MEGHALAYA STATE ELECTRICITY REGULATORY COMMISSION (MSERC)

Tariff Order

For

Annual Revenue Requirement &

Distribution Tariff

For

FY 2014-15

CONTENTS

LIST OF TABLES

LIST OF ABBREVIATIONS	
ABT	Availability Based Tariff
A&G	Administration & General
ARR	Aggregate Revenue Requirement
ATPEL	Appellate Tribunal For Electricity
CAGR	Compound Annual Growth Rate
CD	Contract Demand
CERC	Central Electricity Regulatory Commission
CGS	Central Generating Stations
CoS	Cost of Supply
CPSU	Central Power Sector Undertakings
Cr	Crore
CWIP	Capital Work In Progress
DE	Debt Equity
EHT	Extra High Tension
NER	North Eastern Region
FAC	Fuel Adjustment Costs
FDR	Fixed Deposits Receipts
FY	Financial Year
GFA	Gross Fixed Assets
HP	Horse Power
HT	High Tension
KV	Kilo Volt
KVA	Kilo Volt Amps
KW	Kilo Watt
kWh	kilo Watt hour
LNG	Liquefied Natural Gas
LT	Low Tension
MVA	Million Volt Amps
MW	Mega Watt
PLR	Prime Lending Rate
RIMS	Regulatory Information and Management System
YoY	Year on Year
NAPAF	Normative Annual Plant Availability Factor
MePGCL	Meghalaya Power Generation Corporation Limited
MePDCL	Meghalaya Power Distribution Corporation Limited
MePTCL	Meghalaya Power Transmission Corporation Limited
CoD	Commercial Operation Date
MSERC	Meghalaya Electricity Regulatory Commission
SLDC	State Load Despatch Centre

PGCIL	Power Grid Corporation of India Limited
CAGR	Compounded Annual Growth Rate
RLDC	Regional Load Despatch Centre
UI	Unscheduled Inter Change
NATAF	Normative Annual Transmission Availability Factor
ECR	Energy Change Rate
AFC	Annual Fixed Cost
IC	Installed Capacity
DC	Declared Capacity (in ex-bus MW)
NDY	Number of Days in the year

Meghalaya State Electricity Regulatory Commission

Before the Meghalaya State Electricity Regulatory Commission for the State of Meghalaya

Present

Anand Kumar- Chairman

In the matter of approval of Aggregate Revenue Requirement and retail tariff of Meghalaya Power Distribution Corporation Limited (MePDCL) for FY 2014-15.

- Petitioner

Order

12.04.2014

1. Introduction

1.1 Background

The Meghalaya Power Distribution Company Limited (here after referred to as MePDCL or Petitioner) has filed its Petition on 16th December, 2013 under section 62 of the Electricity Act 2003, read with Meghalaya State Electricity Regulatory Commission (Terms and Conditions for determination of Tariff) Regulations, 2011 for determination of Aggregate Revenue Requirement and determination of tariff for FY 2014-15.

The Commission has admitted the Petition on 19.12.2013.

1.2 Meghalaya Power Distribution Corporation Limited

The Government of Meghalaya unbundled and restructured the Meghalaya State Electricity Board with effect from 31st March, 2010 into the Generation, Transmission and Distribution businesses. The erstwhile Meghalaya State Electricity Board was transferred into four successor companies,viz,

1. Generation: Meghalaya Power Generation Corporation Ltd (MePGCL)
2. Transmission: Meghalaya Power Transmission Corporation Ltd (MePTCL)
3. Distribution: Meghalaya Power Distribution Corporation Ltd (MePDCL)
4. Meghalaya Energy Corporation Limited (MeECL) a holding company.

The Government of Meghalaya issued further notification on 16th September, 2013 notifying the revised statement of assets and liabilities as on 1st April, 2010 to be vested in Meghalaya Energy Corporation Limited.

As per the said notification issued by the Government of Meghalaya a separate company "Meghalaya Power Distribution Corporation Limited" (MePDCL) was incorporated for undertaking Distribution Business.

1.3 Meghalaya State Electricity Regulatory Commission

Meghalaya State Electricity Regulatory Commission (here in after referred to as "MSERC" or the Commission) is an independent statutory body constituted under the provisions of the Electricity Regulatory Commission (ERC) Act, 1998, which was superseded by Electricity Act (EA), 2003. The Commission is vested with the authority of regulating the power sector in the state inter alia including determination of tariff for electricity consumers.

1.4 Admission of the Petition and Public hearing process

The MePDCL has submitted the current Petition for determination of Aggregate Revenue Requirement (ARR) and determination of tariff for FY 2014-15. The Commission undertook the technical validation of the Petition and admitted the Petition on 19.12.2013.

In accordance with section 64 of the Electricity Act, 2003, the Commission directed the MePDCL to publish the application in abridged form to ensure public participation. The public notice, inviting objections/suggestions from its stakeholders on the ARR Petition filed by it, was published in the following news papers on the dates noted against each.

Sl	Name of paper	Language	Date of Publication
1	The Shillong Times	English	30.12.2013
2	U Mawphor	Khasi	30.12.2013
3	Chitylli	Jaintia	30.12.2013
4	Salantini Janera	Garo	30.12.2013

The Petitioner has also placed the public notice and the Petition on the website (www.meecl.nic.in) for inviting objections and suggestions on its Petition.

The interested parties/stakeholders were asked to fill their objections/suggestions on the Petition on or before 30.01.2014.

MePDCL/ Commission received some objections/suggestions from Consumers/consumer organisations. The Commission examined the objections/suggestions received and fixed the data for public hearing on MePDCL's petition to be held on 26.02.2014. Communication was also sent to the objectors to take part in the public hearing process for presenting their views in person before the Commission. The Public hearing was conducted at Commission's office in Shillong as scheduled. The Commission also held meeting with Advisory committee, proceeding of the meeting is annexed.

The names of consumers/consumer organisations those filed their objections and the objectors who participated in the public hearing for presenting their objections are given in the Annexure II.

A short note on the main issues raised by the objectors in the written submissions and also in the public hearing along with response of MePDCL and the Commission views on the response are briefly given in chapter-3.

