	FY 13	FY 14	FY 15	FY 16
System Strengthening				
Normal	85.18	102.66	100.00	100.00
SCSP	64.50	87.84	100.00	100.00
TSP	29.61	47.50	60.00	70.00

Feeder Separation	630.10	191.00	0.00	0.00
New Pump Connection	168.15	202.77	101.14	67.59
ADB II	343.02	199.04	14.69	0.00
RGGVY	176.44	209.74	144.66	0.00
RAPDRP Part A	33.13	23.40	6.16	6.62
RAPDRP Part B	382.56	4.15	4.15	4.15
ERP (DFID)	2.00	2.00	0.00	0.00
EAP	0.00	227.25	0.00	0.00
Total	1,914.68	1,297.35	530.79	348.35

6.1.2. Scheme Wise Capitalization

Following is the proposed scheme wise Capitalization Plan of Discoms:

Table 48: Scheme Wise Capitalization (Rs. Crores)

East Discom				
Name of Scheme	FY 13	FY 14	FY 15	FY 16
Capitalization of Opening CWIP	206.06	206.06	206.06	0.00
New Ag Pumps-Kisan Anudan Yojna	24.00	45.60	61.08	66.54
System Strengthening (STN / TSP / SCSP)	57.76	240.48	400.44	494.13
ADB	84.15	129.73	104.32	47.71
Feeder Bifurcation -ADB	125.45	299.49	232.93	118.62
Feeder Bifurcation -REC	180.00	229.34	163.89	59.99
New EAP Scheme	0.00	29.40	61.85	72.04
RGGVY	60.00	123.00	115.68	63.86
R-APDRP(A+B)	142.51	255.54	192.63	88.18
Miscellaneous	10.00	18.50	24.00	25.00
Total	889.93	1,577.14	1,562.87	1,036.05
West Discom				
Name of Scheme	FY 13	FY 14	FY 15	FY 16
ADB	60.00	92.83	70.50	30.17
TSP and SCSP	84.68	223.41	349.93	427.54
GOMP (Equity)	0.00	115.07	69.04	46.03
FSP - ADB Loan	125.00	262.32	162.39	74.93
FSP Equity	30.69	18.42	12.28	0.00
New Agricultural pumps	43.50	72.25	93.09	100.26
Grant for Simhastha Mela	8.76	15.45	22.65	25.01
PFC Loan (ADB Counter Funds)	27.85	16.71	11.14	0.00
REC Loan (FS) Phase - I	196.81	118.09	78.72	0.00
ADB Loan (FS) Phase - II	0.00	0.00	0.00	0.00
RAPDRP (GOI)	92.37	149.50	93.40	37.63
JBIC	0.00	0.00	0.00	0.00
Others (New EAP)	0.00	0.00	35.00	56.00
RGGVY	55.45	86.96	70.84	44.96
Grant from DFID	0.00	0.00	0.00	0.00
Capitalization of opening CWIP	252.23	252.23	252.23	0.00
Total	977.33	1,423.23	1,321.22	842.54
Central Discom				
Name of Scheme	FY 13	FY 14	FY 15	FY 16
R-APDRP A	191.28	126.46	86.61	9.84
R-APDRP B	16.57	12.01	9.95	4.15
ADB-1	171.51	202.43	135.66	44.22
ADB 2				
GoMP(Work Plan FY 09)		113.63	68.18	45.45
i.- ST(N)/SSTD	89.64	172.78	237.26	260.60
v.- Feeder Separation	315.05	284.53	183.32	38.20

vi- New Pump connection	84.07	151.82	145.02	104.68
RGGVY	88.22	157.80	72.33	85.35
HVDS	1	1.6	1	0.4
OUT OF OPENING CWIP	135.61	135.61	135.61	0
Total	1,092.95	1,358.68	1,074.93	592.88

6.1.3. CWIP

Following table shows the year wise bifurcation of CWIP of the three Discoms.

Table 49: CWIP (Rs. Cr.)

Particulars	East Discom				West Discom				Central Discom			
	FY 13	FY 14	FY 15	FY 16	FY 13	FY 14	FY 15	FY 16	FY 13	FY 14	FY 15	FY 16
Opening Balance of CWIP	618.18	1,171.39	1,598.73	1,140.79	756.68	1,229.55	1,278.21	631.76	410.94	1,332.61	1,379.19	1,130.44
Fresh Investment during the year	1,367.74	1,921.51	1,013.61	695.34	1,450.20	1,471.89	674.77	691.46	2,014.62	1,405.26	826.18	653.93
Interest & Expenses capitalized	75.39	82.97	91.31	100.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Investment capitalized	889.93	1,577.14	1,562.87	1,036.05	977.33	1,423.23	1,321.22	842.54	1,092.95	1,358.68	1,074.93	592.88
Closing Balance of CWIP	1,171.39	1,598.73	1,140.79	900.56	1,229.55	1,278.21	631.76	480.68	1,332.61	1,379.19	1,130.44	1,191.49

6.1.4. Fixed Assets Addition

The year wise fixed assets addition is as follows:

Table 50: Fixed Assets Addition (Rs. Cr.)

Particulars	East Discom				West Discom				Central Discom			
	FY 13	FY 14	FY 15	FY 16	FY 13	FY 14	FY 15	FY 16	FY 13	FY 14	FY 15	FY 16
Land & land rights	0.09	0.18	0.13	0.10	1.45	2.10	1.97	1.25	0.00	0.00	0.00	0.00
Buildings	10.78	19.50	19.31	12.75	7.96	11.53	10.79	6.88	24.36	13.62	7.87	4.68
Hydraulic works	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.00
Other civil works	0.02	0.01	0.02	0.01	0.00	0.00	0.00	0.00	0.09	0.05	0.03	0.02
Plant & machinery	174.81	300.83	289.43	196.69	660.29	957.09	895.57	571.26	580.48	324.42	152.61	103.79
Lines, cables, networks	395.09	704.80	703.76	463.70	246.68	357.57	334.58	213.42	614.14	343.24	177.70	113.36
Vehicles	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.02	0.01	0.01
Furniture & fixtures	0.00	0.00	0.00	0.00	0.42	0.60	0.57	0.36	0.51	0.29	0.13	0.09
Office equipments	12.96	26.91	30.05	17.98	5.09	7.37	6.90	4.40	5.75	3.21	1.35	0.99
Capital Assets not belonging to the board	296.19	524.90	520.15	344.82	55.45	86.96	70.84	44.96				
Total	889.93	1,577.14	1,562.87	1,036.05	977.33	1,423.23	1,321.22	842.54	1,225.39	684.85	339.71	222.94

7. OTHER COSTS/ INCOME – DISCOMS

7.1. Depreciation

According to the applicable norms, Discoms have developed detailed depreciation model based on rates specified by the Hon'ble commission in annexure-II of said regulation. The depreciation during the year so worked out for FY 12-13 to FY 15-16 is shown below:

Table 51: Depreciation - as per regulation (Rs. Cr.)

Particulars	East Discom				West Discom				Central Discom			
	FY 13	FY 14	FY 15	FY 16	FY 13	FY 14	FY 15	FY 16	FY 13	FY 14	FY 15	FY 16
Land under Lease	0.00	0.00	0.00	0.00	0.07	0.13	0.19	0.25	0.00	0.00	0.00	0.00
Building	1.35	1.86	2.51	3.04	2.68	3.01	3.38	3.67	0.69	1.09	1.31	1.44
Hydraulic Works	0.16	0.12	0.12	0.12	0.28	0.28	0.28	0.28	0.01	0.01	0.01	0.01
Other Civil Works	0.07	0.07	0.06	0.06	0.08	0.08	0.08	0.08	0.02	0.02	0.02	0.02
Plant & Machinery	34.97	47.52	59.14	71.97	74.96	117.33	165.44	202.99	88.05	125.24	100.66	111.45
Line Cable Networks etc.	77.04	92.63	129.81	160.63	62.37	75.83	92.49	102.13	44.64	88.06	112.33	124.89
Vehicles	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.06	0.06	0.06	0.06
Furniture & fixtures	0.00	0.00	0.00	0.00	0.09	0.12	0.16	0.19	0.05	0.09	0.10	0.11
Office Equipments	2.04	3.30	5.10	6.43	0.75	1.14	1.57	1.92	0.75	1.11	1.31	1.40
Total	115.63	145.50	196.75	242.25	141.31	197.95	263.62	311.53	134.27	215.68	215.81	239.39

7.2. Interest and Finance Charges

7.2.1. Interest on Project Loans

Regulation 31 provides the method of calculation of interest and finance charges on loan capital.

The methodology adopted for calculating Interest and Finance charges on project loan in tariff order FY'13 has been adopted for projecting the interest and finance charges on project loan. The details are elaborated in following table:

Table 52: Interest on Project Loans (Rs. Cr.)

Particulars	East Discom			
	FY 13	FY 14	FY 15	FY 16
1. Addition to GFA during the year	889.93	1,577.14	1,562.87	1,036.05
2. Consumer contribution during the year	27.00	34.10	34.56	34.13
3. Net addition to GFA during the year (1-2)	862.93	1,543.04	1,528.31	1,001.92
4. 30% of addition to net GFA considered as funded through equity (4=3*30%)	258.88	462.91	458.49	300.58
5. Balance addition to net GFA during the year funded through debt(5=3-4)	604.05	1,080.13	1,069.82	701.34
6. Debt Repayment due during the year (equal to the depreciation claim)	115.63	145.50	196.75	242.25
7. Debt associated with GFA as per tariff order	1,182.59	2,117.21	2,990.28	3,449.37
8. Weighted average rate of interest % on all loans	10.19%	9.28%	9.42%	9.18%
9. Total Interest on project loans(9=7*8)	120.56	196.39	281.59	316.60
10. Finance Charges	2.77	3.05	3.35	3.69
11. Total Interest on project loan and Finance charges	123.33	199.43	284.94	320.29
Particulars	West Discom			
	FY 13	FY 14	FY 15	FY 16
1. Opening balance of GFA identified as funded through debt	846.12	1,424.05	2,161.50	2,773.14
2. Addition to GFA during the year	977.33	1,423.23	1,321.22	842.54
3. Consumer contribution during the year/ Asset Constructed Under RGGVY During the year	55.45	86.96	70.84	44.96
4. Net addition to GFA during the year (1-2)	921.88	1,336.27	1,250.38	797.58
5. 30% of addition to net GFA considered as funded through equity(4=3*30%)	276.56	400.88	375.11	239.27
6. Balance addition to net GFA during the year funded through debt(5=3-4)	645.31	935.39	875.26	558.30
7. Debt Repayment due during the year (equal to the depreciation claim)	67.38	197.95	263.62	311.53
8. Closing balance of GFA identified as funded through debt	1,424.05	2,161.50	2,773.14	3,019.91
9. Average of loan balances	1,135.08	1,792.77	2,467.32	2,896.53
10. Weighted average rate of interest % on all loans	0.11	0.10	0.13	0.13
11. Total Interest on project loans(9=7*8)	124.98	184.78	314.45	370.61
12. Finance Charges	15.08	16.29	17.59	19.00
13. Total Interest on project loan and Finance charges	140.06	201.06	332.04	389.62
Particulars	Central Discom			
	FY 13	FY 14	FY 15	FY 16
1. Addition to GFA during the year	1,225.39	684.85	339.71	222.94
2. Consumer contribution during the year	0.00	0.00	0.00	0.00
3. Net addition to GFA during the year (1-2)	1,225.39	684.85	339.71	222.94
4. 30% of addition to net GFA considered as funded through equity(4=3*30%)	367.62	205.46	101.91	66.88
5. Balance addition to net GFA during the year funded through debt(5=3-4)	857.77	479.40	237.79	156.06
6. Debt Repayment due during the year (equal to the depreciation claim)	134.27	215.68	215.81	239.39
7. Debt associated with GFA as per tariff order	1,125.07	1,618.67	1,761.52	1,730.84
8. Weighted average rate of interest % on all loans	10.48%	9.15%	13.10%	13.13%
9. Total Interest on project loans(9=7*8)	156.67	155.98	226.19	215.77
10. Finance Charges	16.99	18.34	19.79	21.36
11. Total Interest on project loan and Finance charges	173.66	174.31	245.98	237.12

7.2.2. Interest on Working Capital

The interest on working capital has been calculated on the basis of provisions of the Regulation and shown in the table given below.

Table 53: Interest on Working Capital (Rs. Cr.)

Particulars	East Discom			
	FY 13	FY 14	FY 15	FY 16
1/6th of annual requirement of inventory for previous year	20.74	22.82	25.12	27.64
O&M expenses				
R&M expenses	59.20	93.46	129.74	165.68
A&G expense	113.20	113.26	122.26	132.00
Employee expenses	792.94	828.83	975.14	1,102.46
Total of O&M expenses	965.33	1,035.55	1,227.13	1,400.14
1/12th of total	80.44	86.30	102.26	116.68
Receivables	0.00	0.00	0.00	0.00
Annual Revenue from wheeling charges**	0.00	0.00	0.00	0.00
Receivables equivalent to 2 months average billing of wheeling charges	0.00	0.00	0.00	0.00
Total Working capital	101.18	109.12	127.38	144.32
(A), B) ii), C) ii))	-	0.00	-	-
Rate of Interest *	13.50%	13.50%	13.50%	13.50%
Interest on Working capital	13.66	14.73	17.20	19.48
For Retail Sale activity				
Particulars	FY 13	FY 14	FY 15	FY 16
1/6th of annual requirement of inventory for previous year	0.00	0.00	0.00	0.00
Receivables	0.00	0.00	0.00	0.00
Annual Revenue from Tariff and charges**	4,533.11	5,841.09	6,720.82	7,838.02
Receivables equivalent to 2 months average billing	755.52	973.51	1,120.14	1,306.34
Power Purchase expenses	4,219.10	5,445.70	5,577.21	6,207.95
1/12th of power purchase expenses	351.59	453.81	464.77	517.33
Consumer Security Deposit	667.75	734.87	808.74	890.04
Total Working capital (A+B ii) - C i) - D)	-263.82	-215.17	-153.37	-101.03
Rate of Interest *	13.50%	13.50%	13.50%	13.50%
Interest on Working capital	-35.62	-29.05	-20.71	-13.64
Total Interest on working capital from wheeling activities	13.66	14.73	17.20	19.48
Total Interest on working capital from retail activities	-35.62	-29.05	-20.71	-13.64
Net Interest from working capital	(21.96)	(14.32)	(3.51)	5.84
Particulars	West Discom			
	FY 13	FY 14	FY 15	FY 16
1/6th of annual requirement of inventory for previous year	4.28	5.59	7.48	9.25
O&M expenses				
R&M expenses	73.90	96.38	129.12	159.50
A&G expense	122.64	98.40	106.65	115.49
Employee expenses	929.36	849.82	929.73	995.02
Total of O&M expenses	1,125.91	1,044.60	1,165.50	1,270.02
1/12th of total	93.83	87.05	97.13	105.83
Receivables				
Annual Revenue from wheeling charges**	5.95	6.82	7.70	8.58
Receivables equivalent to 2 months average billing of wheeling charges	0.99	1.14	1.28	1.43
Total Working capital	99.10	93.77	105.89	116.51
(A), B) ii), C) ii))				
Rate of Interest *	13.50%	13.50%	13.50%	13.50%
Interest on Working capital	13.38	12.66	14.30	15.73
For Retail Sale activity				
Particulars	FY 13	FY 14	FY 15	FY 16

1/6th of annual requirement of inventory for previous year	1.07	1.40	1.87	2.31
Receivables				
Annual Revenue from Tariff and charges**	6,481.54	8,074.43	8,987.81	10,048.57
Receivables equivalent to 2 months average billing	1,080.26	1,345.74	1,497.97	1,674.76
Power Purchase expenses	5,733.15	6,663.46	6,218.87	6,667.78
1/12th of power purchase expenses	477.76	555.29	518.24	555.65
Consumer Security Deposit	684.85	772.55	860.26	947.96
Total Working capital (A+B ii) - C i) - D)	-81.28	19.29	121.34	173.46
Rate of Interest *	13.50%	13.50%	13.50%	13.50%
Interest on Working capital	-10.97	2.60	16.38	23.42
Total Interest on working capital from wheeling activities	13.38	12.66	14.30	15.73
Total Interest on working capital from retail activities	-10.97	2.60	16.38	23.42
Net Interest from working capital	2.41	15.26	30.68	39.15

Particulars	Central Discom			
	FY 13	FY 14	FY 15	FY 16
1/6th of annual requirement of inventory for previous year	43.01	55.05	65.57	80.83
O&M expenses				
R&M expenses	55.57	85.67	116.20	144.16
A&G expense	98.22	106.74	108.92	118.02
Employee expenses	600.37	774.63	850.41	913.28
Total of O&M expenses	754.17	967.03	1,075.53	1,175.45
1/12th of total	62.85	80.59	89.63	97.95
Receivables				
Annual Revenue from wheeling charges**				
Receivables equivalent to 2 months average billing of wheeling charges				
Total Working capital				
(A), B) ii), C) ii))	106.36	135.63	155.21	178.80
Rate of Interest *	13.50%	13.50%	13.50%	13.50%
Interest on Working capital	14.36	18.31	20.95	24.14
For Retail Sale activity				
Particulars	FY 13	FY 14	FY 15	FY 16
1/6th of annual requirement of inventory for previous year				
Receivables				
Annual Revenue from Tariff and charges**	4,817.72	6,155.38	7,332.53	9,038.56
Receivables equivalent to 2 months average billing	802.99	1,025.89	1,222.08	1,506.43
Power Purchase expenses	4,675.17	5,965.13	6,324.90	7,290.36
1/12th of power purchase expenses	389.60	497.09	527.08	607.53
Consumer Security Deposit	800.73	1,020.89	1,214.64	1,487.66
Total Working capital (A+B ii) - C i) - D)	-378.36	-486.71	-519.03	-580.70
Rate of Interest *	0.14	0.14	0.14	0.14
Interest on Working capital	-51.08	-65.71	-70.07	-78.39
Total Interest on working capital from wheeling activities	14.36	18.31	20.95	24.14
Total Interest on working capital from retail activities	-51.08	-65.71	-70.07	-78.39
Net Interest from working capital	(40.97)	(53.30)	(58.74)	(61.46)

7.2.3. Interest on Consumer Security Deposit

Interest on consumer security deposit has been paid to the consumers according to the Hon'ble Commission's regulation for security deposit.

Below mentioned table shows the projections of Interest on Consumer Security Deposit:

Table 54: Interest on consumer security deposit as per regulation (Rs. Crores)

	East Discom			West Discom			Central Discom		
	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16
Interest on Consumer Security Deposit	60.69	66.79	73.50	69.23	77.56	85.89	91.88	109.32	133.89

7.2.3.1. Submission of East Discom

- Bank rate of RBI as on 1st April 2012 i.e. 9.5% has been considered for computation.
- Interest on consumer security deposit of society area has not been considered as RE Co-operative Societies are under liquidation and their assets and liabilities are not yet transferred to the licensee. Therefore, it is prayed to the Hon'ble Commission that Interest on Consumer security deposit for RECS may be considered in the year of transfer of Final assets and liabilities to the licensee.

7.2.3.2. Submission of West Discom

- Interest on consumer security deposit of society area has not been considered as RE Co-operative Societies are under liquidation and their assets and liabilities are not yet transferred to the licensee. Therefore, it is prayed to the Hon'ble Commission that Interest on Consumer security deposit for RECS may be considered in the year of transfer of Final assets and liabilities to the licensee.

7.3. Other Income

The main components of Non-Tariff Income are meter rent, wheeling charges, supervision charges, sale of scrape and miscellaneous charges from consumers. Meter rent and miscellaneous charges have been projected as a percentage of tariff income. Other income of society area has not been considered due to annual audit of some of the societies is pending and also that societies are under liquidation.

Table 55: Other Income (Rs. Cr.)