1.5 Commission's approach to this Order

The order is derived in to eight chapters as under:

1. The First chapter provides background of the Petitioner, the Petition and the details of the public hearing process and the approach adopted for this Order.
2. The Second chapter contains a summary of MePDCL ARR for FY 2014-15.
3. The Third chapter provides a brief account of the public hearing process, including the objections raised by various stake holders, the MePDCL response and the Commission's view on the same.
4. The Fourth chapter deals with the Commission's approach
5. The Fifth chapter deals with the performance review of MePDCL.

6. The Sixth chapter deals with the Aggregate Revenue Requirement (ARR) for FY 2014-15 and Commission's analysis and orders.
7. The Seventh chapter deals with the tariff philosophy and design; and
8. The Eight chapter deals with the directives and issue of fresh directives.

2. Summary of ARR and Tariff Petition for FY 2014-15

2.1 Aggregate Revenue Requirement (ARR) for the FY 2014-15

The Meghalaya Power Distribution Company Limited (MePDCL) has submitted the Petition on 16th December, 2013 seeking approval for Aggregate Revenue Requirement and Determination of Retail Supply Tariff for FY 2014-15. The MePDCL has projected the revenue requirement for the control period as under:

Table 2.1: ARR proposed by MePDCL for FY 2014-15

(Rs crore)

Sl. No	Item of expenditure	FY 2014-15 (Projected)
1	Cost of Power Purchase	489.08
2	Inter-State Transmission Charge	61.82
3	MePTCL Transmission Charge	61.66
4	Employee costs	163.80
5	R&M expenses	13.35
6	A&G Expenses	9.25
7	Depreciation	35.80
8	Interest on Loan Capital	15.40
9	Interest on Working Capital	30.32
10	Return on equity	24.06
11	Income Tax	-
12	Provision for bad and doubtful debt	8.60
13	Cost of Solar REC	3.86
14	**Total revenue requirement**	**916.99**
15	Less: Non tariff income	31.66
16	Less: Cross Subsidy Surcharge	5.77
17	Less: RE Subsidy	20.00
18	**Net revenue requirement**	**859.56**

2.2 Estimated Revenue gap for FY 2014-15

Based on the ARR for FY 2014-15 given in the Table 2.1 above, the estimated Revenue gap for FY 2014-15 at existing tariff is shown in the Table below:

Table 2.2: Revenue Gap/Deficit

(Rs crore)

Sl.No	Particulars	Rupees
1	Net ARR of FY 2014-15	859.56
2	Revenue at Existing Tariff	509.84
3	**Revenue Gap**	**349.72**

2.3 MePDCL has requested the Commission

1. For approval of net ARR amounting to Rs 859.56 crore for FY 2014-15 as proposed in this Petition.
2. To consider revenue deficit of FY 2007-08, FY 2008-09 and FY 2009-10 of Rs 9.41 crore, Rs 11.48 crore and Rs 128.03 crore respectively while approving ARR for FY 2014-15.
3. To pass such Orders, as Hon'ble Commission may deem fit and proper and necessary in view of the facts and circumstances of the case.
4. To condone any inadvertent omissions, errors and shortcomings and permit the applicant to add/change/modify alter this filing and make further submissions as required.

The details of the ARR proposal of the licensee are being dealt with in the chapter six of ARR analysis.

3. Summary of Objections, Response of MePDCL and Commission's observation

In this chapter, the Commission has dealt with the suggestions/objections received by it on the ARR for 2014-15. The summary of objections, response of the licensee and Commission's view are given below:

Issue 1: Non-submission of audited accounts, unaudited accounts and True up petition.

M/s Byrnihat Industries Association has stated that the ARR petition and Tariff Petition for FY 2014-15 shall be rejected as the petitioner has not submitted the Audited Accounts, unaudited accounts and True up Petition.

Response of MePDCL

The True up petition for FY 2010-11 and FY 2011-12 will be submitted as soon as audited statements are available.

In the Tariff Regulation, 2011, there is no clause for performance review but for review and true up only. The filing of review petition for FY 2013-14 is due only after march 2014.

Commission's observation

The Commission could not true up the past years ARR in the absence of Audited Accounts. Though the provisional true up for 2009-10 has been but the final true could not be done as the licensee has made certain adjustments in bills of the consumers in accordance with the Supreme Court order which reflected in subsequent years. Unless the true up excise is updated with subsequent years, the true up of 2009-10 cannot give effect. In this regard, the Commission has already instructed the licensee to submit the audited records of subsequent years.

Therefore, 2009-10 to 2012-13, true-up could not be done. Soon after the accounts are made available by the licensee with a relevant petition truing up exercise will be done and necessary adjustment will be made in the ARR/Tariff on hand.

Issue 2: Submission of details in accordance with MSERC Regulations, 2011

M/s Byrnihat Industries Association has stated that the petitioner has to submit all details in accordance with the MSERC Regulation, 2011.

Response of MePDCL

In addition to submission of hard copies and soft copies to MSERC, the soft copy (electronic form) of ARR & Tariff petition has been uploaded in website.

Commission's observation

The petition is filed in accordance with MSERC Regulations. However, the requirement of the consumer is met by the licensee.

Issue 3: Audit of MePDCL accounts

M/s Byrnihat industries Association has requested the Commission to direct the petitioner to include all reports submitted in compliance to the directives of the Commission's order dated 30.3.2013 along with petition.

Response of MePDCL

The three Corporations i.e., MePGCL, MePTCL and MePDCL are segregated only as 1.4.2012 and the first ARR of MePDCL was determined only on 30.3.2013 for FY 2013-14 and the MePDCL is yet to segregate the cost of wire and retail business. Hence the MePDCL is not in a position to propose allocation matrix for retail and wire business. Further as per Regulation 23 of MSERC Regulation, 2011 there is no requirement of segregation of costs for retail and wire business for preparation of allocation matrix.

Commission's observation

The MePDCL shall submit the segregation of cost of supply business and wires business with the ARR & Tariff Petition for FY 2015-16.

Issue 4: Proposal in regard to peak hours and off peak hours

M/s Byrnihat industries Association has stated that the petitioner has not submitted any proposal in regard to peak hours and off peak hours as directed by the Commission in its order dated 30.3.2013.

Response of MePDCL

The MePDCL is internally working on the proposal on Time of Day Tariff (ToD) and propose the same as soon as the system is ready.

Commission's observation

The MePDCL shall submit the proposal for Time of Day (ToD) tariff by Sept 2014.

Issue 5: Non-submission of methodology for projecting category wise sales

M/s Byrnihat industries Association has stated that the petitioner has not submitted detailed methodology for projecting growth rate for difference categories of consumers nor slab-wise consumption for specific categories as per Regulation 89(2) of MSERC Regulation, 2011.