Particulars	East Discom			West Discom			Central Discom		
	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16
Income from Investment, Fixed & Call Deposits	17.34	17.34	17.34	0.00	0.00	0.00	17.46	16.76	17.11
Interest on loans and Advances to staff	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.22	0.24
Interest on Advances to Suppliers / Contractors	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.34	0.37
Income/Fee/Collection against staff welfare activities	0.03	0.03	0.03	0.01	0.01	0.01	0.00	0.00	0.00
Miscellaneous receipts	39.06	39.06	39.06	0.00	0.00	0.00	21.39	21.78	22.73
Misc. charges from consumers	0.00	0.00	0.00	38.17	38.17	38.17	6.72	6.15	6.43
Deferred Income (Consumer Contribution)	12.01	12.01	12.01	0.00	0.00	0.00	0.00	0.00	0.00
Wheeling charges	0.00	0.00	0.00	6.82	7.70	8.58	0.00	0.00	0.00
Income from Trading other than Power (i.e sale of scrape, tender form)	0.00	0.00	0.00	4.50	4.50	4.50	0.00	0.00	0.00
Supervision charges	0.00	0.00	0.00	15.55	16.92	18.29	0.00	0.00	0.00
Total	68.43	68.43	68.43	65.06	67.31	69.56	46.23	45.26	46.88

7.4. Return on Equity

Based on the provision of regulation, the calculation of return on equity is as follows:

Table 56: Return on equity as per regulation (Rs. Crores)

Sr. no.	Particulars	East Discom			
		FY 13	FY 14	FY 15	FY 16
A	Gross Fixed Assets at the beginning of year (net of consumer contributions)	3,072.72	3,935.65	5,478.69	7,007.01
A1	Opening balance of GFA identified as funded through equity	921.82	1,180.70	1,643.61	2,102.10
A2	Opening balance of GFA identified as funded through debt	2,150.90	2,754.96	3,835.08	4,904.90
B	Proposed capitalization of assets as per the investment plan (net of consumer contribution)	862.93	1,543.04	1,528.31	1,001.92
B1	Proportion of capitalized assets funded out of equity, internal reserves	152.03	488.63	539.40	532.50
B2	Balance Proportion of capitalized assets funded out of project loans (B - B1)	710.91	1,054.41	988.92	469.42
C1	Normative additional equity (30% of B)	258.88	462.91	458.49	300.58
C2	Normative additional debt (70% of B)	604.05	1,080.13	1,069.82	701.34
D1	Excess / shortfall of additional equity over normative (B1-C1)	-106.85	25.72	80.90	231.93
D2	Excess / shortfall of additional debt over normative (B2-C2)	106.85	-25.72	-80.90	-231.93
E	Equity eligible for Return (A1+(C1/2)) OR (A1+(B1/2)), whichever is lower	997.83	1,412.15	1,872.85	2,252.39
	Return on Equity (16% on E)	159.65	225.94	299.66	360.38
Sr. no.	Particulars	West Discom			
		FY 13	FY 14	FY 15	FY 16
A	Gross Fixed Assets at the beginning of year (net of consumer contributions)	1,723.56	2,578.06	3,716.39	4,703.14
A1	Opening balance of GFA identified as funded through equity	877.44	1,154.01	1,554.89	1,930.00
A2	Opening balance of GFA identified as funded through debt	846.12	1,424.05	2,161.50	2,773.14
B	Proposed capitalization of assets as per the investment plan (net of consumer contribution)	921.88	1,336.27	1,250.38	797.58
B1	Proportion of capitalized assets funded out of equity, internal reserves	276.56	400.88	375.11	239.27
B2	Balance Proportion of capitalized assets funded out of project loans (B - B1)	645.31	935.39	875.26	558.30
C1	Normative additional equity (30% of B)	276.56	400.88	375.11	239.27
C2	Normative additional debt (70% of B)	645.31	935.39	875.26	558.30
D1	Excess / shortfall of additional equity over normative (B1-C1)	0.00	0.00	0.00	0.00

D2	Excess / shortfall of additional debt over normative (B2-C2)	0.00	0.00	0.00	0.00
E	Equity eligible for Return (A1+(C1/2)) OR (A1+(B1/2)), whichever is lower	1,015.73	1,354.45	1,742.45	2,049.64
	Return on Equity (16% on E)	162.52	216.71	278.79	327.94
Sr. no.	Particulars	Central Discom			
		FY 13	FY 14	FY 15	FY 16
A	Gross Fixed Assets at the beginning of year (net of consumer contributions)	2,870.66	4,312.55	4,997.40	5,337.10
A1	Opening balance of GFA identified as funded through equity	861.20	1,293.76	1,499.22	1,601.13
A2	Opening balance of GFA identified as funded through debt	2,009.46	3,018.78	3,498.18	3,735.97
B	Proposed capitalization of assets as per the investment plan (net of consumer contribution)	1,092.95	1,435.17	1,151.42	592.88
B1	Proportion of capitalized assets funded out of equity, internal reserves	327.88	430.55	345.43	177.86
B2	Balance Proportion of capitalized assets funded out of project loans (B - B1)	765.06	1,004.62	806.00	415.01
C1	Normative additional equity (30% of B)	327.88	430.55	345.43	177.86
C2	Normative additional debt (70% of B)	765.06	1,004.62	806.00	415.01
D1	Excess / shortfall of additional equity over normative (B1-C1)	0.00	0.00	0.00	0.00
D2	Excess / shortfall of additional debt over normative (B2-C2)	0.00	0.00	0.00	0.00
E	Equity eligible for Return (A1+(C1/2)) OR (A1+(B1/2)), whichever is lower	1,025.14	1,509.04	1,671.93	1,690.06
	Return on Equity (16% on E)	164.02	241.45	267.51	270.41

7.4.1.1. Submission of East Discom

According to the Para 30.2 of the regulation, MPPKVCL is entitled to Return on Equity @ 16% p.a. Return on equity of RE Co-operative societies has not been considered as RE Co-operative societies are under liquidation and their assets and liabilities are not transfer to licensee, Therefore it is prayed to the Hon'ble Commission that Return on Equity of RECs may be considered in the year of transfer of Final assets and liabilities to the licensee.

7.5. Bad and Doubtful Debts

Bad and doubtful debts have been projected on the basis of 1% of the revenue of the control period. Following table shows the year wise amount.

Table 57: Bad Debts - As per regulation (Rs. Crores)

Particulars	East Discom			West Discom			Central Discom		
	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16
Bad and Doubtful Debts	58.98	67.78	78.95	80.74	89.88	100.49	61.55	73.32	90.38

8. INCOME/EXPENSES OF MPPMCL

As per item No.9 (b) of State Govt. Notification No.4353-F-3-24-2009-XIII dt.18th May 2011, to meet its own expenses, M.P. Power Management Company Limited has been supplying power to the Discoms at the tariff determined/approved by MPERC and its own expenses on actual basis in proportion to the energy drawl by respective Discoms.

MPPMCL has been operating on “No Profit and No Loss” basis. Therefore, till now at the end of each financial year, all the credits received by MPPMCL which formed the part of income of MPPMCL (shown as “other income” in Form S-1) were being passed on to the Discoms in proportion to the energy drawl by respective Discoms as a part of their Power Purchase Costs. The major components of Annual Revenue Requirement of MPPMCL are detailed in this section.

The figures of Income and expenses of both MPPMCL and MPSEB has been merged for the FY 2011-12 to provide a basis for projections in the succeeding years as MPSEB has been merged into MPPCL with effect from FY 2012-13.

8.1. Income

8.1.1. Revenue from operations (including Revenue Subsidy)

The revenue from sale of electricity is taken by Discoms in their ARR therefore it is not taken in the ARR of M.P. Power Management Company Ltd.

8.1.2. OTHER Income

For FY 2011-12, other income is Rs 160.35 Cr of MPPMCL and of Rs 47.56 Cr of MPSEB. The major components which form part of other income are mainly the rebate received from the long term power suppliers against timely payment made and credit received on account of short term open access received from PGCIL. The details of other income of MPPMCL received in FY 11-12 are as follows:

Particulars	Amount(In Rs. Cr)
i) credit on A/c of open access share from long term transmission service providers	69.06
ii) rebate received on a/c of timely/prompt payments	73.11
iii) credit for URS (Un Requisition Supply) (NTPC)	8.15
iv) Income from UI-IRE (it is a onetime income received in Apr'11 for the period of Apr'06 to Aug'06 and wef nov'09 it is not part of MPPMCL's income after introduction of BSC for intrastate ABT vide MPERC order dated 23/10/2009).	5.21
v) Interest on Fixed deposits and commitment advances	4.82
TOTAL	160.35

The major component of other income of MPSEB is of common expenses of Rs 47.07 crs claimed by MPSEB from other companies.

The other income for FY 12-13 and onwards is worked out by excluding the income claimed by MPSEB of Rs 47.07 Cr and income from UI IRE of Rs. 5.21 Cr. From FY-13 onwards, the credits received by MPPMCL are projected to be approx. Rs 168 Cr (Level same as FY-12, the trend of variation in individual component is expected to be compensatory in nature).

8.2. Expenses

In the Discom-wise ARR, the Discoms have considered power purchase cost power station-wise and their own O&M Expenses, Depreciation, Interest Charges etc. as per the provisions of MPERC regulations.

However, there are certain costs pertaining to power purchase (as detailed below) which could not be considered by the Discoms being not in their control/action. Such costs are therefore included in the power purchase costs of

Discoms as MPPMCL specific costs and are taken into consideration in the ARR of MPPMCL, the details of which are given hereunder:-

8.2.1. Energy purchase

For FY 2011-12 it includes:

- a. Deemed purchase of Rs 161.07 crs from Satpura complex.
- b. AFC of NTPC of Rs 40.98 crs.
- c. liability for banking of energy of Rs 2.66 crs

a. Deemed purchase

The State has many Inter-State bilateral arrangements under which it is obliged to provide a defined share of energy to other participating States. In practice, exact 100% energy of such arrangements is not transferred. The energy retained is being treated as "deemed purchase" at mutually agreed rates.

In case of Rajasthan, the rates are pre-defined and, thereby the cost is directly workable. The deemed power purchase cost for Satpura and Chambal complex is already considered in the projections of ARR for Discoms. Regarding another Inter State Project Pench, the cost of over/under drawl among the two States is being settled at UI rates. In case of Rajghat, the rates are not yet finally decided and there are some disputes between MPPMCL and UPPCL. This cost is depicted as "Contingent" in the books of accounts of MPPMCL. The estimated cost of this transaction of approx. Rs.7.08 Cr. is also proposed to be claimed as direct power purchase cost, so that at the time of settlement of these disputes, the tariff is not grossly affected and only the adjustment amount affects the ultimate consumer. Deemed purchase of Satpura complex is not taken from FY 12-13 onwards as it is being passed through to Discoms and is already considered in the projections for ARR by Discoms.

b. Annual Fixed Charge to NTPC

This is an item pertaining to payment to NTPC in lieu of income tax. Hence, it is part of payment made to NTPC for energy received from it. The payment under this head is not expected to be continued in future i.e. it is uncertain and therefore it is not considered for making projection of power purchase cost in succeeding years. However, for the year FY-12, the same is included in direct power purchase.

The power purchase cost is calculated from FY 2012-13 by taking liability for banking of energy of Rs 2.66crs and of Rajghat of Rs 7.08crs in the FY 2011-12 and increasing it by 10% for every year. Deemed purchase of Satpura complex is not taken from FY 12-13 onwards as it is being passed through to Discoms and is already considered in the projections for ARR by Discom

8.2.2. Power procurement cost :-

Apart from the direct bill of power purchase as per REA/SEA and other heads under energy purchase, some other expenses like banking of energy, open access charges, trading margin on banking and short term power purchase & sale have been included under this head.

The demand supply gap on part of the day basis is managed through short term power procurement and in case of surplus energy, the same is disposed off. Therefore, short term sale of power and short term purchase of power are important activities undertaken to meet the power demand of the State. Similarly, MPPMCL makes arrangements for energy banking with various utilities throughout the year to meet the uneven demand of power in the State during monsoon season and rabi period. Energy banking is a barter system, wherein units of energy are exchanged without any financial transaction between the partners in banking arrangement, although some operational expenses like trading margin, open access charges, RLDC/SLDC permission charges etc. are incurred. The charges towards "banking of energy" reflect the notional cost of the net liability of energy to be returned in the subsequent year and it is based on average power purchase cost of the financial year concerned.

The cost of "trading margin" is the amount paid to various traders on sourcing of energy by way of banking and short term purchase & sale within the limit prescribed by MPERC.

For all such short time arrangements for arranging power and disposing off power, the cost of "open access charges" has also to be paid up to the delivery point.

All the above mentioned costs are included in the item 5 under the head "purchase of power from other sources" in Form S-1 submitted herewith in respect of MPPMCL which contains relevant explanatory notes in respect of all the items shown therein.

For FY 2011-12 the actual expenses as per the financial statements are taken. From FY 2012-13 and onwards it is taken by increasing the expenses of FY 11-12 by 7.93% p.a (i.e. the inflation rate given in clause 34.6 of the MPERC regulation " Regulation for the control period from FY 13-14 to FY 15-16 on terms and condition for determination of tariff for supply and wheeling of electricity and methods of principles for fixation of charges.")

8.2.3. Depreciation

For FY 2011-12 depreciation cost consists of expense Rs 0.04crs of MPPMCL and 1.83crs of MPSEB. With effect from FY 2012-13 onwards the assets of MPSEB in Rampur, Jabalpur (Shakti Bhawan,Hospital,Colony etc.) have been transferred to MPPMCL as MPSEB has been merged with MPPMCL. Therefore from FY 2012-13 onwards the combined depreciation in FY 2011-12 of both MPPMCL and MPSEB have been taken and increased by 10%.

8.2.4. Financial and banking charges for power procurement

As per the existing power purchase agreements, facility of Letter of Credit is to be provided to power suppliers. The cost towards extending this facility of LC and other bank charges are covered under item "Interest & finance charges" in Form S-1.

Further, financial and banking charges also include the financing cost towards availing installment facility in case of power purchase bills of high amounts to manage the payment commitments within fund availability.

For FY 2011-12 the actual expenses are of Rs 26.45crs of MPPMCL and of Rs 3.86 crs of MPSEB .

The interest charges for FY 12-13 onwards includes interest of MPSEB and interest on Rs 392 crs (being the amount of securitization for outstanding dues of NHDC) and payment of Rs 5.2 crs per month from escrow account in favour of M/s PFC towards default payment guarantee issued by PFC to the trustees for OFCD of M/s SMHPCL as follows :

a. Actual payment From Aug'12 to Nov'12 from escrow a/c is	Rs. 19.25crs
b. Payment from Dec'12 to Mar'12 @ 5.2crs per month	Rs. 20.80crs
c. Total payment for FY 12-13	Rs. 40.05crs

And from FY 13-14 onwards the payment from escrow account would be @ 5.2cr per month and annual expense is Rs. 62.40 cr.

8.2.5. Repairs and Maintenance:

For FY 2011-12 Repairs and Maintenance expenses consist of expense of Rs. 1.3 cr. Of MPSEB as the assets of MPSEB have also been transferred to MPPCL on merger.

The Repairs and Maintenance expenses for FY 12-13 and onwards is taken by increasing the expenses of FY 11-12 by 7.93% p.a.

8.2.6. Energy sale management expenses

In case of short term sale of energy by MPPMCL to third parties, MPPMCL incurs:

- d. Open Access Charges to the point of delivery as per agreement.
- e. Prompt payment rebate to the purchasers as per PPA.

Similarly, in case of sale of power through the power exchanges, MPPMCL bears the:

- a. Transmission open access charges
- b. Fee of Rs.0.02 per unit payable to the concerned exchange for facilitating trading through the exchange.

These are the charges incurred by MPPMCL in running its business and are proposed to be treated as expense of MPPMCL. These expenses are shown under the head "other expenses" in Form S-1.

The details of other expenses for the FY 2011-12 are as follows:

Particulars	Amount (in Cr)
Fee to IEX (Indian Energy Exchange) on sale	0.62
Fee to PXI (Power Exchange of India) on sale	0.02
Open Access charges on sale	10.71
Transmission expenses on sale to PXI	0.10
Transmission expenses on sale to IEX	8.50
Rebate on receipt from sale of power	2.03
Total	21.97

The other expenses for FY 12-13 and onwards is taken by increasing the expenses of FY 11-12 by 7.93% p.a.

8.2.7. Salary, A&G and asset management Expenses

It is submitted that total number of employees of MPPMCL is 855 out of which 428 employees are the employees of MP Tradeco (now MPPMCL). It is further submitted that the State Govt. vide order dtd. 30.11.2010 published in State Gazette Notification dtd. 30.11.10 has given effect to transfer of personnel of MPSEB to successor companies. According to which following offices with officials providing common services in the Board have been transferred to MP Tradeco (now MPPMCL)

Name of Office	Number of employees
Director (Finance) Jabalpur	116
Hospital, Jabalpur	63
Vehicle Section, Jabalpur	57
SE (Civil) HQ, Jabalpur	07
Director (V&S), Jabalpur	120
OSD (Liaison Duty), Bhopal	55
Resident Engineer, New Delhi	09
Total	427

Furthermore, this expense item includes the cost for managing the overall duties assigned to MPPMCL under Govt. Notification No.212 dated 26.04.2012. This includes the common facilities like Hospital, Library, accommodation and Vehicles etc., being managed on behalf of and for use of various Companies. Had these activities or management of these activities/assets been taken up separately by each Company, it would have been an additional cost to each Company, but keeping these items under one umbrella reduces the overheads and thereby is a benefit to ultimate consumers. Hence these costs are proposed to be treated as expenses of MPPMCL for the purpose of ARR. These expenses are shown under the head "employee costs" and "Administration & General expenses" in Form S-1.

8.2.7.1. Employee costs

Employee cost includes salary of Rs 7.16crs of MPPMCL and Rs 33.16 crs of MPSEB. The amount of Rs 33.16crs of salary of MPSEB also includes Rs 1.66 crs of leave encashment paid for retiring personnel.

The employee costs are increased @ 3% p.a from FY 12-13 onwards taking costs of FY 11-12 as base.

8.2.7.2. Administration and General Expenses

It consists of Rs 2.84crs of exp of MPPMCL and Rs 6.79 crs of MPSEB.
Tariff Proposal for FY 13-14

The administration expenses for FY 12-13 and onwards is taken by increasing the expenses of FY 11-12 by 7.93% p.a.

9. ANNUAL REVENUE REQUIREMENT

9.1. Annual Revenue Requirement of MPPMCL

The table below details the Annual Revenue Requirement of MPPMCL. The Net Expenses are included as a part of Power Purchase Costs of Discoms.

Table 58: Summary of ARR for MPPMCL (Rs. Cr.)

Particulars	Previous Year	Current Year	MYT 2013-14 to 2015-16		
	FY12	FY13	FY14	FY15	FY16
Revenue from operations (including Revenue Subsidy)					
Other income	207.91	167.97	167.97	167.97	167.97
Income from other business allocated to Licensed business					
Total Revenue	207.91	167.97	167.97	167.97	167.97
Expenses:					
Purchase of Power from MP Genco					
Purchase of Power from Other Sources	204.71	10.71	11.79	12.96	14.26
Inter-State Transmission charges	61.84	66.74	72.04	77.75	83.91
Intra-State Transmission (MP Transco) Charges					
SLDC Charges					
Depreciation and amortization expenses	1.87	2.06	2.26	2.49	2.74
Interest & Finance Charges	30.31	72.70	84.20	71.70	64.20
Repairs and Maintenance	1.30	1.80	1.94	2.10	2.26
Employee costs	40.32	37.00	38.11	39.25	40.43
Administration and General expenses	9.63	10.39	11.22	12.11	13.07
Net prior period credit charges					
Other Expenses	21.97	23.71	25.59	27.62	29.81
Lease Rental					
Total Expenses	371.95	225.12	247.15	245.98	250.69
Profit before exceptional and extraordinary items and tax	-164.04	-57.15	-79.18	-78.01	-82.72
Extraordinary items					
Tax expense:					
(1) Current tax					
(2) Deferred tax					
Profit (Loss) for the period (XII+ XV)	-164.04	-57.15	-79.18	-78.01	-82.72

9.2. Annual Revenue Requirement of Discoms

Summary of the Aggregate Revenue Requirement of the Discoms calculated on the basis of provisions of the regulation is detailed in the table on next page.

Table 59: Summary of ARR of Discoms as per the Regulation (Rs. Crores)

Particulars	East Discom			West Discom			Central Discom		
	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16	FY 14	FY 15	FY 16
Revenue									
Revenue from sale of power (Inclusive of tariff subsidy)	5,841.09	6,720.82	7,838.02	8,009.37	8,920.50	9,979.01	6,150.86	7,332.53	8,991.32
Other income (excluding DPS)	68.43	68.43	68.43	65.06	67.31	69.56	46.23	45.26	46.88
Total Revenue or Income	5,909.52	6,789.25	7,906.45	8,074.43	8,987.81	10,048.57	6,197.09	7,377.79	9,038.20
Expenditure									
Purchase of Power cost (Ex-Bus, including MPPMCL costs allocated to Discoms)	4,690.60	4,726.63	5,259.34	6,663.46	6,218.87	6,667.78	5,081.55	5,321.66	6,170.67
Inter-State Transmission charges	212.17	228.39	247.40	266.63	288.52	311.84	206.76	223.98	241.43
Intra-State Transmission charges (MPPTCL costs including SLDC charges)	542.93	622.19	701.20	754.42	868.61	978.94	676.82	779.26	878.26
Repairs and Maintenance	93.46	129.74	165.68	96.38	129.12	159.50	85.67	116.20	144.16
Employee costs (including terminal benefit cash outflow for the year)	828.83	975.14	1,102.46	849.82	929.73	995.02	774.63	850.41	913.28
Administration and General expenses (including MPERC fees)	113.26	122.26	132.00	98.40	106.65	115.49	107.24	109.46	118.60
Other Expenses									
Bad and Doubtful Debts	58.98	67.78	78.95	80.74	89.88	100.49	61.55	73.32	90.38
Less :Expenses Capitalized									
Total Expenses	6,540.23	6,872.13	7,687.04	8,809.86	8,631.38	9,329.07	6,994.22	7,474.28	8,556.77
PBDIT	-630.71	-82.88	219.41	-735.43	356.43	719.50	-797.13	-96.50	481.44
Depreciation and Related debits	145.50	196.75	242.25	197.95	263.62	311.53	215.68	215.81	239.39
PBIT	-776.21	-279.63	-22.84	-933.38	92.81	407.96	-1,012.80	-312.31	242.05
Interest & Finance Charges	260.12	351.73	399.63	285.55	440.28	514.65	266.19	355.30	371.01
Profit/Loss before Tax and ROE	-1,036.33	-631.35	-422.47	-1,218.93	-347.47	-106.69	-1,279.00	-667.61	-128.96
Tax	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RoE	225.94	299.66	360.38	216.71	278.79	327.94	241.45	267.51	270.41
Profit/Loss after Tax and RoE	-1,262.27	-931.01	-782.85	-1,435.65	-626.26	-434.63	-1,520.44	-935.12	-399.37
ARR (Income from Sale of power+Gap)	7,103.36	7,651.82	8,620.87	9,445.01	9,546.76	10,413.65	7,671.30	8,267.65	9,390.69
Average Cost of supply	5.80	5.36	5.11	5.36	4.83	4.68	5.84	5.14	4.67

10. FUEL SURCHARGE & INCREMENTAL PP COST ADJUSTMENT

- 10.1.1. The Hon'ble Commission in Tariff Order dated 31st March'2012 for FY12-13 has specified formula for deriving Fuel Cost Adjustment ("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 only. This formula does not covers the recovery of incremental power purchase cost wherein power purchase has been made due to factors which were beyond the control of distribution licensee, which include shortage in supply in from identified power supply sources in the tariff order requiring distribution licensee to purchase power at higher price from the power market or other sources to meet the demand.
- 10.1.2. Distribution licensee has to meet the power demand of the consumers, as per the relevant provisions of the Electricity Act, 2003 under the obligation to supply. Therefore, quantum of power purchase may not be restricted on the basis of normative loss levels. Under any given operating conditions of the power system, the quantum of energy and the power demand are more or less uncontrollable variables. For the purpose of tariff determination, the average power purchase cost per unit based on the prudent cost may be considered. This means that the cost based on the average power purchase cost per unit on the quantum of power based on normative loss should be passed on to the consumer and any cost in excess of that shall be borne by the licensee. In any case, the full fixed cost element of the power purchase cost should also be passed on to the consumer as a legitimate cost. This methodology shall maintain proper balance between the interests of the consumers and the licensee, as it is based on overall averaging method, so that impact of all the factors over an annual cycle are covered and distributed equitably.
- 10.1.3. In view of above facts and provision in the Regulation it will be more appropriate to design single formula for recovery of fuel cost Adjustment charge simultaneously with incremental power purchase cost. The Distribution Licensee, in line with the above provision submits the following formula for computation of Fuel cost adjustment & incremental power purchase cost:

$$F\&IPPCA \text{ for billing quarter } \left(\frac{p}{u} \right) = \frac{APPC \text{ (Rs. in Cr.)} \times 100}{\text{Normative Sale (MUs)}}$$

- Wherein,
- "APPC" shall mean Average Power Purchase Cost which is sum of – (a) difference in per unit average cost actually billed by each power generator/sources and as allowed in the tariff order, multiplied by (b) units availed from each such generating station in the preceding quarter.
- "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 F&IPPCA 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.