Response of MePDCL

The MePDCL has provided the detailed methodology for projecting category-wise sales in clause 3.2 of the petition for ARR and Distribution Tariff for FY 2014-15 dated 16.12.2013

Commission's observation

The MePDCL has submitted the methodology for projection of category-wise sales for FY 2014-15.

Issue 6: Difference in category-wise sales from FY 2008-09 of FY 2012-13

M/s Byrnihat industries Association has stated that the actual sales submitted by the Petitioner for FY 2009-10 to FY 2012-13 are different from those considered in Tariff order for FY 2013-14.

Response of MePDCL

The actual sale figures for FY 2008-09 to FY 2011-12 are the same in both the submissions. For example in table 1 of clause 3.2.3.3 of petition for ARR and Distribution tariff for FY 2014-15 dated 16.12.2013 the domestic sale is the sum total of Domestic LT, Domestic HT and Kutir Jyoti. Whereas in table 3 of chapter 6 of tariff order for FY 2013-14 dated 30.3.2013 the energy sale is shown separately for Domestic LT, Domestic HT and Kutir Jyoti. Also in table 1 of clause 3.2.3.3 of petition for ARR and Distribution tariff for FY 2014-15 dated 16.12.2013 only within the state sales is shown.

Commission's observation

The Petitioner has projected category-wise sales in the petition based on certain methodology adopted by them.

Issue 7: Submission of details as per Regulation 90(6) of MSERC Tariff regulation

M/s Byrnihat industries Association has requested the Commission to direct the petitioner to submit details as specified in Regulation 90(6) of MSERC Tariff regulation.

Response of MePDCL

The petitioner has submitted the details in accordance with Regulation 90(6) of Tariff Regulations, 2011 in Table 2 of the petition for ARR and Distribution Tariff for FY 2014-15 dated 16.12.2013.

Commission's observation

The response of the Petitioner is noted.

Issue 8: Difference in estimation of Domestic category sales

M/s Byrnihat industries Association has stated that in Form DI, the number of Domestic category sales have been estimated to reduce from 2.42 lakh in FY 2012-13 to 2.40 lakh in FY 2013-14, and are again projected to increase to 2.47 lakh in FY 2014-15. The following points therefore require consideration.

(a) The number of domestic category consumers can never reduce from year to year; and

(b) The petitioner claims that the sales to domestic have increased due to RGGVY, which would imply the number of domestic connections should actually increase rather than reduce.

Response of MePDCL

The petitioner submitted that the domestic sales shown in table.1 of the petition for ARR and Domestic Tariff for FY 2014-15 dated 16.12.2013 include sales to Domestic LT, Domestic HT and Kutir Jyoti. But in Format D1, the sales as well as no of consumers are shown separately for Domestic LT, Domestic HT, and Kutir Jyoti.

(a) The number of Domestic LT consumers are expected to increase every financial year. The reason for reduction in number Domestic LT category of consumers for FY 2013-14, as shown in Format D.1, is due to disconnection drive undertaken for non-payment of outstanding dues, surrender of connections by consumers etc.

(b) Under RGGVY, new connections are provided to Kutir Jyoti and (BPL category of consumers). The increase in number of Kutir Jyoti consumers and the consumption by this category is reflected for FY 2013-14 and FY 204-15 as per Format D.1.

The status of electrification of villages under RGGVY is regularly uploaded in REC website (http://powermin.gov.in/bharatnirman/pdf/Electrification achieved.pdf)

Commission's observation

The response of the Petitioner is noted.

Issue 9: Correction of skewed projection of sales for FY 2014-15

M/s Byrnihat industries Association has stated that while considering the growth rate for projection of sales for FY 2014-15, the petitioner is cherry-picking in adopting the methodology for various categories resulting in a skewed projection of sales for FY 2014-15 and correction by the Commission.

Response of MePDCL

The MePDCL has explained in detail the methodology adopted for energy sales projection in clause 3.2 of the petition for ARR and Distribution Tariff for FY 2014-15 dated 16.12.2013. It has followed a scientific approach in projecting sales. The reasons for increase in number of consumers, consumption variances for different categories and the growth rate for various categories cannot be the same.

Commission's observation

The growth in consumption of different categories of consumers is considered based on the past trend to forecast the category-wise sales for FY 2014-15.

Issue 10: Prudent check of estimated sales for FY 2013-14

M/s Byrnihat industries Association has stated that in Table 2 of the Petition, the projected sales have been shown as 1293.12 MU against the approved sales of 1665.53 MU for FY 2013-14. This requires prudent check as the actual sales for FY 2013-14 would form the basis for projection sales for FY 2014-15. Further a steep reduction of 97 MU in estimated sales to industrial HT category has been shown in FY 2013-14 and a reduction of 182 MU in estimated sales to industrial HT category as compared to the sales approved by the Commission in its tariff order.

Response of MePDCL

The methodology followed for projecting ARR is a bottom-up approach which means the Energy Balance and ARR are projected with appropriate assumptions, revenue gap is computed and then the tariff is proposed. The opposite approach, of projecting ARR and sales to achieve certain tariff increase, as stated by BIA has not been followed.

The MePDCL has studied the energy sales to industries (HT&LT) over last 5 years and found that the energy is showing a declining trend for almost 3 years now. In FY 2012-13 and FY 2013-14, the MePDCL has not imposed any power regulation for industries and to release new connections. However it was found that during FY 2013-14, despite having no power regulation, the energy sale has gone down and not a single consumer has come forward for release of new connection. Which projecting energy sales for FY 2014-15 MePDCL has considered all these factors and considered no growth for FY 2014-15 as against considering a negative growth.

Commission’s observation

As stated earlier the energy sales for FY 2014-15 estimated based on the past trend with judicious adjustment in growth based on present conditions.

Issue 11: Consideration of approved sales figures for FY 2013-14 and FY 2014-15

M/s Byrnihat industries Association has requested the Commission to consider sales figures approved for FY 2013-14 and FY 2014-15.

Response of MePDCL

MePDCL has made a realistic projection of energy sale for FY 2014-15. The category-wise energy sales during first half of FY 2013-14 is shown in Annexure A.

Commission's observation

The response of MePDCL is noted.