- 10.1.4. F&IPPCA charge shall be in the form of paisa 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 treated as part of energy charge.
- 10.1.5. The F&IPPCA charge shall be uniformly applicable to all categories of consumers of the Distribution Companies in the State. The F&IPPCA charge shall also be uniformly applicable to all categories of open access consumers for the quantum of such supply as is availed by them from the Distribution Companies.
- 10.1.6. The National Tariff Policy prescribes the following formula 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

Since on F&IPPCA charge is a part of energy charge and uniformly applicable to all categories of consumers, therefore average tariff will change to the tune of applicable F&IPPCA charge. Therefore it will be more appropriate to add per unit F&IPPCA rate in the formula for determination of cross subsidy surcharge for various categories of consumers under the term “T”.

- 10.1.7. The M.P. Power Management Co. Ltd., Jabalpur is a holding company and has been authorized by the Distribution Companies to procure power on behalf of them for retail supply to consumers. The responsibility of working out the rate of F&IPPCA every quarter shall rest with the M.P. Power management Co. Ltd., Jabalpur.
- 10.1.8. The M.P. Power management Co. Ltd., Jabalpur shall workout change in average cost of power purchase during the preceding quarter based on the bills received by them from the Generators. The information shall be prepared in the manner as decided by Commission in the Tariff Order for every month of the “preceding quarter” and summated thereafter for the quarter:
- 10.1.9. The M.P. Power management 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.
- 10.1.10. F&IPPCA charge shall be worked out by the M.P. Power management Co. Ltd., Jabalpur based on the formula provided by the Commission. The Distribution Companies of the State shall be advised by them from time to time to incorporate the F&IPPCA 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 management 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.

10.1.11. If the Commission finds after reviewing the details submitted by the M.P. Power management Co. Ltd. Jabalpur, any over or under recovery of F&IPPCA charge, it may direct the M.P. Power management Co. Ltd., Jabalpur and the Distribution Companies of the State to make required changes in F&IPPCA charge billing and any further adjustments in consumer bills that it may consider appropriate.

10.1.12. The Distribution Companies of the State shall commence billing of F&IPPCA charge from the first day of the billing quarter.

10.1.13. Following illustration is given for the purpose of understanding:

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 F&IPPCA charge.

10.1.14. The details of the normative losses for PGCIL System and MPPMCL System and normative distribution losses may be provided by the Commission in the Tariff Orders.

11. TARIFF PROPOSAL FOR FY 2013-14

It is submitted that the Tariff hikes during the previous year's except during 2010-11 were not at all commensurate with the rise in wholesale price index, which has severely affected the financial health of the Discom. The Discom has started finding it extremely difficult to sustain the multiple onslaughts of intrinsic rise in expenditure due to inflationary pressures, and consistent rise in power and energy demands, rather ambitious normative loss reduction trajectory and benchmarks set by the Regulator and rapidly falling credit rating of the company in the market, obligations to be met under the policy objectives of the State and Central governments.

Therefore, it is necessary for the licensee to seek an appropriate hike in the tariff, up to the level as proposed and detailed in the instant petition. It would just not be possible for the Discom to maintain its operational viability at the least, without an appropriate hike in the retail tariff sought through this petition.

11.1.1. East Discom

The ARR for the year 2013-14 is **Rs. 7,103.36 Cr** and revenue at existing Tariff (Tariff income) works out to **Rs. 5,841.09 Cr** and Non-tariff income works out to **Rs. 68.43 Cr.** resulting in a Gap of **Rs. 1,262.27 Cr.** It is to mention here that this Gap does not include the True-up Costs of previous years and contribution towards terminal benefits trust. The average Cost of Supply for FY'14 comes to **Rs 5.80 per unit.** However, Discom has proposed the average tariff of **Rs. 5.26 per unit** to fulfill the gap partially. On account of the proposed tariff, the additional revenue of **Rs. 602.55 Cr.** would be generated. The remaining gap amount of **Rs 659.71 Cr.** is proposed to be treated as "Regulatory Asset" and proposed to be amortized over a period of 3 years starting from FY-15.

11.1.2. West Discom

The ARR for the year 2013-14 is **Rs. 9,445.01 Cr** and revenue at existing Tariff (Tariff income) works out to **Rs. 8,009.37 Cr** and Non-tariff income works out to **Rs. 65.06 Cr.** resulting in a Gap of **Rs. 1,435.65 Cr.** It is to mention here that this Gap does not include the True-up Costs of previous years and contribution towards terminal benefits trust. The average Cost of Supply for FY'14 comes to **Rs 5.36 per unit.** However, Discom has proposed the average tariff of **Rs. 4.89 per unit** to fulfill the gap partially. On account of the proposed tariff, the additional revenue of **Rs. 599.69 Cr.** would be generated. The remaining gap amount of **Rs 835.96 Cr.** is proposed to be treated as "Regulatory Asset" and proposed to be amortized over a period of 3 years starting from FY-15.

11.1.3. Central Discom

The ARR for the year 2013-14 is **Rs. 7,671.30 Cr** and revenue at existing Tariff (Tariff income) works out to **Rs. 6,150.86 Cr** and Non-tariff income works out to **Rs. 46.23 Cr.** resulting in a Gap of **Rs. 1,520.44 Cr.** It is to mention here that this Gap does not include the True-up Costs of previous years and contribution towards terminal benefits trust. The average Cost of Supply for FY'14 comes to **Rs 5.84 per unit.** However, Discom has proposed the average tariff of **Rs. 5.19 per unit** to fulfill the gap partially. On account of the proposed tariff, the additional revenue of **Rs. 674.62 Cr.** would be generated. The **845.82 Cr.** is proposed to be treated as "Regulatory Asset" and proposed to be amortized over a period of 3 years starting from FY-15.

11.2. Category Wise Detailed Tariff Proposal

- 11.2.1. It is mentioned here that the revenue as per the existing and proposed tariff has been calculated considering all factors i.e. energy charges up to 50% LF, energy charges above 50% LF, Load factor incentive, PF incentive, PF penalty etc. The revenue from excess demand has not been projected as it is expected that all the consumers will maintain the Grid discipline.
- 11.2.2. The schedule of the proposed Retail Tariff for FY 13-14 is enclosed with this petition. The National tariff Policy requires that by the end of 2010-11, the tariff for all consumers should be within +/-20% of the average cost of supply. While designing the tariff, the licensee has made efforts to maintain the Cross subsidy within limits and reduce the same as compared to the previous year.
- 11.2.3. The impact on revenue due to proposed tariff is given in the table below:-

Table 60: Impact on Revenue due to proposed tariff

Tariff Category		East Discom				West Discom				Central Discom			
		Sale FY14	Revenue for FY14 at Current Tariff	Revenue for FY14 at Proposed Tariff	Additional Revenue at proposed tariff	Sale FY14	Revenue for FY14 at Current Tariff	Revenue for FY14 at Proposed Tariff	Additional Revenue at proposed tariff	Sale FY14	Revenue for FY14 at Current Tariff	Revenue for FY14 at Proposed Tariff	Additional Revenue at proposed tariff
		MU	Rs Cr	Rs Cr	Rs Cr	MU	Rs Cr	Rs Cr	Rs Cr	MU	Rs Cr	Rs Cr	Rs Cr
LV 1	Domestic	5,089.70	2,197.94	2,391.85	193.91	5,944.77	2,527.34	2,775.39	248.06	4,378.79	1,981.34	2,225.83	244.50
LV 2	Non-Domestic	637.58	416.80	464.99	48.19	824.42	565.78	631.85	66.07	821.91	547.79	612.15	64.36
LV 3	WW & Street Light	330.32	134.70	151.09	16.38	384.71	158.16	177.38	19.23	403.16	168.03	188.46	20.43
LV 4	LT Industrial	319.81	180.03	199.67	19.64	577.96	336.37	369.93	33.56	345.58	195.43	213.53	18.09
LV 5.1	Agriculture Irrigation Pumps	2,273.72	815.17	858.85	43.68	5,831.91	2,165.19	2,265.33	100.14	3,783.68	1,333.64	1,402.30	68.67
LV 5.2	Agriculture related Use	2.90	1.26	1.31	0.05	3.82	1.64	1.71	0.07	5.61	2.58	2.70	0.13
	Total (LT)	8,654.03	3,745.90	4,067.75	321.85	13,567.59	5,754.47	6,221.60	467.12	9,738.73	4,228.81	4,644.98	416.18
HV 1	Railway Traction	570.44	337.74	378.31	40.57	425.04	262.44	293.97	31.53	900.84	533.64	612.11	78.47
HV 2	Coal Mines	496.48	323.39	367.59	44.20	0.00	0.00	0.00	0.00	33.47	25.18	27.39	2.22
HV 3.1	Industrial	1,795.13	1,043.97	1,168.45	124.49	2,855.29	1,221.98	1,278.00	56.01	1,832.85	924.39	1,043.26	118.87
HV 3.2	Non-Industrial	249.89	163.34	222.58	59.24	404.59	617.99	645.24	27.25	334.24	292.26	334.02	41.76
HV 4	Seasonal	7.80	5.03	5.61	0.57	8.96	6.65	6.92	0.26	2.93	2.38	2.68	0.30
HV 5.1	Public Water Works, Irrigation	66.74	30.70	35.00	4.30	344.52	138.94	155.93	16.98	109.47	52.89	61.40	8.51
HV 5.2	Other Agricultural	10.51	4.76	5.43	0.67	6.29	2.96	3.39	0.43	6.31	3.07	3.53	0.46
HV 6	Bulk Residential Users	396.96	186.25	192.91	6.66	7.17	3.92	4.02	0.10	184.50	88.24	96.11	7.86
HV 7	Bulk Supply to Exemptees	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total (HT)	3,593.95	2,095.19	2,374.99	280.70	4,051.87	2,254.89	2,387.46	132.56	3,404.61	1,922.05	2,180.50	258.45
	TOTAL LT+HT	12,247.98	5,841.09	6,442.74	602.55	17,619.46	8,009.37	8,609.05	599.69	13,143.34	6,150.86	6,825.48	674.63

11.2.4. Consumer Category wise comparison of the existing and proposed tariff is given in the tables below:

Table 61: LT Proposed Tariff Schedule

Tariff Category	Type of installation	EXISTING TARIFFS							PROPOSED TARIFF						
		FY 13							FY 14						
		Energy Charge (Rs/KWh)	Minimum Charges per month			Fixed Charge per month			Energy Charge (Rs/KWh)	Minimum Charges per month			Fixed Charge per month		
			Urban	Rural	Criteria	Urban	Rural	Criteria		Urban	Rural	Criteria	Urban	Rural	Criteria
		Rs.							Rs.						
LOW TENSION															
LV 1: DOMESTIC															
Metered															
1.1	Consumption upto 30 unit per month														
	Upto 30 units	2.90	40.00	40.00	Rs. Per Connection	-	-		2.90	40.00	40.00	Rs. Per Connection	-	-	
1.2	Consumption more than 30 unit per month														
	(With Telescopic Unit)														
	Upto 50 units	3.40	60.00	60.00	Rs. Per Connection	40	25	Rs. Per Connection	3.70	60.00	60.00	Rs. Per Connection	43	25	Rs. Per Connection
	51 to 100 units	3.85	60.00	60.00	Rs. Per Connection	65	40	Rs. Per Connection	4.20	60.00	60.00	Rs. Per Connection	72	43	Rs. Per Connection
	101 to 300 units	4.80	60.00	60.00	Rs. Per Connection	75	50	Rs. for each 0.5 kW of authorized Load	5.40	60.00	60.00	Rs. Per Connection	84	56	Rs. for each 0.5 kW of authorized Load
	301 to 500 units	5.20	60.00	60.00	Rs. Per Connection	80	70	Rs. for each 0.5 kW of authorized Load	6.00	60.00	60.00	Rs. Per Connection	92	81	Rs. for each 0.5 kW of authorized Load
	Above 500 units	5.50	60.00	60.00	Rs. Per Connection	85	70	Rs. for each 0.5 kW of authorized Load	6.30	60.00	60.00	Rs. Per Connection	98	81	Rs. for each 0.5 kW of authorized Load
	Demand Based														
	Temporary (for construction of own house)	6.75	500.00	500.00	Rs. Per Connection	300	200	Rs. for each one kW of sanctioned or connected or recorded load whichever is higher	7.40	500.00	500.00	Rs. Per Connection	330	220	Rs. for each one kW of sanctioned or connected or recorded load whichever is higher
	Temporary (for social/marriage/religious function)	6.75	500.00	500.00	Rs. Per Connection	40	20	Rs. for each one kW of sanctioned or connected or recorded load whichever is higher for 24 hours duration or part thereof.	7.40	500.00	500.00	Rs. Per Connection	40	20	Rs. for each one kW of sanctioned or connected or recorded load whichever is higher for 24 hours duration or part thereof.
	Through DTR for cluster of Juggi/Jhopadi	3.00	-	-		-	-		3.00	-	-		-	-	
Un-Metered															
	Urban Areas	4.20	77.00		Units per consumer	75		Rs. Per Connection	4.60	77.00		Units per consumer	83		Rs. Per Connection
	Rural Areas	3.40		42.00	Units per consumer		30	Rs. Per Connection	3.70		42.00	Units per consumer		33	Rs. Per Connection
LV 2: NON-DOMESTIC															

Tariff Category	Type of installation	EXISTING TARIFFS							PROPOSED TARIFF						
		FY 13							FY 14						
		Energy Charge (Rs/KWh)	Minimum Charges per month			Fixed Charge per month			Energy Charge (Rs/KWh)	Minimum Charges per month			Fixed Charge per month		
			Urban	Rural	Criteria	Urban	Rural	Criteria		Urban	Rural	Criteria	Urban	Rural	Criteria
LOW TENSION															
2.1	Sanctioned load base Tariff	5.20	360.00	180.00	Minimum Annual units per kW or part thereof of connected load/sanction load whichever is higher and contract demand (in case of demand based tariff).	90	60	Rs. Per kW	5.80	360.00	180.00	Minimum Annual units per kW or part thereof of connected load/sanction load whichever is higher and contract demand (in case of demand based tariff).	101	67	Rs. Per kW
	Demand Base Tariff for above 10 kW CD (Optional)	5.20	360.00	180.00	Minimum Annual units per kW or part thereof of connected load/sanction load whichever is higher and contract demand (in case of demand based tariff).	144	96	Rs. Per kVA of billing demand	5.80	360.00	180.00	Minimum Annual units per kW or part thereof of connected load/sanction load whichever is higher and contract demand (in case of demand based tariff).	161	108	Rs. Per kVA of billing demand
2.2	For all units if monthly consumption is upto 50 units	5.40	360.00	180.00	Minimum Annual units per kW or part thereof of connected load/sanction load whichever is higher and contract demand (in case of demand based tariff) without load of x-Ray Units.	50	30	Rs. Per kW	6.00	360.00	180.00	Minimum Annual units per kW or part thereof of connected load/sanction load whichever is higher and contract demand (in case of demand based tariff) without load of x-Ray Units.	56	34	Rs. Per kW

Tariff Category	Type of installation	EXISTING TARIFFS							PROPOSED TARIFF						
		FY 13							FY 14						
		Energy Charge (Rs/KWh)	Minimum Charges per month			Fixed Charge per month			Energy Charge (Rs/KWh)	Minimum Charges per month			Fixed Charge per month		
		Rs.	Urban	Rural	Criteria	Urban	Rural	Criteria	Rs.	Urban	Rural	Criteria	Urban	Rural	Criteria
LOW TENSION															
	For all units if monthly consumption exceeds 50 units upto 1000 units	6.00	360.00	180.00	Minimum Annual units per kW or part thereof of connected load/sanction load whichever is higher and contract demand (in case of demand based tariff) without load of x-Ray Units.	85	60	Rs. Per kW	6.70	360.00	180.00	Minimum Annual units per kW or part thereof of connected load/sanction load whichever is higher and contract demand (in case of demand based tariff) without load of x-Ray Units.	95	67	Rs. Per kW
	For all units if monthly consumption exceeds 1000 units	6.00	360.00	180.00	Minimum Annual units per kW or part thereof of connected load/sanction load whichever is higher and contract demand (in case of demand based tariff) without load of x-Ray Units.	85	60	Rs. Per kW	6.70	360.00	180.00	Minimum Annual units per kW or part thereof of connected load/sanction load whichever is higher and contract demand (in case of demand based tariff) without load of x-Ray Units.	95	67	Rs. Per kW
	Demand Base Tariff for above 10 kW CD (Optional)	5.25	360.00	180.00	Minimum Annual units per kW or part thereof of connected load/sanction load whichever is higher and contract demand (in case of demand based tariff) without load of x-Ray Units.	152	96	Rs. Per kVA of billing demand	5.90	360.00	180.00	Minimum Annual units per kW or part thereof of connected load/sanction load whichever is higher and contract demand (in case of demand based tariff) without load of x-Ray Units.	170	108	Rs. Per kVA of billing demand

Tariff Category	Type of installation	EXISTING TARIFFS							PROPOSED TARIFF						
		FY 13							FY 14						
		Energy Charge (Rs/KWh)	Minimum Charges per month		Criteria	Fixed Charge per month			Energy Charge (Rs/KWh)	Minimum Charges per month		Criteria	Fixed Charge per month		
			Urban	Rural		Urban	Rural	Urban		Rural	Urban		Rural		
Rs.	Urban	Rural	Criteria	Urban	Rural	Criteria	Rs.	Urban	Rural	Criteria	Urban	Rural	Criteria		
LOW TENSION															
	Temporary Connection	7.15	360.00	180.00	Minimum Annual units per kW or part thereof of connected load/sanction load whichever is higher and contract demand (in case of demand based tariff) without load of x-Ray Units.	130	85	Rs. Per kW or part thereof	8.00	360.00	180.00	Minimum Annual units per kW or part thereof of connected load/sanction load whichever is higher and contract demand (in case of demand based tariff) without load of x-Ray Units.	146	95	Rs. Per kW or part thereof
	Temporary Connection (for marriage purpose at marriage gardens or marriage halls etc.)	7.15	500.00	500.00	Minimum consumption charges @ 6 units per day per kW of highest of sanction / connected / recorded load for each 24 hours duration or part thereof of subject to minimum of Rs. 500)	50	30	Rs. for each kW or part thereof of sanction/connected/recorded Load whichever is highest for each 24 hours duration or part thereof.	8.00	500.00	500.00	Minimum consumption charges @ 6 units per day per kW of highest of sanction / connected / recorded load for each 24 hours duration or part thereof of subject to minimum of Rs. 500)	50	30	Rs. for each kW or part thereof of sanction/connected/rec ordered Load whichever is highest for each 24 hours duration or part thereof.
	For X-ray Plants	Additional Fixed Charges (Rs. Per machine per month)							Additional Fixed Charges (Rs. Per machine per month)						
	Single Phase	450.00							504.00						
	Three Phase	650.00							728.00						
	Dental X-Ray Machine	50.00							56.00						
LV 3: PUBLIC WATER WORKS AND STREET LIGHTS															
PUBLIC WATER WORKS															
	Municipal Corporation/ Cantonment Board	3.65	-	-		140	140	Rs. Per kW	4.10	-	-		157	157	Rs. Per kW
	Municipality / Nagar Panchayat	3.65	-	-		120	120	Rs. Per kW	4.10	-	-		134	134	Rs. Per kW
	Gram Panchayat	3.65	-	-		50	50	Rs. Per kW	4.10	-	-		56	56	Rs. Per kW
	Temporary	4.75				65	65	Rs. Per kW	5.30				73	73	Rs. Per kW
STREET LIGHTS (incl. Traffic Signals)															
	Municipal Corporation/ Cantonment Board	3.75	-	-		230	230	Rs. Per kW	4.20	-	-		258	258	Rs. Per kW
	Municipality / Nagar Panchayat	3.75	-	-		210	210	Rs. Per kW	4.20	-	-		235	235	Rs. Per kW
	Gram Panchayat	3.75	-	-		50	50	Rs. Per kW	4.20	-	-		56	56	Rs. Per kW

Tariff Category	Type of installation	EXISTING TARIFFS							PROPOSED TARIFF						
		FY 13							FY 14						
		Energy Charge (Rs/KWh)	Minimum Charges per month			Fixed Charge per month			Energy Charge (Rs/KWh)	Minimum Charges per month			Fixed Charge per month		
		Rs.	Urban	Rural	Criteria	Urban	Rural	Criteria	Rs.	Urban	Rural	Criteria	Urban	Rural	Criteria
LOW TENSION															
	Temporary														
LV 4: LT INDUSTRY															
A	Non Seasonal														
	Upto 25 HP	4.00	360.00	180.00	Minimum Annual units per HP or part thereof of contract demand.	90	30	Rs. Per HP	4.40	360.00	180.00	Minimum Annual units per HP or part thereof of contract demand.	99	33	Rs. Per HP
	Demand Based Tariff (CD and connected load Upto 100 HP)	5.10	360.00	180.00	Minimum Annual units per HP or part thereof of contract demand.	176	88	Rs. Per kVA of billing demand	5.60	360.00	180.00	Minimum Annual units per HP or part thereof of contract demand.	194	97	Rs. Per kVA of billing demand
	Demand Based Tariff (CD upto 100 HP and connected load >100 HP but <150 HP)	5.25	480.00	240.00	Minimum Annual units per HP or part thereof of contract demand.	240	168	Rs. Per kVA of billing demand	5.80	480.00	240.00	Minimum Annual units per HP or part thereof of contract demand.	264	185	Rs. Per kVA of billing demand
	Demand Based Tariff (CD > 100 HP but less than 150 HP and connected load <150 HP)	5.25	480.00	240.00	Minimum Annual units per HP or part thereof of contract demand.	240	168	Rs. Per kVA of billing demand	5.80	480.00	240.00	Minimum Annual units per HP or part thereof of contract demand.	264	185	Rs. Per kVA of billing demand
	Temporary	5.20				117	39	Rs. Per HP	6.00				135	45	Rs. Per HP
B	Seasonal	(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.							(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.						
	During Season	Normal tariff as for Non Seasonal Consumer							Normal tariff as for Non Seasonal Consumer						
	During Off Season	120% of Normal Tariff for non seasonal				Normal tariff as for Non Seasonal Consumer		On 10% of CD or MD whichever is highest	120% of Normal Tariff for non seasonal				Normal tariff as for Non Seasonal Consumer		On 10% of CD or MD whichever is highest
LV 5.1: IRRIGATION PUMP FOR AGRICULTURE															
	First 300 units	3.20	90.00	90.00	Units per HP or part thereof of connected load per month for the months from Oct to March and 30 units for the month from April to Sept.	-	-		3.40	90.00	90.00	Units per HP or part thereof of connected load per month for the months from Oct to March and 30 units for the month from April to Sept.	-	-	

Tariff Category	Type of installation	EXISTING TARIFFS							PROPOSED TARIFF						
		FY 13							FY 14						
		Energy Charge (Rs/KWh)	Minimum Charges per month			Fixed Charge per month			Energy Charge (Rs/KWh)	Minimum Charges per month			Fixed Charge per month		
			Urban	Rural	Criteria	Urban	Rural	Criteria		Urban	Rural	Criteria	Urban	Rural	Criteria
		Rs.							Rs.						
LOW TENSION															
	Above 300 units upto 750 units in the month	3.75	90.00	90.00	Units per HP or part thereof of connected load per month for the months from Oct to March and 30 units for the month from April to Sept.	-	-		3.90	90.00	90.00	Units per HP or part thereof of connected load per month for the months from Oct to March and 30 units for the month from April to Sept.	-	-	
	Above 750 units in the month	4.00	90.00	90.00	Units per HP or part thereof of connected load per month for the months from Oct to March and 30 units for the month from April to Sept.	-	-		4.20	90.00	90.00	Units per HP or part thereof of connected load per month for the months from Oct to March and 30 units for the month from April to Sept.	-	-	
	Temporary Connections	4.00	90.00	90.00	Units per HP or part thereof of connected load per month for the months from Oct to March and 30 units for the month from April to Sept.	-	-		4.20	90.00	90.00	Units per HP or part thereof of connected load per month for the months from Oct to March and 30 units for the month from April to Sept.	-	-	
	DTR metered group consumers	3.00	90.00	90.00	Units per HP or part thereof of connected load per month for the months from Oct to March and 30 units for the month from April to Sept.	-	-		3.00	90.00	90.00	Units per HP or part thereof of connected load per month for the months from Oct to March and 30 units for the month from April to Sept.	-	-	
	Assessment of Permanent Unmetered consumers														
	Single Phase (April to May)	As indicated above	90	60	Units per HP of the sanction load				As indicated above	90	60	Units per HP of the sanction load			
	Single Phase (June to Sept)		90	60						90	60				
	Single Phase (Oct to March)		180	160						180	160				
	Three Phase (April to May)		90	50						90	50				

Tariff Category	Type of installation	EXISTING TARIFFS							PROPOSED TARIFF						
		FY 13							FY 14						
		Energy Charge (Rs/KWh)	Minimum Charges per month			Fixed Charge per month			Energy Charge (Rs/KWh)	Minimum Charges per month			Fixed Charge per month		
		Rs.	Urban	Rural	Criteria	Urban	Rural	Criteria	Rs.	Urban	Rural	Criteria	Urban	Rural	Criteria
LOW TENSION															
	Three Phase (June to Sept)		90	50						90	50				
	Three Phase (Oct to March)		170	150						170	150				
	Assessment of Temporary Unmetered consumers														
	Single Phase		190	170						190	170				
	Three Phase		175	175						175	175				
LV 5.2: OTHER THAN AGRICULTURAL USE-HORTICULTURE ACTIVITY															
	First 300 units	3.20	90.00	90.00	Units per HP or part thereof of connected load per month for the months from Oct to March and 30 units for the month from April to Sept.	-	-		3.40	90.00	90.00	Units per HP or part thereof of connected load per month for the months from Oct to March and 30 units for the month from April to Sept.	-	-	
	Above 300 units upto 750 units in the month	3.75	90.00	90.00	Units per HP or part thereof of connected load per month for the months from Oct to March and 30 units for the month from April to Sept.	-	-		3.90	90.00	90.00	Units per HP or part thereof of connected load per month for the months from Oct to March and 30 units for the month from April to Sept.	-	-	
	Above 750 units in the month	4.00	90.00	90.00	Units per HP or part thereof of connected load per month for the months from Oct to March and 30 units for the month from April to Sept.	-	-		4.20	90.00	90.00	Units per HP or part thereof of connected load per month for the months from Oct to March and 30 units for the month from April to Sept.	-	-	
	Temporary Connections	4.00	90.00	90.00	Units per HP or part thereof of connected load per month for the months from Oct to March and 30 units for the month from April to Sept.	-	-		4.20	90.00	90.00	Units per HP or part thereof of connected load per month for the months from Oct to March and 30 units for the month from April to Sept.	-	-	
LV 5.2: OTHER THAN AGRICULTURE USE															

Tariff Category	Type of installation	EXISTING TARIFFS							PROPOSED TARIFF						
		FY 13							FY 14						
		Energy Charge (Rs/KWh)	Minimum Charges per month			Fixed Charge per month			Energy Charge (Rs/KWh)	Minimum Charges per month			Fixed Charge per month		
			Urban	Rural	Criteria	Urban	Rural	Criteria		Urban	Rural	Criteria	Urban	Rural	Criteria
		Rs.							Rs.						
LOW TENSION															
	Connected Load Base Upto 25 HP	3.75	360.00	180.00	Minimum Annual units per HP or part thereof of contract demand.	55	20	Rs. Per HP	3.90	360.00	180.00	Minimum Annual units per HP or part thereof of contract demand.	58	21	Rs. Per HP
	Demand Base Above 25 HP and upto 100 HP	4.50	360.00	180.00	Minimum Annual units per HP or part thereof of contract demand.	136	64	Rs. Per kVA of billing demand	4.70	360.00	180.00	Minimum Annual units per HP or part thereof of contract demand.	143	67	Rs. Per kVA of billing demand

Table 62: HT Proposed Tariff Schedule

Tariff Category	Type of installation	EXISTING TARIFFS					PROPOSED TARIFF				
		FY 13					FY 14				
		Energy Charge (Rs/KWh) for consumption		Minimum Annual Consumption	Fixed Charge Per kVA of billing demand per month		Energy Charge (Rs/KWh) for consumption		Minimum Annual Consumption	Fixed Charge Per kVA of billing demand per month	
		Upto 50% LF	Above 50% LF				Upto 50% LF	Above 50% LF			
		Rs.	Rs.	Units	Rs.	Criteria	Rs.	Rs.	Units	Rs.	Criteria
HIGH TENSION											
HV 1: RAILWAY TRACTION											
	220 kV	5.00	5.00	1500 Per kVA of CD	265		5.60	5.60	1500 Per kVA of CD	297	
	132 kV	5.00	5.00	1500 Per kVA of CD	265		5.60	5.60	1500 Per kVA of CD	297	
HV 2: COAL MINES											
	220 kV	5.05	4.25	1620 Per kVA of CD	535		5.70	4.80	1620 Per kVA of CD	599	
	132 kV	5.15	4.35	1620 Per kVA of CD	525		5.80	4.90	1620 Per kVA of CD	588	
	33 kV	5.25	4.45	1200 Per kVA of CD	515		6.00	5.10	1200 Per kVA of CD	592	
	11 kV	5.45	4.65	1200 Per kVA of CD	505		6.30	5.30	1200 Per kVA of CD	581	
HV-3: INDUSTRIAL AND NON-INDUSTRIAL											
	HV 3.1: Industrial Use										
	400 kV	4.40	3.70	1800 Per kVA of CD	500		4.90	4.10	1800 Per kVA of CD	560	
	220 kV	4.40	3.70	1800 Per kVA of CD	500		4.90	4.10	1800 Per kVA of CD	560	
	132 kV	4.60	3.80	1800 Per kVA of CD	470		5.20	4.30	1800 Per kVA of CD	526	
	33 kV	5.00	4.00	1200 Per kVA of CD	370		5.80	4.60	1200 Per kVA of CD	426	
	11 kV	5.10	4.50	1200 Per kVA of CD	225		5.90	5.20	1200 Per kVA of CD	259	
	HV 3.2: Non-industrial use										
	400 kV										
	220 kV										
	132 kV	4.80	4.15	1800 Per kVA of CD	425		5.40	4.60	1800 Per kVA of CD	476	
	33 kV	5.15	4.50	1200 Per kVA of CD	300		5.80	5.00	1200 Per kVA of CD	336	
	11 kV	5.40	4.65	1200 Per kVA of CD	190		6.20	5.30	1200 Per kVA of CD	219	
	HV 3.3: Shopping Mall										
	220 kV										
	132 kV	4.80	4.10	1800 Per kVA of CD	400		5.40	4.60	1800 Per kVA of CD	448	
	33 kV	5.20	4.55	1200 Per kVA of CD	280		6.00	5.20	1200 Per kVA of CD	322	
	11 kV	5.40	4.65	1200 Per kVA of CD	190		6.20	5.30	1200 Per kVA of CD	219	
	HV 3.4: Power Intensive Industries										
	220 kV										
	132 kV	3.75	3.75	1800 Per kVA of CD	560		4.20	4.20	1800 Per kVA of CD	627	
	33 kV	3.95	3.95	1200 Per kVA of CD	435		4.50	4.50	1200 Per kVA of CD	500	
	11 kV										
HV-4: SEASONAL											
	During Season										
	33 kV	4.80	4.10	900 Per kVA of CD	280		5.40	4.60	900 Per kVA of CD	314	
	11 kV	4.90	4.25	900 Per kVA of CD	250		5.50	4.80	900 Per kVA of CD	280	
	During Off Season										

Tariff Category	Type of installation	EXISTING TARIFFS					PROPOSED TARIFF				
		FY 13					FY 14				
		Energy Charge (Rs/KWh) for consumption		Minimum Annual Consumption	Fixed Charge Per kVA of billing demand per month		Energy Charge (Rs/KWh) for consumption		Minimum Annual Consumption	Fixed Charge Per kVA of billing demand per month	
		Upto 50% LF	Above 50% LF				Upto 50% LF	Above 50% LF			
		Rs.	Rs.	Units	Rs.	Criteria	Rs.	Rs.	Units	Rs.	Criteria
HIGH TENSION											
	33 kV	5.76	NA		280	on 10% of CD or MD whichever is higher	6.50	NA		314	on 10% of CD or MD whichever is higher
	11 kV	5.88	NA		250	on 10% of CD or MD whichever is higher	6.60	NA		280	on 10% of CD or MD whichever is higher
HV-5: IRRIGATION, PUBLIC WATER WORKS AND OTHER THAN AGRICULTURAL											
	<i>HV 5.1: Public WW, Group Irrigation and LIS</i>										
	132 kV	3.60	3.60	720 Per kVA of CD	210		4.00	4.00	720 Per kVA of CD	235	
	33 kV	3.80	3.80	720 Per kVA of CD	190		4.40	4.40	720 Per kVA of CD	219	
	11 kV	4.00	4.00	720 Per kVA of CD	170		4.60	4.60	720 Per kVA of CD	196	
	<i>HV 5.2: Other than agricultural use</i>										
	132 kV	3.70	3.70	720 Per kVA of CD	230		4.10	4.10	720 Per kVA of CD	258	
	33 kV	3.85	3.85	720 Per kVA of CD	210		4.40	4.40	720 Per kVA of CD	242	
	11 kV	4.05	4.05	720 Per kVA of CD	190		4.70	4.70	720 Per kVA of CD	219	
HV 6: BULK RESIDENTIAL USERS											
	<i>HV 6.1: Town ship, residential colony</i>										
	132 kV	4.25	3.75	780 Per kVA of CD	245		4.80	4.20	780 Per kVA of CD	274	
	33 kV	4.40	3.90	780 Per kVA of CD	230		5.10	4.50	780 Per kVA of CD	265	
	11 kV	4.65	4.10	780 Per kVA of CD	215		5.30	4.70	780 Per kVA of CD	247	
	<i>HV 6.2: Registered Group Housing Society</i>										
	132 kV	4.45	3.90	780 Per kVA of CD	155		5.00	4.40	780 Per kVA of CD	174	
	33 kV	4.60	4.05	780 Per kVA of CD	150		5.30	4.70	780 Per kVA of CD	173	
	11 kV	4.70	4.15	780 Per kVA of CD	145		5.40	4.80	780 Per kVA of CD	167	
HV 7: BULK SUPPLY TO EXEMPTEDS											
	RECs having mixed use	3.50	3.50		240		3.90	3.90		269	
	Mixed domestic and agricultural use in rural area	2.90	2.90		140		3.30	3.30		161	
	Mixed domestic and agricultural use in urban area	3.50	3.50		180		4.00	4.00		207	

11.3. Salient Features of Tariff Proposal

- 11.3.1. Demand Based tariff for Non-domestic consumers having connected load of 10 kW or more is proposed to be introduced on optional basis and for connected load of more than 15kW, it is proposed to be introduced as mandatory. However in any case the proposed Contract demand shall not be less than 10kW.
- 11.3.2. The Peak period Surcharge is proposed as 30% of Energy charge in place of present level of 15% of Energy charge.
- 11.3.3. The Off-peak period Rebate is proposed to be withdrawn.

Reason for increase of ToD surcharge and withdrawal of ToD Rebate: 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 is down loaded from CERC web-site and given as under:-

Month	Price of Power Transacted through Traders				
	Weighted average Sale Price (Rs per unit)				
	Round the Clock (RTC)	Peak	% diff w.r.t. RTC	Off Peak	% diff w.r.t. RTC
Jan-10	5.34	5.01	-6%	5.11	-4%
Feb-10	4.95	5.72	16%	5.22	5%
Mar-10	4.99	5.4	8%	4.73	-5%
Apr-10	5.68	6.62	17%	5.72	1%
May-10	6.26	6.39	2%	5.88	-6%
Jun-10	5.57	5.84	5%	5.67	2%
Jul-10	4.97	5.89	19%	5.02	1%
Aug-10	4.86	4.8	-1%	5.34	10%
Sep-10	4.71	2.2	-53%	4.9	4%
Oct-10	3.9	4.97	27%	4.23	8%
Nov-10	3.92	4.88	24%	3.81	-3%
Dec-10	4.12	4.86	18%	3.46	-16%
Jan-11	4.12	5.13	25%	3.55	-14%
Feb-11	4.22	5.91	40%	3.98	-6%
Mar-11	4.65	5.64	21%	4.79	3%
Apr-11	4.76	5.07	7%	4.72	-1%
May-11	4.52	5.02	11%	4.22	-7%
Jun-11	3.81	4.94	30%	3.81	0%
Jul-11	3.90	3.95	1%	3.7	-5%
Aug-11	3.88	4.73	22%	3.61	-7%
Sep-11	3.95	6.26	58%	4.63	17%
Oct-11	4.19	5.16	23%	5.02	20%
Nov-11	4.25	6.8	60%	4.75	12%
Dec-11	4.12	6.05	47%	4.46	8%
Jan-12	4.38	6.1	39%	5.12	17%
Feb-12	4.41	5.93	34%	4.7	7%
Mar-12	4.37	5.74	31%	4.86	11%
Apr-12	4.35	5.78	33%	4.95	14%
May-12	4.26	6.13	44%	4.79	12%
Jun-12	4.11	4.91	19%	4.17	1%
Jul-12	4.02	5.81	45%	4.69	17%
Aug-12	4.22	4.89	16%	4.3	2%
Sep-12	4.37	5.69	30%	4.26	-3%
Oct-12	4.43	5.73	29%	4.85	9%

Source:- CERC web site Market Monitoring

It could be seen from the above table 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 from the above table 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. In the opinion of MPPKVCL, Jabalpur the range of surcharge during the peak period should be increased by at least 15% and rebate should be withdrawn during off peak period. It would also be appropriate to recover such additional charges from consumers who have utilized the power during peak period.

11.3.4. Load Factor calculation formula is proposed to be changed.

Reason for modification in LF formula:

The LF calculation formula as provided in Tariff Order for FY'12 unduly benefits such consumers whose maximum recorded demand is less than the contracted/billing demand. Such consumers get double benefit i.e. by way of PF incentive and by way of reduction in energy charges for the energy corresponding to more than 50% LF. This anomaly needs to be rectified.

It is expected from the consumer to utilize its asset at optimum level within grid discipline. Therefore licensee has proposed to change the formula for calculating the load factor based on contracted demand and PF.

11.3.5. Load Factor Incentive for HT consumer is proposed to be withdrawn.

Reason for withdrawal of LF incentive: The petitioner is of the view, that, in principle, the tariff incentives should be the prerogative of the licensee to promote its commercial interests with sharing some part of it with consumers.

11.3.6. The calculation of Billing to HT consumer willing to avail temporary supply for the same purpose through existing meter is proposed to be changed.

Reasons for proposed changes:-The changes have been proposed to take care of various scenarios in which actual MD recorded exceeds the deemed CD (sum of CD for permanent supply and Temporary demand), actual MD recorded is below the permanent contract demand and actual MD recorded is between the permanent CD and deemed CD.

11.3.7. **Additional charges for excess demand:** - Definition of excess demand as provided in tariff order of FY'13 is not justified and it is proposed to be retained the same as has been defined in Tariff Order for FY'11.

Reasons for proposed changes:- As per the tariff order for FY12 the computation of excess demand is to be done on the basis of difference of recorded maximum demand and 105% of contract demand. This clearly indicates that the demand over and above the contract demand and up to 105% of contract demand shall not be termed as Excess Demand and consumers would be billed on normal tariff without paying any additional charge and this is a breach of the agreement. It means that the word "Contract" of the contract demand has no relevance to the agreement. This anomaly needs to be reviewed and rectified and therefore change in definition of the excess demand is proposed.

11.3.8. Introduction of new slab in tariff sub-category LV-2

Reasons for proposed changes: Non-domestic consumers who consume more power need to be appropriately categorized in a separate slab and therefore one separate slab for monthly consumption exceeding 1000 units is being introduced.

11.3.9. Minimum period for Temporary connections for irrigation purpose is proposed to be increased from 3 month to 4 months.

Reasons for proposed changes: At present there is a provision of providing temporary connection for Irrigation purpose for a minimum period of 3 months. Most of the consumers are taking Temporary connections for Irrigation purpose for 3 months only and require extension of the same for a further period of one or two months as the Irrigation season lasts for 4 to 5 months. To facilitate such consumers from making frequent requests for extension in the period of their Temporary connections the minimum period of providing the Temporary connections for irrigation purpose is proposed to be increased to 4 month.

11.3.10. Provision of terms and conditions of consumers who is not the consumer of the licensee and seeks to avail power for synchronization with the grid is proposed to be removed.

Reasons for proposed changes: Since the terms and condition for generators connected to the grid but who are not the consumer of the licensee and seek to avail power for synchronization with the grid or start-up power are the matters related with the relevant regulation, such as supply code, regulation of CPP and are not linked with the retail supply tariff. Therefore it is proposed to remove this condition from the retails supply tariff.

11.3.11. Reliability Charges

The Discoms have envisaged in providing 24 hours of electricity to every household (urban and rural areas) in the state starting from FY14 through feeder separation project. The objective of feeder separation project is to provide commercially viable continuous supply of electricity in urban as well as rural habitations while ensuring sufficient supply for agricultural use to promote sustainable exploitation of ground water, thereby to accelerate socio-economic development of rural areas.

Therefore, it is requested to approve the reliability charges by the Honorable Commission as deemed necessary in lieu of quality and continuous supply.

11.3.12. Provisions of flat rate scheme

It is requested to provide a flat rate scheme for agricultural consumers wherein only two bills for the year would be required to be issued by the Discoms (twice in a financial year on 1st April and 1st October every year) to such consumers who enrol/opt for this scheme. However, the consumer availing the scheme will have to pay advance payment for next six months for bill issued on 1st April and 1st October every year at the applicable flat rate.

11.3.13. Based on the available information, the Petitioner has made sincere efforts to comply with the Regulations of the Hon'ble Commission and discharged its obligations to the best of its ability and resources at its command. However, should any further material information become available during the process of determination, the Applicant be permitted to reserve the right to file such additional information and consequently amend/ revise the application.

12. COMPLIANCE ON TARIFF ORDER FY 2012-13

The Para-wise response of Discoms on the directives issued by Hon'ble Commission in retail supply tariff order for FY-13 is given below:

12.1.1. Distribution losses:

12.1.1.1. Commission's Directives:

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.

12.1.1.2. East Discom submission

Following steps are being taken up to reduce the losses:

a) System strengthening work/Aug. of transmission capacity:

To reduce the technical losses the distribution system is being strengthened /augmented. During year FY-12, following addition in the distribution system has been made.

Sr. no.	Particulars	Unit	As on Mar-2011	Added DY 2011-12	As on Mar-2012
1	33/11KV S/s	No.	909	5	914
2	Power Transformer	No.	1377	39	1416
3	PTR Capacity	MVA	5317.50	238.70	5556.20
4	33KV Line	Km	14685.00	244.00	14929.00
5	11KV Line	Km	74269.00	4517.00	81635.00
6	LT Line	Km	107243.00	741.00	107984.00
7	DTR	No	76708	18314	95022
8	DTR Capacity	MVA	5179.55	449.06	5628.61

b) Implementation of Non-RAPDRP Scheme:

To reduce the losses, the work in selected Non-RAPDRP towns is being undertaken. The work consist of LT line cabling, replacement of service line by armored cable, shifting of meters to call bell location, installation of meters, etc.