Issue 12: Energy availability for FY 2014-15

1) In Table 4 of the Petition MePGCL has submitted that energy availability has been shown as 865 MU while MePGCL in its petition for FY 2014-15, the net generation from its stations has been shown as 426.07 MU for FY 2014-15 and the total energy available for FY 2014-15 has been shown as 1670 MU, which is much less than the energy availability of 2393 MU approved by the Commission for FY 2013-14. The Commission is requested to approve energy availability more than 2393 MU for FY 2014-15 as newer generating stations are expected to be added in FY 2014-15 as per MePDCL's submission.

Response of MePDCL

As per clause 3.3.1 of the petition for ARR and Distribution Tariff for FY 2014-15 dated 16.12.2013, MePDCL has considered the existing as well as upcoming stations while projecting the energy availability and has clearly mentioned the assumption taken for energy availability projections. The energy availability from existing stations is projected by considering the present supply from these stations whereas energy availability from upcoming stations is considered by considering the status of project commissioning and expected share of Meghalaya in the same.

MePGCL has filed ARR petition for FY 2014-15 for Umiam Stage I to IV, Umatra and Sonapani stations and it does not include projection for Myntdu Leskha HEP. Whereas the MePDCL ARR petition includes availability of power MLHEP due to which availability is shown as 865 MU for FY 014-15.

Commission's observation

The Commission has considered the energy availability from central generating stations as per allocation of power by GOI to MePDCL and generation from MeGCL stations of Myntdu as approved for MePGCL ARR for 2014-15.

Issue 13: Banking arrangements for Power during shortage and payment of additional cost.

M/s Byrnihat industries Association has requested the Commission to:

(a) Direct the petitioner to undertake banking arrangements so that the consumers are shielded from additional power purchase cost during deficit conditions;

(b) Direct the petitioner to submit monthly likely energy availability as against monthly energy requirement;

(c) Any additional cost incurred due to costly power purchase should not be passed on to consumers; and

(d) To allow additional cost for the shortfall in energy procured directly through Fuel and Power Purchase Adjustment (FPPPA) mechanism only after prior approval as per Regulation 90(10) of MSERC Tariff Regulation.

Response of MePDCL

MePDCL, being a hydro dependent utility, the shortfall or excess generation by hydro stations cannot be projected accurately in advance and in case of any shortfall MePDCL may need to procure power from short-term market on a real-time basis in addition to exploring swapping options. Hence, the MePDCL, in clause

3.3.1 of the petition for ARR and Distribution Tariff for FY 2014-15 dated 16.12.2013, has requested the Commission to allow the pass on the additional cost through FPPPA mechanism.

Commission's observation

The availability indicates considerable surplus. The surplus power is considered for sale in the market.

Issue 14: Renewable Purchase Obligation

M/s Byrnihat industries Association has requested the Commission to the purchase price of solar REC only at a floor price as the RECs are being traded at floor price in the past several REC trading sessions.

Response of MePDCL

In clause 3.3.2 of the petition for ARR and Distribution Tariff for FY 2014-15 dated 16.12.2013 MePDCL has considered the weighted average price of Solar RECs at IEX for the period of April'13 to Nov'13 considering the market scenario. The cost as projected in clause 3.3.2 be allowed for procurement of Solar REC.

Commission's observation

The response of MePDCL is noted.

Issue 15: Distribution Loss – details for FY 2014-15 as in Regulation 91 of MSERC Tariff Regulation

M/s Byrnihat Industries Association and Cement Manufacturing Company Ltd stated that:

(1) The petitioner considered distribution loss for FY 2014-15 i.e., at 27.34%. Which is higher than 24% approved by the Commission. Also petitioner has

not submitted details as required in Regulation 91 of the MSERC Regulations 2011. The objectors have requested the Commission to retain the target of 24% approved by the Commission.

(2) T&D losses, to be considered for allowing power purchase, have to be considered at 24% and 1.5% additional revenue from reduction in commercial losses and overall losses in the State to be allowed at 21.79% as per approved trajectory.

(3) T&D losses of 24% should be considered only on the sale within the State, as considered by the Commission in its Tariff order for FY 2013-14 whereas the MePDCL has considered T&D losses of 27.34% on the sale within the State. As a result the quantum of energy that can be sold to traders has increased from 315 MU to 499 MU resulting in additional revenue. The Commission shall ensure that the consumers in the State are not deprived of the additional revenue.

(4) The Petitioner has submitted AT&C loss of 28.65% for FY 2012-13 and 33.11% for FY 2013-14. The target of AT&C loss for FY 2014 approved by the Commission is 21.79%. Whereas the MePDCL has projected A&T losses of 31.29%. In view of the increase in AT&C loss, the commission has to penalise the petitioner.

Response of MePDCL

In tariff petition for FY 2013-14, the distribution loss has been projected at 27.78% in FY 2012-13 and 26.28% for FY 2013-14. Against this, the Commission approved distribution loss of 26.87% for FY 2012-13, 25% for FY 2013-14 and 24% for FY 2014-15.

The MePDCL has submitted details as stipulated in Regulation 91 of the Tariff Regulation. The distribution loss is an important parameter which reflects the performance of the licensee and the MePDCL is taking all necessary steps to bring down the losses as detailed in the petition.

Commission's observation

The Commission has considered distribution loss as per trajectory fixed by the Commission for FY 2014-15.

Issue 16: Gross Fixed Assets

M/s Byrnihat industries Association has requested the Commission to direct the petitioner to submit complete scheme-wise and project-wise details in specified formats and also not to approve any addition in gross Fixed Assets if the petitioner does not furnish complete information regarding capitalisation of assets as per Regulations. The Commission is also requested to consider the GFA of Rs 240.56 cr for FY 2014-15 as proposed by BIA.

In Table 9 of the petition, the opening GFA as on 1.4.2012 was shown as Rs 235.35 crore whereas during the tariff proceedings, the opening GFA as on 1.4.2012 was shown as Rs 240.69 cr. The Commission is requested to take punitive action as the consumers are being unfairly burdened because of inflated figures submitted by the petitioner.

Response of MePDCL

Tariff Regulations require assessment of the present situation and preparation of estimates for current financial year and projection for next financial year. MePDCL has followed the same and prepared estimated addition to fixed assets during FY 2013-14 and projected addition to fixed asset during FY 2014-15 after assessing in detail the progress of ongoing schemes. MePDCL also submitted the list of schemes and projects considered for capitalisation during FY 2013-14 and FY 2014-15 in letter no: MePDCL/DD/T-440/74 dated 20.01.2014. Regarding difference in the addition to fixed assets shown for FY 2013-14, it is reiterated that as per ARR petition for FY 2013-14, the asset addition was a projection for future whereas in the ARR petition for FY 2014-15, the asset addition for FY 2013-14 is estimation for ongoing year. Hence the difference is logical and methodology is in line with the Tariff Regulation.