In Phase-I, 21 towns were selected, the work in all 21 towns have been completed. The average loss level of these towns reduced from 47.28% in the month of March-10 to 19.17% in the month of March-12. In Phase-II, 27 towns were selected, the works in all 27 towns have been completed and average loss level has reduced from 53.26% to 29.69%. In Phase-III work in 35 towns has been recently taken up with ADB loan saving and the work is proposed to be completed in 2012-13.

c) Feeder Separation plan:

There is a provision to separate 1645 no 11 kV feeders under Feeder separation scheme and it is expected that after completion of entire project there would be a saving of 2823 LU.

12.1.1.3. West Discom response:

As per the Hon'ble Commission directives the discom is sincerely striving for reduction in line losses and to bring it to the normatic level of line loss trajectory notified by GoMP/ Commission. It is the only outcome of sincere endeavor made by discom that the discom is performed well on this front as compared to the same time period of the previous year. The achievements made in loss level as compared to the same time period of previous financial year are as follows:

Months	T&D Losses	Months	T&D Losses	Difference
Apr-11	29.01%	Apr-12	24.76%	-4.25%
May-11	40.36%	May-12	35.26%	-5.10%
Jun-11	37.47%	Jun-12	32.57%	-4.90%
Jul-11	23.66%	Jul-12	26.48%	2.82%
Aug-11	13.97%	Aug-12	12.50%	-1.47%
Sep-11	14.75%	Sep-12	17.29%	2.54%
Oct-11	25.14%	Oct-12	23.45%	-1.69%
Nov-11	25.76%	Nov-12	28.12%	2.36%
Average	27.05%		25.86%	-1.19%

The company has also strengthened its vigilance wing and launched intensive checking drives to curb pilferage energy. Vigilance cell under the leadership of a officer of the rank of Chief Engineer assists with 05 Nos. of SEs, and substantial no. of EEs, AEs and JEs who conduct regular raids to check and to keep surveillance on theft and pilferage of energy. The status of raids conducted and no. of connections checked, amounts billed / realized from April 2012 to November 2012 of FY 12-13 is given as below:-

No s Checked	No. of cases of irregularities/theft detected during the month			Total amount billed (Rs.in lacs)			Total amount realized (Rs.in lacs)			No. of cases filed before the Special Court during the month
	Direct Theft	Mal- practice	Total	Direct Theft	Mal- practice	Total	Direct Theft	Mal- practice	Total	
146175	23113	21967	45080	4262.16	5486.49	9748.65	3019.88	2987.39	6007.27	11137

The progress achieved against the drive apparently reveals that the discom has launched a very effective drive against the pilferage of energy.

The discom has also launched a feeder separation scheme 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 very objective of the scheme is to separate agricultural load from rural households etc. The tie up of finance for the scheme has been done from REC and ADB in phase one and phase two respectively. The awards of both phases have been placed and agreement also executed with the agency and the works are under execution. The progress of vary project for both the phases is given later in this petition. The effective planning and monitoring system have been developed at corporate level for proper implementation of feeder separation scheme and for ensuring quality of man and materials besides inclusion of 3rd party supervision of project for both phases.

The discom has also launched various scheme for system strengthening under GoMP / TSP. SCSP, Feeder bifurcation, new irrigation pumps, ADB Second (TR 4 and 5) RGGVY(10th and 11th Plan) JBIC First and Second. The detailed information of Capital investment plan under CAPEX PLAN is already sanctioned by Hon'ble Commission. It is evident from above averment that the discom has taken all possible endeavors to redress the very problem of higher line losses and to bring them within the road map prescribed for the same under above schemes. It is expected that the losses would be brought within the bench mark of the road map after execution of all above schemes.

12.1.1.4. Central Discom submission

The efforts for reduction of T&D losses have already been intensified. The utility is expediting cabling instead of overhead lines in LT networks in Rural as well as in Urban area. The meterization of un-metered DL&F connection is also being done promptly so that actual consumption may be recorded to boost sale of energy.

Region	12-Dec	13-Jan	13-Feb	13-Mar	Total
Bhopal	520	2000	2000	1000	5520
Gwalior	1480	2000	2000	1000	6480
MPMKVVCL	2000	4000	4000	2000	12000

The AMR of LT high value consumer is also implemented. Regional CGMs have been instructed to monitor various activities towards reduction of T&D losses and administrative actions are also being taken to ensure reduction in T&D losses:

Period	Input (LU)	Sale (LU)	% T&D Loss
Apr-Oct'11	75557.30	51220.77	32.21
Apr-Oct'12	84485.32	57888.99	31.48

12.1.2. Meterization of unmetered connections

12.1.2.1. Commission's Directives:

It is observed that the results so far achieved in meterization 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 meterization status; however the achievements so far are unsatisfactory. The status of meterization 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 meterization of agricultural DTRs, 33 kV and 11kV feeders so as to ensure proper energy auditing. The targets proposed for completion of meterization particularly for unmetered rural domestic consumers are unacceptable. The Commission finds the plea of non-availability of funds for meterization 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 meterization 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% meterization in this regard is achieved by March,2013.

12.1.2.2. East Discom Submission

The meeting on the issue was convened by the commission on dated 13.06.12. The factual position in the matter has been apprised to the Hon'ble Commission vide letter No.5032 dated 12.06.12.

12.1.2.3. West Discom's response

The Company has made a comprehensive meterization plan under Capex Plan of the Company. The meterization plan is submitted to the Hon'ble Commission vide letter no. CMD/WZ/05/16509, dated 25/05/2012. The company is stick to the implementation of the schemes shown in the meterization plan and works under the schemes are in progress. Hence from the meterization plan it is evident that the company will surely achieve the target of meterization given by Hon'ble Commission. The progress of Domestic meterization for last two quarter of FY13 is given below:-

FOR THE QUARTER ENDING June'12															
Sr. No.	Name of Circle	Total No.of Domestic Connections. As on 30.06.12		Total No.of unmetered connections.As on 31.03.12		New connection served during the quarter without meter		Total No.of unmetered connections including unmetered new connections served during the quarter.		Total No. of meters provided to unmetered connection.		Balance Unmetered connections at the end of quarter i.e. 30.06.12		[%] Unmetered	
		Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
1	City - Indore	351745	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00
2	O&M - Indore	116741	112911	0	1688	0	0	0	1688	0	116	0	1572	0.00	1.39
3	O&M - Khandwa	47824	104541	0	28119	0	1465	0	29584	0	3513	0	26071	0.00	24.94
4	O&M - Burhanpur	45504	45221	0	4563	0	142	0	4705	0	182	0	4523	0.00	10.00
5	O&M - Khargone	52843	144987	0	17819	0	1169	0	18988	0	1214	0	17774	0.00	12.26
6	O&M - Barwani	34477	89254	0	17511	0	0	0	17511	0	2844	0	14667	0.00	16.43
7	O&M - Dhar	36999	192068	0	19927	0	0	0	19927	0	163	0	19764	0.00	10.29
8	O&M - Jhabua	24930	146165	0	80994	0	2651	0	83645	0	0	0	83645	0.00	57.23
IR TOTAL :-		711063	835147	0	170621	0	5427	0	176048	0	8032	0	168016	0.00	20.12
1	O&M - Ujjain	125232	130940	0	2603	0	1797	0	4400	0	1780	0	2620	0.00	2.00
2	O&M - Dewas	60854	121286	0	51602	0	816	0	52418	0	3336	0	49082	0.00	40.47
3	O&M - Shajapur	40597	99065	0	26221	0	473	0	26694	0	8077	0	18617	0.00	18.79
4	O&M - Ratlam	77125	120244	0	34471	0	2599	0	37070	0	2739	0	34331	0.00	28.55
5	O&M - Mandsaur	53595	133384	0	24635	0	674	0	25309	0	123	0	25186	0.00	18.88
6	O&M - Neemuch	38796	65518	0	6837	0	883	0	7720	0	47	0	7673	0.00	11.71
UR TOTAL :-		396199	670437	0	146369	0	7242	0	153611	0	16102	0	137509	0.00	20.51
WZ TOTAL :-		1107262	1505584	0	316990	0	12669	0	329659	0	24134	0	305525	0.00	20.29

FOR THE QUARTER ENDING Sept'12															
Sr. No.	Name of Circle	Total No.of Domestic Connections. As on 30.09.12		Total No.of unmetered connections.As on 30.06.12		New connection served during the quarter without meter		Total No.of unmetered connections including unmetered new connections served during the quarter.		Total No. of meters provided to unmetered connection.		Balance Unmetered connections at the end of quarter i.e. 30.06.12		[%] Unmetered	
		Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
1	City - Indore	356405	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00
2	O&M - Indore	119489	114797	0	1572	0	169	0	1741	0	37	0	1704	0.00	1.48
3	O&M - Khandwa	48271	105554	0	26071	0	546	0	26617	0	2173	0	24444	0.00	23.16
4	O&M - Burhanpur	45971	45795	0	4523	0	240	0	4763	0	46	0	4717	0.00	10.30
5	O&M - Khargone	55802	143606	0	17774	0	870	0	18644	0	1003	0	17641	0.00	12.28
6	O&M - Barwani	35116	91198	0	14667	0	0	0	14667	0	3585	0	11082	0.00	12.15
7	O&M - Dhar	37382	194846	0	19764	0	0	0	19764	0	106	0	19658	0.00	10.09
8	O&M - Jhabua	25263	151553	0	83645	0	1142	0	84787	0	0	0	84787	0.00	55.95
IR TOTAL :-		723699	847349	0	168016	0	2967	0	170983	0	6950	0	164033	0.00	19.36
1	O&M - Ujjain	126912	132004	0	2620	0	0	0	2620	0	23	0	2597	0.00	1.97

2	O&M - Dewas	61264	121589	0	49082	0	12	0	49094	0	891	0	48203	0.00	39.64
3	O&M - Shajapur	41252	100776	0	18617	0	568	0	19185	0	517	0	18668	0.00	18.52
4	O&M - Ratlam	77807	122693	0	34331	0	1731	0	36062	0	4575	0	31487	0.00	25.66
5	O&M - Mandsaur	53271	135523	0	25186	0	1364	0	26550	0	1060	0	25490	0.00	18.81
6	O&M - Neemuch	39320	66154	0	7673	0	856	0	8529	0	3299	0	5230	0.00	7.91
UR TOTAL :-		399826	678739	0	137509	0	4531	0	142040	0	10365	0	131675	0.00	19.40
WZ TOTAL :-		1123525	1526088	0	305525	0	7498	0	313023	0	17315	0	295708	0.00	19.38

The progress of Feeder meterization as on 30 .09.12 is given below:-

MP PASHCHIM KSHETRA VIDYUT VITRAN CO. LTD. INDORE																	
DETAILS OF 33 KV FEEDERS & 33/11 KV S/S METERISATION																30.09.12	
DETAILS OF 33 KV FEEDER METERISATION																	
SL	Name of Circle	Total No. of 33 KV Feeders from E.H.V. S/s	No of 33 KV Import / export points at S/S and other locations	Total	Meters Installed for energy Audit out of Col.			Meters Not Installed for energy Audit out of Col.		Total	Locations where recording could not done due to ME/Meter defective or other reason out of Col.		Total	% Meterization w.r.t. Total Feeder	% Defective Meter/ME w.r.t. Total Meterized Feeder	No. of ME/Meter defective	
NO.					No. 3	No.4	Total	No. 3	No.4		No. 6	No.7				ME	Meter
1	2	3	4	5=3+4	6	7	8=6+7	9	10	11=9+10	12	13	14=12+13	15	16	19	20
1	INDORE CITY	52	214	266	52	173	225	0	41	41	0	70	70	84.59	31.11	29	18
2	INDORE O&M	83	139	222	83	134	217	0	5	5	0	56	56	97.75	25.81	51	17
3	KHANDWA	26	92	118	26	87	113	0	3	3	0	14	14	95.76	12.39	15	17
4	BURHANPUR	15	45	60	15	21	36	0	24	24	0	24	24	60.00	66.67	18	16
5	KHARGONE	44	128	172	44	99	143	0	29	29	0	46	46	83.14	32.17	23	23
6	BARWANI	20	6	26	20	6	26	0	0	0	0	0	0	100.00	0.00	0	0
7	DHAR	51	157	208	51	114	165	0	43	43	0	47	47	79.33	28.48	45	25
8	JHABUA	22	25	47	22	19	41	0	7	7	0	17	17	87.23	41.46	7	4
	TOTAL IR	313	806	1119	313	653	966	0	152	152	0	274	274	86.33	28.36	188	120
1	UJJAIN	75	270	345	75	183	258	0	87	87	0	61	61	74.78	23.64	61	37
2	DEWAS	58	114	172	58	91	149	0	23	23	0	36	36	86.63	24.16	32	21
3	SHAJAPUR	56	136	192	56	102	158	0	34	34	0	30	30	82.29	18.99	30	19
4	RATLAM	44	110	154	44	93	137	0	17	17	0	9	9	88.96	6.57	9	3
5	MANDSAUR	32	123	155	32	80	112	0	43	43	0	37	37	72.26	33.04	37	37
6	NEEMUCH	21	67	88	21	51	72	0	16	16	0	22	22	81.82	30.56	22	22
	TOTAL UR	286	820	1106	286	600	886	0	220	220	0	195	195	80.11	22.01	191	139
TOTAL WZ Co.		599	1626	2225	599	1253	1852	0	372	372	0	469	469	83.24	25.32	379	259

DETAILS OF 11 KV FEEDER METERISATION																		
SL																		
NO.	Name of Circle	Total No. of 11 KV Feeders from		No of 11 KV Import/export points at other locations	Total	Meters Installed for energy Audit out of Col.			Meters Not Installed for energy Audit out of Col.		Total	Locations where recording could not done due to ME/Meter defective or other reason out of Col.		Total	% Meterization w.r.t. Total Feeder	% Defective Meter/ME w.r.t. Total Meterized Feeder	No. of ME/Meter defective	
		E.H.V. S/s	33/11 KVS/S			No. 3+4	No.5	Total	No. 3+4	No.5		No. 7	No.8				ME	Meter
1	2	3	4	5	6=3+4+5	7	8	9=7+8	10	11	12=10+11	13	14	15=13+14	16	17	20	21
1	INDORE CITY	0	296	8	304	292	8	300	4	0	4	17	0	17	98.68	5.67	17	6
2	INDORE O&M	10	417	43	470	373	40	413	54	3	57	117	34	151	87.87	36.56	118	22
3	KHANDWA	4	221	25	250	127	19	146	98	6	104	107	11	118	58.40	80.82	118	107
4	BURHANPUR	3	115	20	138	73	20	93	45	0	45	36	1	37	67.39	39.78	36	42
5	KHARGONE	0	331	5	336	202	4	206	129	1	130	120	4	124	61.31	60.19	58	62
6	BARWANI	0	156	7	163	114	5	119	42	2	44	79	2	81	73.01	68.07	29	52
7	DHAR	12	398	16	426	308	1	309	102	15	117	168	1	169	72.54	54.69	150	96
8	JHABUA	0	118	0	118	98	0	98	20	0	20	46	0	46	83.05	46.94	38	17
	TOTAL IR	29	2052	124	2205	1587	97	1684	494	27	521	690	53	743	76.37	44.12	564	404
1	UJJAIN	13	520	47	580	401	47	448	132	0	132	66	0	66	77.24	14.73	66	22
2	DEWAS	6	325	12	343	130	6	136	201	6	207	65	1	66	39.65	48.53	0	24
3	SHAJAPUR	3	304	9	316	248	9	257	59	0	59	133	3	136	81.33	52.92	140	150
4	RATLAM	2	299	66	367	243	18	261	58	48	106	130	0	130	71.12	49.81	88	92
5	MANDSAUR	13	280	12	305	200	12	212	93	0	93	126	9	135	69.51	63.68	135	135
6	NEEMUCH	4	165	10	179	112	4	116	57	6	63	28	0	28	64.80	24.14	28	28
	TOTAL UR	41	1893	156	2090	1334	96	1430	600	60	660	548	13	561	68.42	39.23	457	451
TOTAL WZ Co.		70	3945	280	4295	2921	193	3114	1094	87	1181	1238	66	1304	72.50	41.88	1021	855

12.1.2.4. Central Discom Submission

The quarter wise meterization plan of un-metered domestic connections as well as 33KV & 11KV feeders has already been submitted to Hon'ble Commission which still prevails. The work of meterization of un-metered DL&F connection is covered in various ongoing schemes and contract for feeder meterization work has been awarded so as to achieve 100% meterization.

The monthly target for meterisation for the year 2013-14 & 2014-15 has also been prepared and shown in the table given below:-

2013-14													
Region	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Total
Bhopal	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	15600
Gwalior	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	20400
MPMKVVCL	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	36000

2014-15													
Region	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Total
Bhopal	300	300	300	300	300	300	300	300	200	200	200	125	3125

Gwalior	400	400	400	400	400	400	400	400	400	400	400	475	4875
MPMKVVCL	700	700	700	700	700	700	700	700	600	600	600	600	8000

12.1.3. Capex plan for reduction of technical losses:**12.1.3.1. Commission's directives:**

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% meterization of un-metered connections including meterization of agricultural DTRs. The matter is under further review of the Commission.

12.1.3.2. East Discom Submission

The Hon'ble Commission has already approved the Capex Plan in SMP no. 58 of 2011.

12.1.3.3. West Discoms response:

As per the directives the comprehensive Capex plan for the year FY 2011-12 to 2015-16 has been submitted to the Commission in accordance with the Regulation. On the basis of which Hon'ble Commission sanctioned the Capex plan for the year FY 2011-12 to 2015-16 vide its order dated 02.07.2012 in petition no 75/2011.

12.1.3.4. Central Discom Submission

The Capex plan has already been approved by MPERC by order dated 07-11-12 issued in petition no. 68/2011.

12.1.4. Installation of meters having facility to record average monthly demand on domestic category of consumers:-**12.1.4.1. Commission Directives:**

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.

12.1.4.2. East Discom Submission

The company is procuring / installing the meters having facility to record maximum monthly demand. The company at present is not having any plan to procure / install the meters having the facility to record average monthly demand. However the possibility is being explored to procure the meters having this additional feature.

12.1.4.3. West Discom' response:

The MPPKVVCL, Indore is keen to comply the direction. The process has started to install Meters having a connected load of 10 KW in Indore city. Now it has been decided that single phase or three phase meter will be procured as per Hon'ble Commission directions i.e. meter having facility recording average monthly demand.

12.1.4.4. Central Discom Submission

All the domestic connections are being provided with demand meter which are capable of recording maximum demand.

12.1.5. Segregation of rural feeders into agricultural and others:**12.1.5.1. Commission's Directives:**

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. 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.

12.1.5.2. East Discom Submission

There is provision to separate 1645 no 11 kV feeders under Feeder separation scheme. The progress as on August'12 is given below:

Sr. no.	Target of FSP for FY-12 (No. of Feeders)	Progress as on Mar'12 (No. of Feeders)	No. of new Domestic connections proposed to be given as on Aug'12 (Cumulative)	No. of new Domestic connections proposed to be given in FY-13	Target of FSP for FY-13 (No of Feeders)	Achievement on Aug'12 (No of Feeders)
1	303	127	12643 nos.	45157 nos.	1518	425

12.1.5.3. West Discom's response :

The discom has also launched a feeder separation scheme in two phases. The phase one covers Indore, Dhar, Khandwa, Khargone, Barwani, Burhanpur and Ratlam districts while phase two of the scheme covers 7 districts i.e. Ujjain, Dewas, Mandsaur, Neemuch, Alirajpur, Jhabua and Shajapur Districts. The vary objective of the scheme is to separate agricultural load from rural households etc. 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 The effective planning and monitoring system have been developed at corporate level for proper implementation of feeder separation scheme for ensuring quality of man and materials besides inclusion of 3rd party supervision for both phases. The progress of vary project for both the phases against provision till Nov. is given below:-

Feeder Separation Progress (FSP, RGGVY and ADB) - Indore Region

S.No	District	Provision in Various scheme as per master Plan								Progressive achievement -upto Nov-2012							
		RGGVY		ADB		FS		TOTAL		RGGVY		ADB		FS		TOTAL	
1	INDORE	2	17	70	79	212	529	284	625	2	17	25	49	135	358	162	424
2	DHAR	0	0	63	281	181	1056	244	1337	0	0	63	281	164	449	227	730
3	BURHANPUR	0	0	0		66	258	66	258	0	0	0	0	58	178	58	178
4	KHANDWA	0	0	0	0	135	705	135	705	0	0	0	0	63	170	63	170
5	KHARGONE	0	0	0	0	266	1156	266	1156	0	0			117	292	117	292
6	BARWANI	0	0	0	0	144	662	144	662					62	152	62	152
7	JHABUA	0	0	0		52	752	52	752	0	0	0	0	18	120	18	120
8	ALIRAJPUR	0	0	0		28	529	28	529	0	0	0	0	17	96	17	96
Total Indore Region		2	17	133	360	1084	5658	1219	6024	2	17	88	330	634	1815	724	2162

Feeder Separation Progress (FSP, RGGVY and ADB) - Ujjain Region

S.No	District	Provision in Various scheme as per master Plan								Progressive achievement -upto Nov-2012							
		RGGVY/DEPARTMENTAL		ADB		FS		TOTAL		RGGVY		ADB		FS		TOTAL	
9	UJJAIN	119		544		0	0	216	552	335	1096	119	420	0	0	93	659
10	RATLAM	4		8		0	0	198	1045	202	1053	4	4	0	0	139	394
11	DEWAS	0		0		38	312	183	743	221	1055	0	0	38	132	221	353
12	SHAHJAPUR	0		0		0	0	273	1106	273	1106	0	0	0	0	98	438
13	MANDSAUR	0		0		0	0	234	906	234	906	0	0	0	0	89	354
14	NEEMUCH	0		0		0	0	158	674	158	674	0	0	0	0	50	186
Total Ujjain Region		123		552		38	312	1262	5026	1423	5890	123	424	38	132	546	2384
GRAND Total (WZ)		125		569		171	652	2346	10837	2642	11914	125	441	126	462	1180	4546

12.1.5.4. Central Discom Submission

The progress of works related with feeder separation scheme in Central Discom is as under:-

S.No	District	PROVISION IN VARIUS SCHEME AS PER MASTER PLAN								Progressive achievement -upto Oct- 2012								Progress during the month Nov- 2012-13								Progressive achievement -upto Nov- 2012							
		RGGVY		ADB		FS		TOTAL		RGGVY		ADB		FS		TOTAL		RGGVY		ADB		FS		TOTAL		RGGVY		ADB		FS		TOTAL	
		Feeders	Villages	Feeder	Villages	Feeder	Villages	Feeder	Villages	Feeders	Villages	Feeder	Villages	Feeder	Villages	Feeder	Villages	Feeders	Villages	Feeder	Villages	Feeder	Villages	Feeder	Villages	Feeders	Villages	Feeder	Villages	Feeder	Villages	Feeder	Villages
1	Bhopal	4	0	22	141	43	357	69	498	0	0	13	81	34	219	47	300	0	0	1	13	2	7	3	20	0	0	14	94	36	226	50	320
2	Raisen	29	0	22	194	76	1231	127	1425	0	0	15	113	47	278	62	391	0	0	7	19	4	32	11	51	0	0	22	132	51	310	73	442
3	Harda	46	0	6	117	7	396	59	513	43	205	0	0	3	5	46	210	2	0	0	0	1	11	3	11	45	205	0	0	4	16	49	221
4	Hoshagabad	15	0	54	391	43	538	112	929	0	0	27	186	20	127	47	313	0	0	13	38	2	19	15	57	0	0	40	224	22	146	62	370
5	Sehore	64	0	0	0	91	1019	155	1019	0	0	0	0	63	298	63	298	0	0	0	0	8	38	8	38	0	0	0	0	71	336	71	336
6	Vidisha	7	0	0	0	86	1533	93	1533	0	0	0	0	53	467	53	467	0	0	0	0	8	80	8	80	0	0	0	0	61	547	61	547
7	Betul	101	0	0	0	29	1343	130	1343	61	319	0	0	19	247	80	566	4	0	0	0	0	74	4	74	65	319	0	0	19	321	84	640
8	Rajgarh	52	0	0	0	134	1677	186	1677	0	0	0	0	45	372	45	372	0	0	0	0	10	99	10	99	0	0	0	0	55	471	55	471
Total Bhopal Region		318	0	104	843	509	8094	931	8937	104	524	55	380	284	2013	443	2917	6	0	21	70	35	360	62	430	110	524	76	450	319	2373	505	3347
9	Shivpuri	33	0	0	0	97	1306	130	1306	21	68	0	0	45	336	66	404	4	0	0	0	9	67	13	67	25	68	0	0	54	403	79	471
10	Guna	43	0	0	0	143	1260	186	1260	43	488	0	0	33	113	76	601	0	0	0	0	8	83	8	83	43	488	0	0	41	196	84	684
11	Ashok Nagar	16	0	0	0	47	818	63	818	16	284	0	0	37	238	53	522	0	0	0	0	8	83	8	83	16	284	0	0	45	321	61	605
12	Gwalior	21	0	0	0	94	612	115	612	0	0	0	0	30	157	30	157	0	0	0	0	5	15	5	15	0	0	0	0	35	172	35	172
13	Datia	18	0	0	0	54	584	72	584	17	139	0	0	14	67	31	206	0	0	0	0	3	39	3	39	17	139	0	0	17	106	34	245
14	Sheopur	21	0	0	0	31	527	52	527	17	89	0	0	16	72	33	161	0	0	0	0	3	19	3	19	17	89	0	0	19	91	36	180
15	Bhind	17	0	0	0	60	917	77	917	0	0	0	0	19	164	19	164	0	0	0	0	4	38	4	38	0	0	0	0	23	202	23	202
16	Morena	35	0	0	0	68	782	103	782	16	64	0	0	18	90	34	154	0	0	0	0	5	40	5	40	16	64	0	0	23	130	39	194
Total Gwalior Region		204	0	0	0	594	6806	798	6806	130	1132	0	0	212	1237	342	2369	4	0	0	0	45	384	49	384	134	1132	0	0	257	1621	391	2753
Total (CZ)		522	0	104	843	1103	14900	1729	15743	234	1656	55	380	496	3250	785	5286	10	0	21	70	80	744	111	814	244	1656	76	450	576	3994	896	6100

Remarks:-Under RGGVY Scheme in 244 feeders only 11 kv line work is done ,No work is take up in LT line and No sanitation work is done in 1569 villages, only BPL connection is served. Hence it is not possible to give 20 Hours supply in the 1656 villages. Under these 244 feeders LT line work are being proposed in feeder Separation Scheme

12.1.6. Minimum supply hours:**12.1.6.1. Commission's directives:**

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.

12.1.6.2. East Discom Submission

Monthly Average Supply Hours maintained (HH:MM) are given below:

Month	Rural	THQ	DHQ	CHQ
April'2012	14:12	19:09	22:48	23:46
May'2012	16:47	20:49	24:00	24:00
June'2012	13:51	19:25	24:00	23:58
July'2012	14:31	18:01	23:35	23:48
Aug'2012	22:44	23:08	23:58	24:00
Sept'2012	23:25	23:40	24:00	24:00
Oct'2012	17:53	22:14	23:57	24:00

12.1.6.3. West Discom's response :

The supply hours in the West Discom from April-2012 to June-2012 is submitted as given below :-

SUPPLY HOURS WEST DISCOM Apr-12 - Oct -12								
S. No.	Month	CHQ.			THQ	RURAL		
		INDORE	UJJAIN	DIS.		MIX.	DLF	IRR.
1	Apr-12	23:53:37	23:46:24	23:53:11	18:53:08	12:28:25		
2	May-12	23:53:38	23:46:25	23:53:10	18:52:40	12:29:12		
3	Jun-12	23:53:39	23:46:26	23:53:10	18:52:09	12:30:03		
4	Jul-12	23:53:43	23:46:26	23:53:10	18:51:42	12:30:39		
5	Aug-12	23:53:50	23:46:24	23:53:12	18:51:13	12:31:01		
6	Sep-12	23:54:14	23:46:18	23:53:20	18:50:16	12:29:21	18:28:33	7:31:47
7	Oct-12	23:54:10	23:46:19	23:53:19	18:50:28	12:29:35	18:28:33	7:31:47

12.1.6.4. Central Discom Submission

The average supply hours for the year 2011-12 & 2012-13 (up to Nov.12) are shown in table given below:-

S.No.	Month	CHQ	DHQ	THQ	Rural (3Ph+1Ph)		
					Mixed	DLF	Irrigation
1	2011-12	23.07	21.28	17.43	13.44		
2	2012-13 (upto Nov.12)	23.73	23.18	21.52	17.15	19.33	7.58

S.No.	Month	CHQ	DHQ	THQ	Rural (3Ph+1Ph)		
					Mixed	DLF	Irrigation
1	April 11	22.55	21.02	17.44	12.54		
2	May 11	22.48	20.29	16.38	12.14		
3	June	22.56	20.45	17.34	14.13		
4	July	23.17	21.14	17.43	13.15		
5	August	23.44	22.56	20.10	16.11		
6	September	24.00	24.00	22.22	22.27		
7	October	23.16	21.27	16.40	11.52		
8	November	23.00	20.14	14.51	10.30		
9	December	23.01	20.17	14.02	10.09		
10	January	23.36	22.03	18.30	14.47		
11	February	23.06	20.26	15.59	11.03		
12	March 12	23.01	22.05	19.37	13.51		
13	April 12	23.54	23.53	23.09	16.30		
14	May 12	24.00	24.00	23.44	19.14		
15	June 12	24.00	24.00	23.13	13.35		
16	July 12	24.00	23.23	20.20	15.35		
17	Aug 12	24.00	24.00	23.55	23.20		

18	Sept.12	23.47	23.51	23.28	22.58	23.19	7.59
19	Oct.12	23.41	21.57	18.08	14.05	17.46	7.58
20	Nov.12	23.40	21.59	17.42	13.25	17.33	7.57
	Avg. Apr11-Mar.12)	23.07	21.28	17.43	13.44		
	Avg. (Apr12-Nov.12)	23.73	23.18	21.52	17.15	19.33	7.58
	Avg. (Apr.11-Nov.12)	23.33	22.04	19.06	14.92	19.33	7.58

12.1.7. Appointment of Franchisees:**12.1.7.1. Commission's Directives:**

The status of appointment of franchisees is not very encouraging. The Commission would like to continue to review the status.

12.1.7.2. East Discom Submission

The company has appointed M/s Essel Vidyut Vitaran (Sagar) Pvt. Ltd. as distribution franchisee (DF) for distribution and supply of electricity in Sagar City. This has already been apprised to Hon'ble Commission vide letter no. EZ/Comml/FD/3629 dated 23/06/12. The franchisee has started operating its function w.e.f. 1st Dec'2012.

12.1.7.3. West Discom's response:

Ujjain city area under the MPPKVVCL was selected for implementing the pilot project of urban distribution franchisee.

Request for Proposal (RFP) was issued vide TS No. CMD/SE(BD)/Distribution of Elect./2011/04/Ujjain City/20780 Dtd. 30.09.11. The GoMP had approved the standard bidding documents on 2nd Dec 2012. Subsequent to the approval, the proposal was submitted to the State level Empowered Committee for Public Private Partnership projects under chairmanship of the Chief Secretary for obtaining approval for development of Input based Distribution Franchisee. The committee accorded approval to the project on 2nd January, 2012 with certain modifications in the documents and subsequently revised DFA and RFP were issued to the bidders on 3rd January, 2012.

The technical/commercial bids were opened on 16.02.12. Total ten bidders participated in the bidding process. After detailed evaluation the price bids were opened on 07-03-2012, wherein the consortium of M/S Smart wireless Pvt. Ltd. (Lead Member), PAN India Infrastructures Pvt. Ltd. and PAN India Network Ltd. have emerged as highest bidder with a levelized input rate of Rs. 3.781per unit.

The letter of award was issued to the successful bidder on Dtd. 23rd March 2012, which was unconditionally accepted by them on 30th March 2012. Thereafter the Distribution Franchisee Agreement (DFA) has been executed on 10th May 2012 ,with M/S Essel Vidyut Vitaran (Ujjain) pvt. Ltd. an SPV formed by the successful bidder. The DF M/S Essel Vidyut Vitaran (Ujjain) pvt. Ltd. have submitted the Performance Guarantee and Payment Security on 29/05/12 and started working towards completion of condition precedents of DFA. Joint asset survey was to be completed up to 19/09/2012. The time limit was extended up-to 18/12/12 in accordance with the provision of the distribution franchisee agreement, on the request of the DF. The DF has not completed the conditions precedent.

12.1.7.4. Central Discom Submission

As per decision taken in 49th Board of Directors meeting, Letter of Award was issued to Selected Bidder in the form of consortium of M/s Smart Wireless Pvt. Ltd, M/s Essel Infraprojects Ltd and PAN India Network Infravest Pvt. Ltd. on dtd. 23.03.2012.

The Distribution Franchisee Agreement for Gwalior town area was executed on 10.05.12 on non judicial stamp paper worth Rs. 250/- duly sealed and signed on each page by authorized signatories of the Licensee and M/s Essel Vidyut Vitaran (Gwalior) Company Pvt. Ltd.

As per provision of clause 27.1 of RFP, M/s Essel Vidyut Vitaran (Gwalior) Company has submitted payment security in the form of a confirmed, unconditional revolving and irrevocable letter of credit for an amount of Rs. 77 Cr issued in favour of Discom by Axis Bank Mumbai and performance guarantee in the form of an irrevocable and unconditional Bank Guarantee for an amount of Rs. 42 Cr issued in favour of Discom by Axis Bank Mumbai on dtd. 29.05.12.

Subsequent to the above, important timelines and their present status for effective handover of the Franchisee Area to the Distribution Franchisee are as follows:-

S. No.	Provisions of the DFA	Activities	Timeframe	Present Status
1	Article 4.2.1	Completion of Conditions Precedent (Legal compliance)	Within 30 days from issue of Letter of Award	All legal formalities completed
2	Article 4.3.1	Completion of Conditions Precedent (Survey and Reporting)	Within 180 days from issue of Letter of Award (completion of Joint Asset survey may be extended to nine (9) months)	Partially completed
3	Article 1.2 - Definitions	Effective Date- Date of commencement of operations by the Distribution Franchisee	On completion of above mentioned Conditions Precedent	Extension of ninety days has been accorded to the franchisee to fulfil the conditions precedent as per clause 4.3 of DFA, accordingly effective date for handover of the franchisee area of DF is 18.12.2012.
4	Article 1.2 –	Completion of Conditions	Within six (6) months from the	To be done

	Definitions & Article 4.4	Subsequent (Project) within the Transition Period	Effective Date	
5		Distribution Franchisee operations in the Franchisee Area	After completion of Conditions Subsequent	To be done

In view of above, the present status of partially completed conditions precedent (Survey and Reporting) are as follows:-

Status of Conditions Precedent (Survey & Reporting)

S. No	Activities proposed as per DFA	Present Status	Due Dates as per DFA	Actual date of submission	Remark
1	Installation of Check meters at all input points as per the provision of CEA (Within 6 months from the date of issue of LOA) (As per Article 6.1.1)	i. Installation of Check Meters to be done by the Distribution Franchisee. ii. 0.2S class Main Meters and metering equipments at all export/import points has been installed by Discom	19.09.12		Till date check meters are not installed by franchisee.
2	Completion of joint inspection and survey and preparation/ validation of data of the Franchisee area	Joint Asset survey of 33 KV feeders, 11 KV feeders and DTR along with 10% LT Network had been completed but franchisee is interested in 100% survey of LT network	10.05.12	18.06.12	No progress on asset survey of LT network since last 1½ months, in spite of full support has been provided by the Discom
3	Facilitation in obtaining the authorization under sec 126 and 151. (As per article 4.3.3)	Authorization under section 135(2), section 151 and 152 has been is sued by GoMP	19.09.12	-	Authorization under section 135(2), section 151 and 152 has been conveyed to the franchisee
4	Finalization of methodology to compute Distribution losses and collection efficiency during the term of agreement.	The methodology to compute Distribution losses will be as per the DFA and the same has been finalized by the Discom and intimated to the franchisee for concurrence	19.09.12		Consent on draft methodology is awaited from franchisee
5	Joint audit and calibration of main meter and interface meter at the input points	The authorized representatives of the licensee, MPPTCL and the Distribution Franchisee shall conduct joint audit and calibration of the main meter and interface meter at the input point(s). In case of such meters found defective or variance with the specification laid down in CEA Regulation 2006, as amended from time to time, it shall be replaced as per the provisions of article 6.1.3 before the effective date by Distribution Licensee.	19.09.12		Meters are to be installed by Franchisee

To complete the above said conditions precedent, regarding joint asset survey of 100% LT network including installation of check meters at all export/import points of franchisee area so many letters/reminders has been issued vide this office but no response from the franchisee side is obtained till date. As per the decision taken in the 54th meeting of Board of Directors, the timeline for completing the conditions precedent was already extended as per DFA and conveyed to the franchisee on dtd.17.10.2012. Since only two weeks are left from the dead line therefore it is important to complete the conditions precedent including action on the following issues:-

- Intimation of selection /appointment of Independent Auditor in response to our letter no.1009 dtd.11.07.2012 is still pending at franchisee end.
- Methodology to compute Distribution Losses and Collection Efficiency was conveyed vide T.O.L.No.MD/CZ/Comm.2488 dtd.06.11.20 for concurrence of franchisee but response is still awaited.

As per provisions of the DFA, above-mentioned activities must be completed within the time limits as mentioned in the DFA, subject to following provisions:-

- As per Article 4.2.4 of DFA, non- completion of Conditions Precedent (Legal Compliance) before the expiry of period specified, the Distribution Licensee shall have the option but not an obligation to terminate the DFA. As already mentioned in Table 1 above, the Conditions Precedent for Legal Compliance have been satisfied by the Distribution Franchisee.
- As per provisions of the DFA, Article 32.1.1 of the DFA states that:

“The occurrence and continuation of any of the following events, unless any such event occurs as a result of a Force Majeure event or a breach by the Distribution Licensee of its obligations under this Agreement, shall constitute the Distribution Franchisee event of default. Further, in case of the Distribution Franchisee event of default as mentioned in this Article, the Distribution Licensee shall have the option and not an obligation to terminate the Agreement as per provisions of this Agreement”

In view of the above including Article 32.1.1. (viii) – “unlawfully repudiates the DFA or has otherwise expressed an intention not to be bound by the DFA” and Article 32.1.1. (iii) – “ abandons the Project at any time during the Term of the Agreement” the Licensee shall have the option but not an obligation to start the termination procedure as per Article 32.2 of the DFA and has the right to invoke Payment Security & Performance Guarantee and to recover all dues & outstanding amounts.

12.1.8. Issue of tariff card with first bill based on new tariff for the year 2009-2010:**12.1.8.1. Commission's Directives:**

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

12.1.8.2. East Discom Submission

The company has arranged to print Tariff cards for tariff order FY2012-13 for different categories of the consumers and the same have been provided to the field units for their distribution to the consumers.

12.1.8.3. West Discom's response:

The information related to tariff for FY2012-13 is issued to consumers of the Company.

12.1.8.4. Central Discom Submission

Tariff cards showing the tariff provisions have been issued to L.T. consumers. In addition, tariff schedule booklets have been providing to all H.T. consumers

12.1.9. Filing of ARR and tariff proposals in Hindi language**12.1.9.1. Commission's Directives:**

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.

12.1.9.2. East Discom Submission

Translation of ARR/Tariff petition for FY 14 is in progress and the same shall be submitted before the Hon'ble Commission.

12.1.9.3. West Discom's response:

ARR for FY 2012-13 is filed both in English and Hindi. ARR for FY 2013-14 in Hindi will be submitted shortly.

12.1.9.4. Central Discom Submission

For Hindi translation of ARR, contract has been awarded and Hindi version of ARR will be submitted shortly.

12.1.10. Accounting of rebates/incentives/ surcharge:**12.1.10.1. Commission's Directives:**

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.

12.1.10.2. East Discom Submission

Compliance of the said directive has already been done by the company. This is also mentioned in the tariff order.

12.1.10.3. West Discom's response:

The discom is implementing R APDRP project in which M/s TCS is developing a billing soft ware. In the billing, TCS include the features like separate rebate/incentive/surcharge developed software.

12.1.10.4. Central Discom Submission

The Discom has complied with the Commission's directive by incorporating the details of rebate, surcharge and other requisite details in the HT connection bills issued to the HT consumers monthly. The specimen copies of such HT connection bills are submitted with this Petition.

12.1.11. Maintaining uniform accounts:**12.1.11.1. Commission's Directives:**

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

12.1.11.2. East Discom Submission

Efforts are being taken

12.1.11.3. West Discom's response:

The Company was incorporated on 31st May 2002 under Companies Act 1956. However, the commercial operations commenced from 1st June 2005 pursuant to Government of Madhya Pradesh Notification No. 226 dated 31st May 2005. Schedule VI to the Companies Act, 1956 ('the Act') provides the manner in which every company shall prepare its Balance Sheet, Statement of Profit and Loss and notes thereto.

The Ministry of Corporate Affairs (MCA) has issued a revised form of Schedule VI vide gazette notification 30th March, 2011.

The requirements of the Revised Schedule VI, do not apply to companies as referred to in the proviso to Section 211 (1) and Section 211 (2) of the Act, i.e., any insurance or banking company, or any company engaged in the generation or supply of electricity or to any other class of company for which a form of Balance Sheet and Profit and Loss account has been specified in or under any other Act governing such class of company.

However, in the guidance note issued by Institute of Chartered Accountants of India, it is clarified that for companies engaged in the generation and supply of electricity, neither the Electricity Act, 2003, nor the rules framed there under, prescribe any specific format for presentation of Financial Statements by an electricity company. Section 616(c) of the Companies Act states that the Companies Act will apply to electricity companies, to the extent it is not contrary to the requirements of the Electricity Act. Keeping this in view, Revised Schedule VI may be followed by such companies till the time any other format is prescribed by the relevant statute.

As such, the financial statements are being prepared as per Revised Schedule VI of the Companies act 1956, this ensure uniform presentations in the accounts of all Discoms from the FY 2011-12 onwards. The company prepares its financial statements under historical cost basis in accordance with Generally Accepted Accounting Principles (GAAP) and the Accounting Standards as notified by the Companies (Accounting Standard) Rules 2006.

It is also submitted that ERP project of MPPKVVCL, Indore is proposed for procurement, customization, implementation and subsequent support of Enterprises Resources Planning (ERP) application system 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.

12.1.11.4. Central Discom Submission

The ERP program covers the accounting part also which is in progress. Maintaining of uniform accounts will be implemented after completion of ERP.

12.1.12. Compliance of Regulations:**12.1.12.1. Commission's Directives:**

The compliance of the directives should be maintained in future also.

12.1.12.2. East Discom Submission

The instant petition is according to the provisions of the prevailing regulations of MPERC.

12.1.12.3. West Discom's response:

MPPKVVCL, Indore is committed to adhere directives.

12.1.12.4. Central Discom Submission

The petitions have been filed in accordance with the provisions of the Regulations.

12.1.13. Mandatory demand based tariff for all Non-domestic LV consumers having load in excess of 25 HP**12.1.13.1. 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.

12.1.13.2. East Discom Submission

Not applicable for East Discom

12.1.13.3. West Discom's response:

It is submitted that meters having features to record the maximum demand have been installed on the consumers of non-domestic category having connected load above 25 HP.

12.1.13.4. Central Discom Submission

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 30-11-12 the status of AMR is as follows:-

Region	AMR Points	Installation	Downloading of MRD file	Generation of Bill
Bhopal	4560	4061	3129	2601
Gwalior	3834	3820	1997	1239

12.1.14. Removal of ceiling on connected load in LT demand based tariff**12.1.14.1. Commission's Directives:**

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 licensee's 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..