Commission's observation

Since the erstwhile Electricity Board is unbundled and the assets allocated to the MePDCL are considered for GFA and being reflected in the Accounts, the Commission has noted.

Issue 17: Power Purchase Cost

M/s Byrnihat industries Association has stated that:

(a) The fixed cost and variable cost for each central generating station has been projected by taking the overall weighted average rate of increase from FY 2012-13 to FY 2013-14. The Commission is requested not to consider any increase in tariff of central generating stations as CERC Tariff Regulations for FY 2014-15 to FY 2018-19 are yet to be notified.

(b) The Commission is requested to consider the power purchase quantum and cost of MePDCL stations as proposed by the BIA.

(c) There are material discrepancies in MePDCL's submission regarding outside state sale to bilateral sources, which have been indicated as 210 MU (Form D3 for FY 2013-14 and form D4 for FY 2013-14) and as 294 MU (Refer Table No 2 addition of UI/bilateral quantum as swapping –NVVN).

(d) The MePDCL has not projected the ARR for the new stations for FY 2014-15 in its petition.

(e) The average power purchase rate works out to Rs 2.30 per kWh as compared to Rs 2.29 kWh approved by the Commission in Tariff order for MePDCL for FY 2013-14.

Response of MePDCL

The response of MePDCL on the issues raised is as follows:

(a) Based on the draft Regulations of CERC, it cannot be concluded whether the cost of power purchase from CGS will go down. The historical power purchase cost has shown an increasing trend only and the historical growth rate forms the basis of projection, which is valid and logical. The Commission is therefore requested that the proposed marginal power purchase cost may be approved.

(b) MePDCL has done the power purchase quantum from central and MePGCL in a scientific and realistic manner and it may be approved.

(c) Regarding material discrepancy in MePDCL's submission, the Format D3 and Format D4 pertain to power purchase quantum and cost. The quantum shown against bilateral/swapping refers to purchase quantum and not sales quantum. Table 2 of the petition for ARR and distribution tariff for FY 2014-15 dated 16.12.2013 shows energy within the State and outside the State. It is incorrect to compare with Formats D3 & D4.

Commission's observation

The Power Purchase Cost from Central Generating Stations is considered based on actual power purchase cost during April to Nov 2013 and the cost of power purchase for MePGCL stations as approved by MSERC for 2014-15.

Issue 18: Transmission Charges

M/s Byrnihat industries Association has stated that the petitioner considered escalation of 10% on inter-state transmission and 5.72% on intra-state transmission charges. The Commission is requested to consider the inter-state transmission charges for FY 2014-15 at the same level as approved for FY 2013-14 and not to allow any escalation.

Response of MePDCL

Based on the draft Regulations of CERC, it cannot be concluded whether the inter-state transmission cost will go down. Historically, the inter-state transmission cost has shown an increasing trend only and the historical growth rate forms the basis for projection, which is valid and legal. The marginal increase in inter-state Transmission cost proposed may be approved.

Commission's observation

The transmission cost for Central are considered as projected by MePDCL and for State, as approved by the Commission for 2014-15.

Issue 19: Return on Equity

M/s Byrnihat industries Association has stated that the petitioner has proposed Return on Equity of Rs 24.06 Cr for FY 2014-15. The Commission in its tariff order for FY 2013-14 provisionally allowed Return on Equity of Rs 9.43 Cr in the absence of Annual Accounts for previous years from FY 2007-08 to FY 2012-13. As the petitioner has not submitted Annual Accounts for previous years, the Commission may approve Return on Equity at Rs 9.43 Cr for FY 2014-15 also.

Response of MePDCL

In view of restructuring of MeSEB, the outstanding state government loans and grants to MeSEB as on 31.03.2010 amounting to Rs 767.55 cr has been converted into equity and the additional grant received from the Government during year 2010-12 and 2011-12 has also be converted into equity. The opening balances as on 1.4.2012 are also required to be validated / notified by the State Government. The accounts for FY 2012-13 are under process of bifurcation by the Corporation Consultancy (PFCCL) subject to validation of the opening balance as on 1.4.2012. In view of this, the MePGCL is entitled the return on equity and it is requested that the Commission may take into cognizance the latest transfer scheme notification and the addition to equity from FY 2010-11 onwards.

Commission's observation

The response of the petitioner is noted.

Issue 20: Interest on Loan Capital

M/s Byrnihat industries Association has stated that the petitioner has claimed interest and finance charges of Rs 15.40 Cr for FY 2014-15 and requested the Commission not to approve the addition in loan during FY 2012-13 and FY 2013-14 due to non-submission of relevant scheme-wise data and also to consider interest and finance charges at Rs 6.35 Cr only as against Rs. 15.40 Cr proposed.

Response of MePDCL

As per Regulation 102(a) of Tariff Regulation, 2011 interest and finance charges on loan capital shall be computed on the outstanding loans duly taking into account the scheduled loan repayment terms and conditions of loan agreements, bond and debenture and the prevailing lending rate of bank and the financial institution. The MePDCL has followed the Tariff Regulations, 2011 and proposed the interest to loan, which may be approved.

Commission's observation

Interest on loan is approved as per regulations.

Issue 21: O&M Expenses

M/s Byrnihat industries Association has stated that the Commission approved O&M expenses of Rs 114.30 Cr for FY 2013-14 and the petitioner has proposed the O&M expenses of Rs 186.40 Cr for FY 2014-15. The Petitioner has submitted the estimated O&M expenses for FY 2013-14 as Rs 168.27 Cr which is 47% higher than the approved expenses and the petitioner has not submitted audited accounts for previous years. The Commission is requested to consider at the most an increase of 5.72% to provide for escalation based on the approach followed for generation business.

Response of MePDCL

O&M expenses include employee cost, R&M expenses and A&G expense. The assumptions and methodology adopted for projecting O&M expenses have been explained in clause 3.7.9 of the petition.

The employee cost consists of expenditure towards present as well as past employees and taking a normative increase of 5.72% will suffice the expenditure.

In order to maintain the network and to provide uninterrupted power supply to consumers, R&M expenditure shall be allowed with due consideration of newly added assets which may not get covered by allowing a normative of 5.72% increase in cost.

Allowing a normative increase of 5.72% of A&G expenses will not suffice the requirement. The increase in A&G expenses includes cost of various services, utility charges, rents, insurance, conveyance etc. The average rate inflation from 2012 to 2014 has been 9.8.

Commission's observation

O&M expenses are allowed on due prudence check of expenses claimed.

Issue 22: Interest on Working Capital

M/s Byrnihat industries Association has stated that the proposed interest on working capital is Rs. 30.32 Cr for FY 2014-15. The Commission approved IWC for FY 2013-14 based on actual records of the petitioner. As the petitioner has not submitted the audited accounts for previous years along with petition, the Commission may approve only Rs. 11.00 Cr, which is equal to IWC approved for FY 2013-14.

Response of MePDCL

As per Regulation 104 (2) of Tariff Regulations, 2011, interest on working capital shall be calculated on normative basis notwithstanding that the licensee has not taken working capital from any outside agency. The Commission may therefore allow interest on working capital on normative basis as proposed.

Commission's observation

Interest on working capital is allowed as per Regulations.

Issue 23: Depreciation

M/s Byrnihat Industries Association has stated that:

(i) The petitioner proposed depreciation of Rs 35.80 Cr for FY 2014-15. The Commission is requested not to approve any addition to GFA during FY 2012-13, FY 2013-14 and FY 2014-15 but to consider depreciation of Rs 13.54 Cr proposed by it against the depreciation of Rs 35.80 Cr proposed by the Petitioner; and

(ii) The Commission may undertake prudent check of the accumulated depreciation as on 1.4.2014 so that the assets are not depreciated beyond 90% of the asset value in accordance with the Regulation.

Response of MePDCL

While projection of addition in GFA, MePDCL has given due consideration to the progress of each scheme and project. MePDCL has to operate and maintain the upcoming distribution network from the expected date of commissioning. It is therefore essential to allow depreciation on projects which are expected to be commissioned in the current and the ensuing year in order to avoid losses and to encourage future investments.

Commission's observation

The depreciation is partly allowed on assets capitalised and put into beneficial use.

Issue 24: Bad Debts

M/s Byrnihat industries Association has stated that the petitioner has proposed a provision of Rs 8.60 Cr for bad and doubtful debts for FY 2014-15 as against Rs 5.00 Cr allowed in Tariff order for FY 2013-14. As the petitioner has not submitted details of written off dues in the petition, the Commission is requested to disallow the petition for FY 2014-15.

Response of MePDCL

The details of written off bad debts will be submitted at the time of true up. However at the time of approval of ARR, the provision for Bad and Doubtful debts should be 1% of the Net ARR as per Regulation 107 of Tariff Regulations, 2011.

Commission's observation

In the absence of Audited Accounts, a token provision of Bad debts is allowed.

Issue 25: Non-Tariff Income

M/s Byrnihat Industries Association has stated that the petitioner proposed non-tariff income of Rs 31.46 Cr as against non-tariff income of Rs 78.42 Cr submitted by the Petitioner for FY 2013-14. It is seen from table 10 of the petition that the main reason for reduction is due to reduction in late payment surcharge from Rs 64.83 Cr in FY 2012-13 to Rs 20 Cr in FY 2014-15. As the audited accounts have not been submitted, the Commission is requested to consider the non-tariff income of Rs 78.42 Cr submitted by the petitioner for FY 2012-13 for FY 2014-15 also.

Response of MePDCL

After implementation of Supreme Court order for billing of industrial consumers, the delayed payment charges have gone down substantially. Hence the MePDCL has proposed a lower non-tariff increase for FY 2013-14 and FY 2014-15. The Commission may consider the same.

Commission's observation

In the absence of Audited Accounts, Non tariff income is allowed based on past records.

Issue 26: Revenue at Existing Tariff

M/s Byrnihat industries Association has stated that the revenue for FY 2014-15 at the existing tariff would be Rs 745.14 Cr as worked by the Commission in Table 26 of the Tariff order for FY 2013-14. Further since the sales through bilateral sources will be actually higher at 499 MU as compared to 315 MU, the additional revenue on the additional quantum of sales through bilateral sources, i.e. 184 MU has been considered at the rate of Rs 3.60 per kWh as considered by the Commission in the Tariff order for FY 2013-14 which works out to Rs 66.24 Cr. The total revenue from the existing tariff works out to Rs 811.38 Cr.

Response of MePDCL

MePDCL has projected energy sales in a scientific and realistic manner. Therefore the Commission may approve the energy as proposed and the revenue at the existing tariff should be the same as proposed by the MePDCL in the petition for ARR and Distribution Tariff for FY 2014-15 dated 16.12.2003.

Commission's observation

The projected revenue is considered based on the energy sales approved by the Commission & existing tariff.

Issue 27: Revenue through Efficiency Improvement

M/s Byrnihat Industries Association has stated that the Commission has stipulated a commercial loss reduction trajectory of 1.5% for FY 2014-15 which translates to Rs 8.00 Cr, as considered by the Commission in Tariff order for FY 2013-14.

Response of MePDCL

MePDCL has considered the efficiency improvement and proposed T&D and AT&C for FY 2014-15 as compared to FY 2013-14 and considering revenue through efficiency improvement will not be logical. Hence the Commission may not consider any additional revenue through efficiency improvement.

Commission's observation

The objection and response of MePDCL are noted.

Issue 28: Revenue Gap / (Surplus) for FY 2014-15

M/s Byrnihat Industries Association has stated that there is actually a revenue surplus of Rs 122 Cr for FY 2014-15 rather than a revenue gap of Rs 350 Cr as projected by MePDCL and suggested to accommodate this gap through reduction in the tariff for industrial consumers of the State.

Response of MePDCL

The Cost components as well as revenue component may be approved as proposed in the petition for ARR and Distribution tariff for FY 2014-15 dated 16.12.2013.

Commission's observation

The Commission has arrived at the ARR based on due scrutiny of the proposal of MePDCL.

Issue 29: Objections on proposed Tariff Hikes.

M/s Byrnihat Industries Association has stated:

(a) Hike in Industrial Tariff:

The Tariff hike proposed for Industrial consumers is irrational and would have severe financial impact on the industrial consumers and they would be forced to close down.