12.1.14.2. East Discom Submission

The present status in respect of LT High Value consumers is as follows:

Region	Meter Read by AMR/MRI	Meters read by A2Z (AMR/MRI)	Total Meters read
Jabalpur	2225	570	2795
Sagar	832	148	980
Rewa	1168	146	1314
TOTAL	4225	864	5089

12.1.14.3. West Discom's response:

Company created a separate cell to deal with the AMR metering named MT-2 under the leadership of a SE rank officer. The progress of LT AMR metering is given below:

LIST OF AMR CONDUCTED OF LT METERS												
S.no	Circle Name	Total No. of Meters	No. of meters provided by Circles	Balance Meters where Modems are to be provided	AMR Done							
					Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12
1	Indore	4223	4173	50	3305	3342	3347	3201	3128	3140	3191	3112
2	Indore O & M	1008	1008	0	786	773	647	742	735	786	789	796
3	Dhar	215	55	160	0	0	0	0	0	0	0	0
4	Khandwa	201	161	40	55	99	97	83	85	55	43	69
5	Burhanpur	138	98	40	20	59	76	78	73	79	75	56
6	Khargone	224	214	10	83	80	79	80	125	123	125	92
7	Barwani	268	103	165	0	0	0	0	0	0	0	0
8	Jhabua	75	45	30	21	28	23	22	21	19	20	17
9	Ujjain	946	725	221	191	195	189	186	176	160	198	199
10	Dewas	401	292	109	176	191	183	194	209	187	170	189
11	Shajapur	279	239	40	93	102	91	94	133	136	85	83
12	Ratlam	553	519	34	343	331	318	347	338	323	273	271
13	Mandsour	315	291	24	103	107	101	116	120	108	108	116
14	Neemuch	422	395	27	87	100	100	107	111	100	100	100
Total		9268	8318	950	5263	5407	5251	5250	5254	5216	5177	5100
% AMR Done					63	65	63	63	63	63	62	61

12.1.14.4. Central Discom Submission

The AMR status of LT high value consumers as on 30-11-12 has already been covered under point no.13.

TARIFF PROPOSAL PETITION FOR FY 2013-14

Submitted By:

Madhya Pradesh Power Management Company Limited
Shakti Bhawan, Vidyut Nagar, Jabalpur

Madhya Pradesh Poorv Kshetra Vidyut Vitaran Company Limited
Block No. 7, Shakti Bhawan, Vidyut Nagar, Jabalpur

Madhya Pradesh Paschim Kshetra Vidyut Vitaran Company Limited
GPH Compound, Pologround, Indore

Madhya Pradesh Madhya Kshetra Vidyut Vitaran Company Ltd.
Bijlee Nagar Colony, Nishtha Parisar, Govindpura, Bhopal



PROPOSED TARIFF Schedule - LT

PROPOSED TARIFF SCHEDULES

FOR LOW TENSION CONSUMERS

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Schedules for Low Tension Consumers

Tariff Schedule-- LV-1

DOMESTIC:-

Applicability:

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

Domestic sub-category LV-1.1

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

12.1.15. Tariff

- (a) **Energy Charge** – For actual consumption of metered connection

Monthly consumption	Energy charges (Rs. per unit) Urban/ Rural areas	Monthly Fixed Charges (In Rs.) Urban/Rural areas
Up to 30 units	2.90	Nil

- (b) **Minimum Charges** – **Rs. 40.00 per connection per month** as minimum charges is applicable to this category of consumers.

Domestic sub-category LV-1.2

Tariff LV-1.2:

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

Slabs of monthly consumption	Energy charges with telescopic benefit (Rs per unit) (Rs. per unit)	Monthly Fixed Charges (in Rs.)	
		Urban	Rural
Up to 50 units	3.70	43.00 Per connection ccoconnection	25.00 Per connection
51 to 100 units	4.20	72.00 Per connection	43.00 Per connection
101 to 300 units	5.40	84.00 for each 0.5 kW of authorised load	56.00 for each 0.5 kW of authorised load
301 to 500 units	6.00	92.00 for each 0.5 kW of authorised load	81.00 for each 0.5 kW of authorised load
Above 500 units	6.30	98.00 for each 0.5 kW of authorised load	81.00 for each 0.5 kW of authorised load

Minimum charges: Rs. 60.00 per connection per month or part thereof as minimum charges towards energy charges are applicable for above categories.

Note: The authorized load shall be as defined in the Electricity Supply Code 2004. (Every 75 unit's 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 (Rs per unit)	Monthly Fixed Charges (In Rs)	
	Urban/Rural areas	Urban areas	Rural areas
Temporary connection for construction of own house (max. up to one year).	7.40	330.00 for each one KW or part thereof of sanctioned or connected or recorded load whichever is highest	220.00 for each one KW or part thereof of sanctioned or connected or recorded load whichever is highest
Temporary connection for social/ marriage purposes and religious functions.	7.40	40.00 for each one KW or part thereof of sanctioned or connected or recorded load, whichever is highest, for each 24 hours duration or part thereof.	20.00 for each one KW or part thereof 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	3.00	NIL	NIL

Minimum charges: Rs 500.00 per connection per month or part thereof 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 Charges for un-metered domestic connections:

Particulars	Assessed Units and Energy charges to be billed per month or part thereof for unmetered connections (Rs per unit)	Monthly Fixed Charges (in Rs Per connection)
Un-metered connection in urban areas	136.00 units @ 4.60 per unit	Rs. 83.00 per connection
Un-metered connection in rural areas	100.00 units @ 3.70 per unit	Rs. 33.00 per connection

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

Specific Terms and conditions:

- 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:-

Non-Domestic sub-category LV-2.1**Applicability:**

This tariff is applicable for light, fan and power to Dharmshalas other than Govt. registered trustees , 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)

12.1.16. Tariff:

Tariff shall be as given in the following table:

Sub category	Energy charges (Rs per unit)	Monthly Fixed Charges (in Rs)	
	Urban / Rural areas	Urban areas	Rural areas
Sanctioned load based tariff	5.80	101.00 per KW or part thereof	67.00 per KW or part thereof
Demand based tariff	5.80	201 per kW OR 161.00 per kVA of billing demand	135 per kW OR 108.00 per kVA of billing demand

Non-Domestic sub-category 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 Centres, clinics, nursing homes belonging to either Govt. or public or private organisation, 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 (Rs per unit)	Monthly Fixed charges (in Rs)	
	Urban/Rural areas	Urban area	Rural area
On all units if monthly consumption is not more than 50 units	6.00	56.00 per KW or part thereof	34.00 per KW or part thereof
For all units if monthly consumption exceeds 50 units upto 1000 units	6.70	95.00 per KW or part thereof	67.00 per KW or part thereof
For all units if monthly consumption exceeds 1000 units	6.70	95.00 per KW or part thereof	67.00 per KW or part thereof

Sub category	Energy charges (Rs. per unit)	Monthly Fixed charges (in Rs.)	
	Urban/Rural areas	Urban area	Rural
<u>OPTIONAL</u> Demand based tariff for contract demand above 10 KW	5.90	213 per KW or part thereof OR 170.00 per kVA of billing demand	135 per KW or part thereof OR 108.00 per kVA of billing demand
Temporary connections including Multi point temporary connection at LT for Mela*	8.00	146.00 per KW or part thereof of sanctioned or connected or recorded load whichever is highest	95.00 per KW or part thereof of sanctioned or connected or recorded load whichever is highest
Temporary connection for marriage purposes at marriage gardens or marriage halls or any other premises covered under LV 2.1 and 2.2 categories	8.00 (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 500.00 /- in Urban area and Rs 500.00 /- in Rural area)	Rs. 50.00 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. 30.00 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 or part thereof)		
Single Phase	504.00		
Three Phase	728.00		
Dental X-Ray Machine	56.00		

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

Specific Terms and Conditions for LV2.1 & LV-2.2 Category:

- a) Any consumer having **connected load of 10 kW or more** may opt for demand based tariff, however for the consumers having **connected load above 15 kW** 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. However, in any case the contract demand should not be less than 10kW.

b) Minimum consumption:

The consumer shall guarantee a minimum annual consumption of 360.00 units per KW or part thereof in urban areas and **180.00** 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.

- a) **Additional Charge:** Shall be billed as given in General Terms and Conditions of Low Tension Tariff.
- b) Other terms and conditions shall be as specified under General Terms and Conditions.

Tariff Schedule – LV-3

PUBLIC WATER WORKS AND STREET LIGHTS

Applicability:

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

Note: Private water supply scheme, water supply schemes run by institutions for their own use/employees/townships etc. will not fall in this category. 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 the 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 Shouchalaya.

Tariff:

The tariff for the sub-categories shall be based on current monthly consumption as per following table:

Category of consumers / Area of applicability	Energy Charges (Rs per unit)	Monthly Fixed Charges (In Rs per kW or part thereof)		Minimum Charges
		Urban	Rural	
LV-3.1: Public Water Works				
Municipal Corporation/ Cantonment board	4.10	157.00	157.00	No Minimum Charges
Municipality/ Nagar Panchayat	4.10	134.00	134.00	
Gram Panchayat	4.10	56.00	56.00	
Temporary	5.30	73.00	73.00	
LV-3.2: Street light				
Municipal Corporation/ Cantonment board	4.20	258.00	258.00	No Minimum Charges
Municipality/ Nagar Panchayat	4.20	235.00	235.00	
Gram Panchayat	4.20	56.00	56.00	

Specific Terms and Conditions for LV3 Category:**(a) Incentives for adopting Demand Side Management**

An **incentive** equal to 5 % of energy charges shall be given on installation and use of energy saving devices (such as ISI energy efficient motors for pump sets and programmable on-off/ dimmer switch with automation for street lights). **Incentive** will be admissible only if full bill is paid within due dates failing which all

consumed units will be charged at normal rates. Such incentive will be admissible from the month following the month in which energy saving devices are put to use and its verification by a person authorized by the licensee. This incentive will continue to be allowed till such time these energy saving devices remain in service. The licensee is required to arrange wide publicity of above incentive.

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

Tariff Schedule – LV-4**LT INDUSTRIAL****Applicability:**

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

Tariff: For Non seasonal and seasonal consumers

Category of consumers		Monthly Fixed Charges (in Rs)		Energy Charges (Rs. per unit) Urban/Rural
		Urban Areas	Rural Areas	
4.1	Non seasonal consumers			
4.1 a	LT industries having connected load up to 25 HP	99.00 per HP or part thereof	33.00 per HP or part thereof	4.40
4.1b(i)	Demand based tariff (Contract demand and connected load up to 100HP)	243 per KW OR 194.00 per kVA of billing demand	121 per KW OR 97.00 per kVA of billing demand	5.60

4.1b(ii)	Demand based tariff (Contract demand up to 100 HP and connected load more than 100 HP but not exceeding 150 HP)	330 per KW 12.1.17. OR 264.00 per kVA of billing demand	231 per KW 12.1.18. OR 185.00 per kVA of billing demand	5.80
4.1 c	Demand based tariff (Contract demand more than 100 HP & up to 150 HP with connected load not exceeding 150HP*) (For existing consumers only)	330 per KW OR 264.00 per kVA of billing demand	231 per KW OR 185.00 per kVA of billing demand	5.80
4.1 d	Temporary connection	135.00 per HP	45.00 per HP	6.00
*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 periods, then the tariff for the respective period shall be applicable.				
4.2 a	During season	Normal tariff as for Non seasonal consumers	Normal tariff as for Non seasonal consumers	Normal tariff as for Non-seasonal consumers
4.2 b	During Off -season	Normal tariff as for Non-seasonal consumers on 10% of contract demand or actual recorded demand, whichever is more	Normal tariff as for Non-seasonal consumers on 10% of contract demand or actual recorded demand, whichever is more	120% of Normal Tariff for non seasonal

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 to 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 **180.00** 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 **360.00** 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 in rural area and 40 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 **240.00** 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 **480.00** 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 25 units per HP per month or part thereof of contract demand in rural area and 50 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:** 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 2013-14 within 60 days of issue of tariff order and inform the same to the licensee.
- ii. The seasonal period once declared by the consumer cannot be changed during the financial year.
- iii. This tariff is not applicable to composite units having seasonal and other category of loads.
- iv. The consumer will be required to restrict his monthly off season consumption to 15% of the highest of average monthly consumption during the preceding three seasons. In case this limit is exceeded in any off season month, the consumer will be billed under Non seasonal tariff for the whole financial year as per the tariff in force.
- v. The consumer will be required to restrict his maximum demand during off season up to 30 % of the contract demand. In case the maximum demand recorded in any month of the declared off season exceeds this limit, the consumer will be billed under Non seasonal tariff for the whole financial year as per the tariff in force.

Tariff Schedule – LV - 5

AGRICULTURAL AND OTHER THAN AGRICULTURAL

Applicability:

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

The tariff **LV-5.2** shall apply to connection for nurseries 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:

S. No.	Sub-Category	Monthly Fixed charges (in Rs.)	Energy charges (Rs. per unit)
5.1	For agricultural use		
a)	First 300 units per month	NIL	3.40
b)	Above 300 units up to 750 units in the month	NIL	3.90
c)	Rest of the units in the month	NIL	4.20
d)	Temporary connections	NIL	4.20
e)	DTR metered group consumers	NIL	3.00

5.2	Other than agricultural use-horticulture activity		
a)	First 300 units per month	NIL	3.40
b)	Above 300 units up to 750 units in the month	NIL	3.90
c)	Rest of the units in the month	NIL	4.20
d)	Temporary connections	NIL	4.20
5.2	For other than agricultural use		
a)	Up to 25 HP in urban areas	58.00 per HP or part thereof	3.90
b)	Up to 25 HP in rural areas	21.00 per HP or part thereof	3.90
c)	Demand based tariff (Contract demand and connected load up to 100 HP) in urban areas	179 per KW OR 143.00 per kVA of billing demand	4.70
d)	Demand based tariff (Contract demand and connected load up to 100 HP) in rural areas	84 per KW OR 67.00 per kVA of billing demand	4.70

1. Basis of billing of energy of un-metered consumption:

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

Particulars		No. of units per HP or part thereof of connected/sanctioned/actual load per month or part thereof							
		Urban Area				Rural Area			
Type of Pump Motor	Nature of connection	April 2013	May 2013	June'13 to Sept'13	Oct'13 to Mar'14	April 2013	May 2013	June'13 to Sept'13	Oct'13 to Mar'14
Three Phase	Permanent	90	90	90	170	50	50	50	150
	Temporary	175	175	175	175	175	175	175	175
Single Phase	Permanent	90	90	90	180	60	60	60	160
	Temporary	190	190	190	190	170	170	170	170

Option: Flat rate scheme

Electricity Distribution Companies have made a Flat Rate Scheme for unmetered permanent Agriculture Consumers in order to simplify the billing, improve the collections and reduce the arrears for agriculture consumers.

The scheme will be available to unmetered permanent agriculture consumers of the Electricity Distribution Companies on choice of such consumers. The consumer availing the scheme will have to pay advance payment for next six months for bill issued on 1st April and 1st October every year at a per HP flat rate basis. The bills will be raised by the Licensee twice in a financial year on 1st April and 1st October every year. The surcharge of the consumer as on 31st March or 30th September as the case may be, will be waived off for such consumers who are availing this scheme. The arrears for such consumers who are availing this scheme will be frozen as on 31st March or 30th September as the case may be and no surcharge on the balance arrear will be levied.

To facilitate the above scheme the Licensee needs to make necessary modification in its billing system so as to administer the new payment offsetting procedure for all Un-metered agriculture consumers, who are choosing for this scheme. This proposed new operational procedure is different than the operational procedure framed in the “Madhya Pradesh Electricity Supply Code”.

As the change sought by the Petitioner, do not affect the spirit of giving priority to recover Electricity Duty and Cess at first instance as it is not applicable on the flat rate unmetered agriculture consumers, the petitioner, seeks the permission of the Hon'ble Commission

approval to administer this new payment offsetting procedure so as to implement a Flat Rate Scheme for Agriculture Consumers in order to simplify the billing, improve the collections and reduce the arrears for agriculture consumers. It is expected that this scheme will improve the collection efficiency of the Licensee and bring commercial viability of the Company.

No consumer other than unmetered agriculture consumers would be eligible to avail the benefit under this scheme which is for a limited period. In order to improve the collection efficiency, it is conscious decision of the Company to waive off surcharge for such consumers who opt for this scheme.

Current Provisions in Supply Code

Clause 10.13 “10.13 All payments made by the consumer will be adjusted in the following order of priority:

- (a) *Electricity Duty and Cess on the current consumption*
- (b) *Arrears of Electricity Duty plus arrears of Cess.*
- (c) *Delayed payment surcharge*
- (d) *Balance of arrears*
- (e) *Balance of current bill amount*

Permission required on case basis to offset the payment for the selected consumer's category (un-metered Agriculture consumers) who opt for the scheme in the manner as given below;

All payments made by the consumer will be adjusted in the following order of priority:

- (a) *Electricity Duty and Cess on the current consumption*
- (b) *Arrears of Electricity Duty plus arrears of Cess.*
- (c) *Balance of current bill amount*
- (d) *Delayed payment surcharge*
- (e) *Balance of arrears*

Terms and conditions:

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

- (b) 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 in tariff
1.	ISI / BEE star labelled motors for pump sets	15 paise per unit
2.	ISI / BEE star labelled motors for pump sets and use of frictionless PVC pipes and foot valve	30 paise per unit
3.	ISI / BEE star labelled motors for pump sets and use of frictionless PVC pipes and foot valves along with installation of shunt capacitor of appropriate rating	45 paise per unit

****Incentive shall be allowed on the consumer's contribution part of the normal tariff (full tariff minus amount of Govt. subsidy per unit, if any) for installation of energy saving devices under demand side management.*** This incentive will be admissible only if full bill is paid within due dates failing which all consumed units will be charged at normal rates. Incentive will be admissible from the month following the month in which Energy Saving Devices are put to use and its verification by a person authorized by the licensee.

(c) Minimum consumption

(i) For Metered agricultural consumers (LV-5.1 & 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 **90.00** units per HP or part thereof of connected load per month for the remaining months irrespective of whether any energy is consumed or not during the year.

(ii) For other than agricultural use (LV-5.2) :

a) The consumer will guarantee a minimum annual consumption (KWH) based on 240 units/HP or part

thereof of contract demand in rural areas and 480 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 20 units per HP per month in rural area and 40 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 given in the General Terms and Conditions of Low Tension Tariff.
- (d) **Additional charge for Excess Demand** shall be billed as given in General Terms and Conditions of Low Tension Tariff.
- (e) **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.
- (f) One lamp up to 40 W is permitted at or near the pump in the power circuit.
- (g) 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.

- (h)** 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.
- (i)** Other terms and conditions shall be as specified under General Terms and Conditions.

GENERAL TERMS AND CONDITIONS OF LOW TENSION
TARIFF

1. **Rural Areas** mean feeder declared by the Distribution Licensee for receiving supply as per rural discipline under load regulatory measures.
2. **Rounding off:** All bills will be rounded off to the nearest rupee i.e. up to 49 paise shall be ignored and 50 paise upwards shall be rounded 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 next higher integer number.
4. **Fixed charges billing:** Fractional load for the purposes of billing of fixed charges shall be rounded off to next higher integer unless specified otherwise. The connected/sanctioned load for un-metered agricultural consumers will be rounded to next higher integer for the purpose of the assessment of energy.
5. **Reliability Charges:** The Discoms have envisaged in providing 24 hours of electricity to every household (urban and rural areas) in the state starting from FY14 through feeder separation project. The objective of feeder separation project is to provide commercially viable continuous supply of electricity in urban as well as rural habitations while ensuring sufficient supply for agricultural use to promote sustainable exploitation of ground water, thereby to accelerate socio-economic development of rural areas.

Therefore, it is requested to approve the reliability charges by the Honorable Commission as deemed necessary in lieu of quality and continuous supply.

6. Method of billing of minimum consumption:

- a. The consumer shall be billed one twelfth of guaranteed annual minimum consumption (KWH) specified for his category each month in case the actual consumption is less than above mentioned minimum consumption.
- b. During the month in which actual cumulative consumption equals or greater than the annual minimum guaranteed consumption, no further billing of monthly minimum consumption shall be done in subsequent months of the financial year and only actual recorded consumption shall be billed.
- c. 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 be 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.

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

7. 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 the contract demand, the tariff in this schedule shall apply to the extent of the contract demand only. The consumer shall be charged for demand recorded in excess 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 @ 2 times the tariff for energy charges for consumption corresponding to excess demand in case the maximum demand recorded exceeds the contract demand.
- 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 contract demand shall be charged at 2 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 2.5 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.

8. Other Terms and Conditions:

- (a) For **advance payment** made before commencement of consumption period for which bill is prepared, a rebate of 1 % per month on the amount (excluding security deposit) which remains with the licensee at the end of calendar month shall be credited to the account of the consumer after adjusting any amount payable to the licensee.

- (b) **Incentive for prompt payment:** An incentive for prompt payment @ 0.25% of the bill amount (excluding electricity duty and Cess) shall be given in case the payment is made at least 7 days in advance of the due date of payment where the current month billing amount is equal to or greater than Rs. One lac. The consumers in arrears shall not be entitled for this incentive.
- (c) The Sanctioned load or connected load or Contract Demand should not exceed 75 KW / 100 HP except where a higher limit is specified. If the consumer exceeds his load / demand beyond this ceiling on more than two occasions in two billing months during the tariff period, the Licensee may insist on the consumer to avail HT supply.
- (d) Metering Charges shall be billed as per schedule of Metering and Other Charges as prescribed in MPERC (Recovery of expenses and other charges for providing electric line or plant used for the purpose of giving supply), Regulations (Revision-I), 2009. Part of a month will be reckoned as full month for purpose of billing.
- (e) In case the cheque presented by the consumer is dishonoured, without prejudice to Licensee's rights to take recourse to such other action as may be available under the relevant law, a service charge of Rs. 150 per cheque shall be levied in addition to delayed payment surcharge
- (f) Other charges as stated in schedule of miscellaneous charges shall also be applicable.
- (g) **Welding surcharge** is applicable to installations with welding transformers, where the connected load of welding transformers

exceeds 25% of the total connected load and where suitable capacitors of prescribed capacity have not been installed to ensure power factor of not less than 0.8 (80%) lagging. Welding Surcharge of 120 (one hundred twenty) paise per unit shall be levied for the consumption of the entire installation during the month.