(b) Cross Subsidy levels:

- (i) The petition does not contain the prevalent and proposed cross subsidies. The Commission is requested to keep the prevalent cross-subsidy in mind while determining the tariff for FY 2014-15. As per the judgement of APTEL, category-wise cost of supply or voltage-wise cost of supply have to be computed and cross-subsidy has to be measured with respect to category-wise/voltage-wise cost of supply rather than average cost of supply.
- (ii) The cost of supply for HT and EHT industrial consumers will be significantly lower than average cost of supply.
- (iii) The tariff and cross subsidy be determined on the basis of voltage wise/category-wise cost of supply rather than average cost of supply.
- (iv) There is a clear case for tariff reduction rather than increase as MePDCL has expected a revenue surplus of Rs 116 Cr in FY 2014-15 which amounts to an average reduction in tariff of 15.3%. Moreover the approach followed by the Commission tariff order for FY 2013-14 of increasing tariff across by a specific percentage to meet the approved revenue gap actually leads to increase in cross-subsidy which is against the mandate laid down in E.A 2003, Tariff Policy and several judgements of APTEL.

The Commission is requested to ensure reduction of cross-subsidy by reducing industrial tariff by around 20%, while the tariff reduction for other categories may be lower than the average reduction of 14%.

The Secretaries, Raid Shobhang, Khyim Syiemship, Rangbah Shnong, Nohwet, Mowshem etc. have stated that enhancement of energy charges, fixed charges of DLT and CLT is unbearable. The General Secretary, Khasi Students Union (KSU), Shillong in their letter dated 31.3.2014 have stated that MeECL's generation is mostly Hydro based and the cost of generation is range from Rs. 1.50 per kWh to Rs. 2.50 per kWh, even the rates of energy from CGS ranges from Rs1/kWh to Rs. 2.9/kWh, as such the proposed hike in fixed charges by 500% is not acceptable. They also suggested for an independent agency to carryout energy audit to ascertain the actual (AT&C) losses and high costs should be compensated by Government of Meghalaya by about 30% to 50%. The Meghalaya Pensioners Association in their letter dated 26.3.2014 and 3.4.2014 have requested to furnish PLF of the three units of Myntdu Leshka Project and also furnish technical calculation of the above project as already called for in their letter dated 14.3.2014 and till such time, the matter is sorted out the proposed hike in tariff be kept in abeyance.

Response of MePDCL

While proposing tariff for FY 2014-15, the following are considered:

(1) Guidelines of National Tariff Policy for keeping the cross-subsidy level in the range of +/- 20% and gradual reduction of cross-subsidy levels.

(2) FY 2012-13, the fixed cost of service was 77% (of total cost) as against fixed revenue of only 5% (of total revenue). The fixed cost is very high in proportion to the total cost which the MePDCL is not able to meet in case of sudden reduction in energy demand as the fixed revenue is very low. Hence while proposing the tariff for FY 2014-15, MEPDCL has tried to reduce the gap between fixed cost and fixed revenue. As per the proposed tariff, the revenue from the fixed charge is expected to be 29% (of the total revenue) as against a fixed cost of service of 75% (of the total cost).

Further the hike in tariff should be sufficient to meet net ARR and revenue at existing tariff. However there is a limit beyond which other consumer categories cannot subsidise the tariff of DLT, CLT, Kutir Jyoti category and impact of increased cost has to be passed on to cross subsidized category of consumers. Hence the rise in tariff is unavoidable.

As per Regulation 5 of Tariff Regulation, 2011, the cross-subsidy level for a particular category in the 1st phase means the difference between the average realisation per unit from that category and the combined average cost of supply per unit. As MePDCL is still in nascent stage of operation, it has arrived at the cross-subsidy level for each category by considering the difference between the average tariff for that category and the average cost of supply for the whole state. While proposing the tariff for FY 2014-15, the MePDCL has reduced the cross-subsidy level from that of FY 2013-14.

The existing tariff of Meghalaya is lower than the existing tariff of Assam, Tripura and West Bengal.

Commission's observation

T he Commission has approved the various components on due scrutiny and taken appropriate decision on tariff. Regarding energy audit, a directive was already issued.

Issue 30: Levy of Power factor penalty and billing as KVAh basis instead of kWh

M/s Byrnihat Industries Association has stated that only the billing for energy consumed are on the basis of KVAh, rather than kWh, the actual power factor maintained gets reflected in the energy billing itself. Hence there is no merit in levying power factor penalty charges over and above KVAh billing. The Commission may therefore either determine energy charges in kWh and levy power factor penalty or determine the energy charges in KVAh and discontinue the levy of power factor. In case power factor penalty is to be levied below a specific level of PF then power factor rebate should also be given for maintenance of PF above the specified level.

Response of MePDCL

No penalty is proposed to be levied on consumers billed under KVAh.

Commission's observation

The response of the Petitioner is noted.

Issue 31: Collection of project cost from Open Access consumers

Shri Abhinandan Goswami, Business Developmet, (North East) Indian Energy Exchange, New Delhi has requested that details of projected cost of Rs 5.77 Cr to be collected from OA consumers in FY 2014-15.

Response of MePDCL

The revenue from OA consumers is based on the actual revenue billed during first 6 months of FY 2013-14.

Commission's observation

The response of the Petitioner is noted.

Issue 32: Hike in fixed charges for crematorium

The Greater Shilling Crematorium & Mortuary Society has stated that seeking to revise the charge per connection per month from the existing charge of Rs 5200/- to Rs 18200/- and per unit from 300 paisa to 540 paisa is highly inflated and shall have a telling effect.

Response of MePDCL

The propose hike of fixed charge for crematorium from Rs 5200 per connection per month to Rs 18200/- per month is at an increase of 250% whereas the proposed hike of fixed charge for commercial HT category is from Rs 125 per kVA/month to Rs 450 at an increase of 260%.

Commission's observation

The Commission has examined all the issues related to tariff and has taken appropriate decision.

4. Commission's Approach

The Tariff petition was filed under MSERC (Terms and Conditions for Determination of Tariff) Regulation 2011. Under Section 61 of Electricity Act 2003, the Commission has to specify terms and conditions for determination of tariff and in doing so it shall be guided by the following:

- The principles and methodology specified by CERC for determination of generation and transmission tariff.
- Business of generation, transmission and distribution are to be conducted on commercial principles.
- The factors which encourage competition efficiency, good performance and optimum investments.
- Safeguarding consumers interest and at the same time recovery of the cost of electricity in a reasonable manner.
- Principles rewarding efficiency in performance.
- Multiyear tariff principles based on efficiency target.
- Tariff should reflect cost of supply.
- Promotion of generation from renewable energy.
- National Electricity Policy and Tariff policy.