- (h) For purposes of computing the connected load in KW of the welding transformers, a power factor of 0.6 (60%) shall be applied to the maximum current or kVA rating of such welding transformers.
- (i) Existing LT power consumer shall ensure that LT capacitor of proper rating is provided. In this regard, Madhya Pradesh Electricity Supply Code 2004 may be referred for guidance. It shall be the responsibility of the consumer to ensure that overall average power factor during any month is not less than 0.8 (80%) failing which the consumer shall be liable to pay low power factor surcharge on the entire billed amount against energy charges during the month at the rates given below:

1. For the consumer whose meter is capable of recording average power factor:

- a. Surcharge @ 1 % of energy charges for every 1% fall in power factor below 80% up to 75 %.
- b. Surcharge of 5% plus 1.25% of energy charges for every 1% fall in power factor below 75% up to 70%.
- c. 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 all the categories of consumers billed under demand based tariff:

Load factor	Concession in energy charges
For load factor above 25% and up to 30 % load factor on contract demand	12 paise per unit concession on the normal energy charges for all energy consumption over and above 25% load factor during the billing month
For load factor above 30% and up to 40 % load factor on contract demand	In addition to load factor concession available up to 30% load factor , concession at the rate of 24 paise per unit

Load factor	Concession in energy charges
	on the normal energy charges for all energy consumption over and above 30 % load factor during the billing month
For load factor above 40% load factor on contract demand	In addition to load factor concession available up to 40% load factor, concession at the rate of 36 paise per unit on the normal energy charges for all energy consumption over and above 40% load factor during the billing month

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

$$\text{Load factor (\%)} = \frac{\text{Monthly consumption X 100}}{\text{No. of hours in the billing month X Demand X PF}}$$

- i. Monthly consumption shall be units consumed in the month excluding those received from sources other than Licensee
- ii. No of Hours in billing month shall exclude period of scheduled outages in hours.
- iii. Demand shall be maximum demand recorded or contract demand whichever is higher
- iv. Power factor shall be 0.8 or actual average monthly power factor whichever is higher

Note: The load factor (%) shall be rounded off to the nearest lower integer. The billing month shall be the period in number of days between the two consecutive dates of meter readings taken for the purpose of billing to the consumer for the period under consideration as a month.

- (l) In case of any dispute on applicability of tariff on a particular LT category, the decision of the Commission shall be final.
- (m) The tariff does not include any tax, cess or duty, etc. on electrical energy that may be payable at any time in accordance with any law then in force. Such charges, if any, shall also be payable by the consumer in addition to the tariff charges and applicable miscellaneous charges.
- (n) **Delayed payment Surcharge for all categories:** Surcharge at the rate of 1.25% per month or part thereof on the amount outstanding (including arrears) will be payable if the bills are not paid up to due date subject to a minimum of Rs.5/- per month for total outstanding bill amount up to Rs. 500/- and Rs 10/- per month for amount of bill more than Rs.500/. The part of a month will be reckoned as full month for the purpose of calculation of delayed payment surcharge. The delayed payment surcharge will not be levied for the period after supply to the consumer is permanently disconnected.
- (o) In case of conversion of LT connection into HT connection, it is mandatory on the part of both the consumer and the licensee to get the HT agreement executed before availing supply at HT.
- (p) **Power Factor Incentive:**

If the average monthly power factor of the consumer is equal to or more than 85%, incentive shall be payable as follows:

Power Factor	Percentage incentive payable on billed energy charges
Above 85% up to 86%	0.5
Above 86% up to 87%	1.0
Above 87% up to 88%	1.5
Above 88% up to 89%	2.0
Above 89% up to 90%	2.5
Above 90% up to 91%	3.0
Above 91% up to 92%	3.5
Above 92% up to 93%	4.0
Above 93% up to 94%	4.5
Above 94% up to 95%	5.0
Above 95% up to 96%	6.0
Above 96% up to 97%	7.0
Above 97% up to 98%	8.0
Above 98% up to 99%	9.0
Above 99%	10.0

For this purpose, the “average monthly power factor” is defined as the ratio in percentage of total Kilo Watt hours to the total kilo volt Ampere hours recorded during the month. The power factor (%) shall be rounded off to the nearest lower integer.

- (q) **Time of Day Surcharge / Rebate:** This scheme is applicable to the categories of consumers where demand based tariff is applicable. 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:

Sr. 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)	30% of Normal rate of Energy Charge as Surcharge
2.	Off peak load period (10 PM to 6 AM next day)	Normal rate of Energy Charge

Note: Fixed charges shall always be billed at normal rates i.e. ToD Surcharge / Rebate shall not be applied on Fixed Charges

- (r) 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.
- (s) Consumers receiving supply under urban discipline shall be billed urban tariff.
- (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.

9. 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 **1.5** 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.

TARIFF PROPOSAL PETITION FOR FY 2013-14

Submitted By:

Madhya Pradesh Power Management Company Limited
Shakti Bhawan, Vidyut Nagar, Jabalpur

Madhya Pradesh Poorv Kshetra Vidyut Vitaran Company Limited
Block No. 7, Shakti Bhawan, Vidyut Nagar, Jabalpur

Madhya Pradesh Paschim Kshetra Vidyut Vitaran Company Limited
GPH Compound, Pologround, Indore

Madhya Pradesh Madhya Kshetra Vidyut Vitaran Company Ltd.
Bijlee Nagar Colony, Nishtha Parisar, Govindpura, Bhopal



PROPOSED TARIFF SCHEDULE - HT

ANNEXURE TO TARIFF PETITION FOR FINANCIAL YEAR 2013-14**PROPOSED TARIFF SCHEDULES
FOR HIGH TENSION CONSUMERS****Table of Contents**

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Schedules for High Tension Consumers

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 (Rs per unit)
1	Railway Traction on 132kV / 220 kV	297.00	5.60

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 FY 2013-14. 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.
- 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 consumer is found to be less than 90% at any time during the first 6 (six) months from the date of connection, the consumer shall be entitled to a further maximum period of six months to improve it to not less than 90% subject to following conditions:

- This further period of six months shall be reckoned from the date on 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 any consecutive four months during the said further period of 6 months to not less than 90%, the charges on account of low power factor billed during the said initial 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 consumers whose average power factor is less than 90% at any time during initial 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.
- v. 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 colonies of coal mines.

Tariff:

S. No.	Sub category	Monthly Fixed charges (Rs per kVA of billing demand per month)	Energy charges (Rs per unit)	
			for consumption up to 50% load factor	for consumption in excess of 50% load factor
	Coal Mines			
	11 kV supply	581.00	6.30	5.30
	33 kV supply	592.00	6.00	5.10
	132 kV supply	588.00	5.80	4.90
	220 kV supply	599.00	5.70	4.80

Specific Terms and Conditions:

- a. Guaranteed Minimum Consumption** shall be on the following basis
:

Supply Voltage	Guaranteed annual minimum consumption in units(KWH) per kVA of contract demand
<i>For supply at 220 / 132 kV</i>	1620
<i>For supply at 33 / 11 kV</i>	1200

Note: The method of billing of minimum consumption shall be as given in General Terms and Conditions of High Tension tariff

- b. Time of Day Surcharge / Rebate:** This surcharge/ rebate shall be as specified in General Terms and Conditions of High Tension tariff.
- c.** Other terms and conditions shall be as specified under General Terms and Conditions of High Tension Tariff.

Tariff Schedule – HV - 3**INDUSTRIAL, NON-INDUSTRIAL AND SHOPPING MALLS****Applicability:**

The **tariff HV-3.1(Industrial)** shall apply to all HT industrial consumers including mines (other than coal mines) for power, light and fan etc. which shall mean and include all energy consumed for factory and lighting in the offices, main factory building, stores, canteen, residential colonies of industries, compound lighting and Dairy units where milk is processed (other than chilling, pasteurization etc.) to produce other end products of milk.

The **tariff HV-3.2 (Non Industrial)** shall apply to establishments like Railway Stations, Offices, Hotels, Government Hospitals, Institutions etc. (excluding group of consumers) having mixed load for power, light and fan etc. which shall mean and include all energy consumed for lighting in the offices, stores, canteen, compound lighting etc. This shall also cover all other categories of consumers, defined in LT non-domestic category subject to the condition that the HT consumer shall not redistribute/sub-let the energy in any way to other person.

The **tariff HV-3.3 (Shopping malls)** shall apply to establishments of shopping malls having group of non-industrial consumers subject to the specific terms and conditions specified in (d) 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.

12.1.36. Tariff:

S. No.	Sub category	Monthly Fixed charges (Rs per kVA of billing demand per month)	Energy charges (Rs per unit)	
			for consumption up to 50% load factor	for consumption in excess of 50% load factor
3.1	Industrial			
	11 KV supply	259.00	5.90	5.20
	33 KV supply	426.00	5.80	4.60
	132 KV supply	526.00	5.20	4.30
	220 KV supply	560.00	4.90	4.10
	400 KV supply	560.00	4.90	4.10
3.2	Non-Industrial			
	11 KV supply	219.00	6.20	5.30
	33 KV supply	336.00	5.80	5.00
	132 KV supply	476.00	5.40	4.60
3.3	Shopping Malls			
	11 KV supply	219.00	6.20	5.30
	33 KV supply	322.00	6.00	5.20
	132 KV supply	448.00	5.40	4.60
3.4	Power intensive industries			
	33 KV supply	500.00	4.50	4.50
	132 KV supply	627.00	4.20	4.20

Specific Terms and Conditions:

- (a) **Guaranteed Minimum Consumption** for all the above categories shall be on following basis:

Supply Voltage	Sub- category	Guaranteed annual minimum consumption in units (KWH) per kVA of contract demand
<i>For supply at 400 / 220 / 132 kV</i>	Rolling Mills	1200
	Educational institutions	720
	Others	1800
<i>For supply at 33 / 11 kV</i>	Educational institutions	600
	Contract demand up to 100 kVA	900
	Others	1200

Note: The method of billing of minimum consumption shall be as given in General Terms and Conditions of High Tension tariff

- (b) **Time of Day Surcharge / Rebate:** This surcharge/ rebate shall be as specified in General Terms and Conditions of High Tension tariff.

- (c) **Additional specific terms and conditions for shopping mall**

- (i) Individual end user shall not be levied a rate which is exceeding non-domestic- 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.
- (d) 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 ninety days. **If the declared season/off-season spreads over two tariff periods, then the tariff for the respective period shall be applicable.**

The licensee shall allow this tariff to any industry having seasonal use only.

Tariff:

Category of Consumers	Monthly Fixed charges (Rs per kVA of billing demand per month)	Energy charges (Rs per unit)	
		for consumption up to 50% load factor	for consumption in excess of 50% load factor
During Season			
11 KV supply	280.00	5.50	4.80
33 KV supply	314.00	5.40	4.60
During Off-Season			
11 KV supply	Rs. 280 on 10% of contract demand or actual recorded demand during the season, whichever is higher	Rs. 6.60 i.e. 120% of seasonal energy charges	Not applicable
33 KV supply	Rs. 314.00 on 10% of contract demand or actual recorded demand during the season, whichever is higher	Rs. 6.50 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) **Time of Day Surcharge / Rebate:** This surcharge/ rebate shall be as specified in General Terms and Conditions of High Tension tariff.
- c) The consumer has to declare months of season and off season for the tariff year 2013-14 within 60 days of issue of tariff order and inform the same to the licensee.
- d) The seasonal period once declared by the consumer cannot be changed during the tariff year 2013-14.
- e) This tariff schedule is not applicable to composite units having seasonal and other category loads.
- f) 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.

- g)** 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.
- h)** 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.	Category of Consumers	Monthly Fixed charges (Rs per kVA of billing demand per month)	Energy charges (Rs per unit)	
			for consumption up to 50% load factor	for consumption in excess of 50% load factor
5.1	Public Water Works, Group Irrigation and Lift Irrigation Schemes			
	11 kV supply	196.00	4.60	4.60
	33 kV supply	219.00	4.40	4.40
	132 kV supply	235.00	4.00	4.00
5.2	Other than agricultural use			
	11 kV supply	219.00	4.70	4.70
	33 kV supply	242.00	4.40	4.40
	132 kV supply	258.00	4.10	4.10

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 website.

- (d)** Other terms and conditions shall be per the General Terms and Conditions of High Tension Tariff.

Tariff Schedule – HV - 6**BULK RESIDENTIAL USERS**

Applicability:

The tariff category HV-6.1 is applicable for supply to industrial or any other township (e.g. University or academic institutions, , hospitals, MES and Border villages etc.) for domestic purpose only such as lighting, fans, heating etc. provided that the connected load for essential common facilities such as Non-domestic supply in residential area, street lighting shall be within the limits specified hereunder :-

- (i) Water supply & Sewage pumping, Hospital - **No limit**
- (ii) Non-domestic/Commercial and other General purpose put together
-10 % of total connected load.

In case, it is observed that the restriction on non-domestic load is not followed by the consumer, then HV 3.2 of relevant voltage level shall be applicable from the date of violation of limits of 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. 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:

No.	Category of Consumers	Monthly Fixed charges (Rs per kVA of billing demand per month)	Energy charges (Rs per unit)	
			for consumption up to 50% load factor	for consumption in excess of 50% load factor
1	For Tariff Sub-Category 6.1			
	11 kV supply	247.00	5.30	4.70
	33 kV supply	265.00	5.10	4.50
	132 kV supply	274.00	4.80	4.20
2	For Tariff Sub-Category 6.2			
	11 kV supply	167.00	5.40	4.80
	33 kV supply	173.00	5.30	4.70
	132 kV supply	174.00	5.00	4.40

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

GENERAL TERMS AND CONDITIONS OF HIGH TENSION TARIFF

The following terms and conditions shall be applicable to all HT consumer categories subject to specific terms and conditions for that category as mentioned in the tariff schedule of respective category:

- 1.1 The contract demand shall be expressed in whole number only.
- 1.2 **Character of Service:** The character of service shall be as per Madhya Pradesh Electricity Supply Code, 2004 as amended from time to time.
- 1.3 **Point of Supply:**
 - (a) The power will be supplied to the consumer ordinarily at a single point for the entire premises.
 - (b) In case of Railway Traction, the supply at each sub-station shall be separately metered and charged.
 - (c) In case of coal mines, the power will be supplied ordinarily at a single point for the entire premises. The power may, however, be supplied, on the request of the consumer, at more than one point subject to technical feasibility. In such cases, metering and billing will be done for each point of supply separately.
- 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 next higher integer number.

1.6 Tariff minimum consumption shall be billed as follows :

- ✓ 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.
- ✓ 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.
- ✓ 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.
- ✓ In the month in which cumulative actual or billed monthly consumption of the consumer exceeds the cumulative monthly prorated minimum annual guaranteed consumption and if the consumer was charged in earlier months for tariff minimum consumption on account of his actual consumption being less, then such tariff minimum difference of energy charge shall be adjusted in the month in which cumulative actual or billed monthly consumption exceeds cumulative monthly prorated minimum guaranteed annual consumption. If such tariff minimum difference does not get fully adjusted in that month, such adjustments shall be continued to be done in subsequent months of the financial year. The following example illustrates the procedure for monthly billing of consumption where prorated monthly minimum consumption is 100 kWH based on annual consumption of 1200 kWH.

Month	Actual cumulative consumption (kWH)	Cumulative minimum consumption* (kWH)	Higher of 2 and 3 (kWH)	Already billed in the year (kWH)	To be billed in the month = (4-5) (kWH)
1	2	3	4	5	6
April	95	100	100	0	100
May	215	200	215	100	115
June	315	300	315	215	100
July	395	400	400	315	85
Aug	530	500	530	400	130
Sept	650	600	650	530	120
Oct	725	700	725	650	75
Nov	805	800	805	725	80
Dec	945	900	945	805	140
Jan	1045	1000	1045	945	100
Feb	1135	1100	1135	1045	90
March	1195	1200	1200	1135	65

- 1.7 **Rounding off:** All bills will be rounded off to the nearest rupee i.e. up to 49 paise shall be ignored and 50 paise upwards shall be rounded 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%	4.5 (four point five percent)
Above 99 %	6.0 (six percent)

1.9 Load factor calculation

- (i) The **load factor** shall be calculated as per the following formula:

$$\text{Load factor (\%)} = \frac{\text{Monthly consumption X 100}}{\text{No. of hours in the billing month X Demand X PF}}$$

- Monthly consumption shall be units consumed in the month excluding those received from sources other than Licensee
- No of Hours in billing month shall exclude period of scheduled outages in hours.
- Demand shall be maximum demand recorded or contract demand whichever is higher
- Power factor shall be 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.

- 1.10 For **advance payment** made before commencement of consumption period for which bill is prepared, an incentive of 1 % per month on the amount which remains with the licensee at the end of calendar month (excluding security deposit) shall be credited to the account of the consumer after adjusting any amount payable to the licensee.

- 1.11 An incentive for prompt payment @ 0.25% of the bill amount (excluding electricity duty and Cess and arrears if any) shall be given in case full payment is made at least 7 days in advance of the due date of payment where the current month billing amount is equal to or greater than Rs. One lac. The consumers in arrears and or making payments in instalments 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)	30% of Normal rate of Energy Charge as Surcharge
2.	Off peak load period (10 PM to 6 AM next day)	Normal rate of Energy Charge.

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 the purpose of working out power factor incentive, 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 the contract demand, the tariffs given in various schedules shall apply to the extent of the contract demand only. The consumer shall be charged for excess demand on energy charges and fixed charges and while doing so, the other terms and conditions of tariff, such as minimum charge, PF Penalty, TOD Penalty shall be applicable but no incentive shall be

allowed. The tariff minimum charge on account of excess demand recorded in a particular month shall not be adjusted in subsequent months. The excess demand so computed, if any, in any month shall be charged at the following rates from all consumers.

- (ii) **Energy charges for excess demand:** The consumer shall pay charges @ 2 times the tariff for energy charges for consumption corresponding to excess demand in case the maximum demand recorded exceeds the contract demand.

Example: If a consumer having a contract demand of 200 kVA records a maximum demand of 250 kVA, the billing of energy charges for excess demand of $(250 \text{ kVA} - 200 \text{ kVA}) = 50 \text{ kVA}$ shall be = (total consumption recorded during the month* 50 kVA/maximum recorded demand)*2* energy charge unit rate.

- (iii) **Fixed charges for excess demand:** These charges shall be billed as per following:

1. **Fixed charges for excess demand** up to 15 % over and above the contract demand shall be charged at 2 times the normal fixed charges
2. **Fixed charges for excess demand** over and above 15 % of the contract demand shall be charged at 2.5 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 100 kVA at normal tariff.
 - b) Above 100 kVA up to 115 kVA i.e. for 15 kVA at 2 times the normal tariff.
 - c) Above 115 kVA up to 140 kVA i.e. for 25 kVA at 2.5 times the normal tariff.
- (iv) The excess demand computed in any month will be charged along with the monthly bill and shall be payable by the consumer.
- (v) The billing of excess demand at higher tariff is without prejudice to the Licensee's right to discontinue the supply in accordance with the provisions contained in the Electricity Supply Code, 2004.
- 1.15 **Delayed Payment Surcharge:** Surcharge at the rate of 1.25% per month or part thereof on the amount outstanding (including arrears) will be payable if the bills are not paid up to due date. The part of a month will be reckoned as full month for the purpose of calculation of delayed payment surcharge. The delayed payment surcharge will not be applicable after supply to the consumer is permanently disconnected.
- 1.16 **Service Charge for Dishonoured Cheques:** In case the cheque(s) presented by the consumer are dishonoured, a service charge at the rate of Rs. 1000/- per cheque shall be levied in addition to delayed payment surcharge as per rules. This is without prejudice to the Licensee's rights to take action in accordance with any other applicable law.
- 1.17 **Temporary supply at HT:** If any consumer requires supply for a temporary period, the temporary supply shall be treated as a separate service and charged subject to the following conditions:

- (a) 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 conditions mentioned hereafter. 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) 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.
- (c) Fixed Charges and Energy Charges shall be charged at 1.5 times the normal tariff. The fixed charge shall be recovered for the full billing month or part thereof.
- (d) The consumer shall guarantee minimum consumption (KWH) as applicable to the permanent consumers on pro-rata basis based on number of days as detailed below:

$$\text{Minimum consumption for additional supply for temporary period} = \frac{\text{Annual minimum consumption as applicable to permanent supply} \times \text{No. of days of temporary connection}}{\text{No. of days in a year}}$$

- (e) The billing demand shall be the demand requisitioned by the consumer or the highest monthly maximum demand during the period of supply commencing from the month of connection ending with the billing month, whichever is higher. For example:

Month	Recorded Maximum Demand (kVA)	Billing Demand (kVA)
April	100	100
May	90	100
June	80	100
July	110	110
August	100	110
September	80	110
October	90	110
November	92	110
December	95	110
January	120	120
February	90	120
March	80	120

- (f) 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.
- (g) The consumer shall pay metering charges for the metering system.
- (h) Connection and Disconnection Charges shall also be paid.
- (i) In case of existing HT consumer, the temporary supply may be given through existing permanent HT connection for the same purpose 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 under:-

- a) In case, recorded MD is found to exceed deemed CD in any month, the billing demand for that month shall be 100% of normal CD and demand recorded over and above normal CD.
- b) In case, recorded MD is found to exceed normal CD but less than or equal to deemed CD in any month, the billing demand for that month shall be 100% of temporary demand and balance demand against normal CD shall be billed as per the provisions of tariff order for permanent supply.
- c) In case, recorded MD is found to be less than normal CD in any month, the billing demand for that month shall be 100% of temporary demand and 90% of normal CD.

(iii) Consumption during the month shall be billed as under:-

Say the normal CD is A, temporary Demand is B and excess demand over and above (A+B) is C then

- a. Consumption for excess demand over and above deemed CD would be (x)

$$x = \frac{C}{(A+B+C)} \times \text{Total consumption}$$

- b. Consumption for temporary demand over and above permanent CD would be (y)

$$y = \frac{B}{(A+B+C)} \times \text{Total consumption}$$

- c. Consumption for permanent CD would be (z)

$$z = \text{Total consumption} - (x+y)$$

- (iv) The consumption worked out above for temporary connection shall be billed at 1.5 times the normal energy charges.
- (v) The demand in excess of deemed contract demand as calculated above at (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 2 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 * 2 (two)

Energy charges for excess demand = energy charges per unit for temporary connection * 2 (two) * (excess demand/deemed contract demand) * total consumption

- (j) 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 7.5% on the total amount of Fixed Charges and, Energy Charges billed in the month.
- 1.19 The existing 33KV consumer with contract demand exceeding 10000 kVA who want to continue to avail supply at 33kV 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.
- 1.20 The existing 132KV consumer with contract demand exceeding 50000 kVA who want to continue to avail supply at 132kV at his request, shall be required to pay additional charge at 3% 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. 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 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.
- 1.25 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.
- 1.26 All conditions prescribed herein shall be applicable notwithstanding if any contrary provisions, exist in the agreement entered into by the consumer with the licensee.