National Electricity Policy prescribes that there is an urgent need for ensuring recovery of service from consumer to make the power sector sustainable. A minimum level of support may be required to make the electricity affordable for consumer of a very poor category. Consumers below poverty line may receive a special support in terms of tariff which is cross subsidized. It also says that existing cross subsidies should also be corrected to hide inefficiencies and losses. The act requires all consumers to be metered within two years time and TOD meters for large consumers with a minimum load of 1 MVA shall also be encouraged.

Regarding transmission and distribution losses, the policy prescribed that State Government would prepare a 5 year plan with annual milestone to bring down T & D losses expeditiously. Continuation of present level of losses would not only owes a threat to the power sector but also jeopardise the growth of the economy as a whole. Similarly electricity policy envisages encouragement of energy conservation and demand site management. Periodic energy audits are mandated for power intensive industries and encouragement of solar, water heating system is also encouraged.

Keeping in view the intent of electricity act, National Electricity Policy and Tariff Policy, the Commission has framed tariff regulations for generation, transmission and distribution tariff. The tariff regulations prescribe the following:

4.1 Application for Determination of Tariff – The distribution licensee shall file application for determination of tariff along with Annual Revenue Requirement in accordance with the procedure laid down by the Commission.

4.2 Estimation of Sales – Regulation prescribes the licensee shall adopt a suitable methodology like CAGR in computing category wise sales for the base year and ensuing year. The Commission accepted the approach used by the licensee wherever appropriate.

4.3 Distribution losses – The licensee shall furnish information on distribution losses for previous year and current year and the basis on which such losses have been worked out. The Commission has already framed a trajectory for reduction of losses for next five years and accordingly allowed distribution loss at 24% for 2014-15.

4.4 Estimation of energy requirement – Based on the estimated energy sales and the proposed distribution losses the Commission may determine the quantum of electricity required to meet the estimated sales and accord its approval. The Commission may approve the power purchase requirement with a modification as it deems fit for the ensuing year. In the tariff order for 2014-15, the Commission in accordance with regulation has allowed power purchase from all sources available/allotted to Meghalaya.

4.5 Power purchase cost – The licensee shall procure power from approved sources. Additional energy required after taking into account the availability of the energy from such approved sources shall be reasonably estimated and procurement arrangement made for long and medium term purchases by following standard contractual procedures. All such purchases shall only be made with the prior approval of the Commission and in accordance with Commission's regulation on power purchase. In case of short term power purchase is necessary on unprecedented development the licensee shall do the purchases in accordance with Commission regulation for power purchase. The cost of power purchase from central generating station shall be based on tariff determined by CERC. However, for state own existing generating stations the cost of power purchase shall be based on prices as determined by the MSERC. The Commission has in accordance with the regulation allowed CERC rates for central generating station and commission's approved rate for MePGCL. The Commission has also allowed RPO requirement from renewable sources of energy in accordance with the Commission's regulation.

4.6 Transmission and wheeling charges – Transmission, wheeling charges shall be considered as expenses and included in the power purchase cost. The Commission has allowed transmission charges for intra-state operation as per Commission's order for MePTCL for 2014-15 and others at the rate proposed by the licensee.

4.7 Annual Revenue Requirement – The annual expenses of distribution licensee shall comprise of the following**:**

(i) Power purchase cost

(ii) Capital Cost

(iii) Debt Equity

(iv) Return on Equity

(v) Interest on Loan capital

(vi) Operation and Maintenance expenses

(vii) Interest on working capital

(viii) Income Tax

(ix) Depreciation as may be allowed

(x) Bad and doubtful debt.

The net annual revenue requirement shall be made after deducting the following formats total expenses.

4.8 Amount of Non Tariff Income

Income from surcharge from open access consumers.

Wheeling charges recovered from open access consumers.

Any grant received other than subsidy.

4.9 Capital cost – The capital cost includes the actual capital expenditure till the date of commercial operation subject to prudence check by the Commission. Scrutiny of the cost shall be limited to reasonableness of the capital cost, financial plan, interest during construction as considered by the Commission. Any abnormal delay causing cost and time overrun attributable to the failure of utility, the Commission may not approve the full capitalization of interest and overhead expenses. In the absence of Audited Accounts, the Commission has provisionally accepted the licensee’s proposal and the same shall be validated after audited accounts are made available.

4.10 Debt Equity Ratio - For the purpose of determination of tariff the debt equity ratio of 70:30 will be applied for all new investments. Where equity employer is more than 30% the amount of equity for the purpose of the tariff shall be limited to 30% and where equity is less than 30% the actual equity shall be considered.

4.11 Return on Equity – Return on equity shall be computed on the equity based determined as above at a fixed rate of 14% per annum. The equity amount appearing in the audited balance sheet or as per transfer scheme will be taken into account for the purpose of calculating ROE. In absence of audited accounts the Commission is unable to accept return on equity as projected for 2014-15 and therefore on provisional basis the Commission has allowed same return on equity as allowed last year.

4.12 Interest on loan capital – Interest on loan capital shall be computed on the outstanding loan at the prevailing lending rate. However, it should not exceed the loan ceilings as defined above. The interest attributable to capital work in progress shall not be allowed**.**

4.13 Operation and maintenance expenditure – Operation and maintenance expenses shall include the following**:**

Employees cost.

Repair and maintenance.

Administration and General Expenses.

The distribution licensee shall submit to the Commission a statement of an O & M expenses under each head the actual of last year, estimates for the current and projection for the next year. In the absence of any norms the Commission shall determine O & M expenses based on prudence check. The Commission has allowed expenses based on the information of actual expenses in the previous year after applying escalation.

4.14 **Interest on working capital –** The working capital for supply of electricity shall consists of**:**

Operation and maintenance expenses for one month.

Budget for maintenance sphere.

Receivables equivalent to 2 months for sales of electricity.

Interest on working capital shall be equal to short term prime lending rate of SBI as on 1st April of relevant year. The Commission allowed interest as per Regulations.

4.15 **Depreciation –** The depreciation shall be computed on the cost of fixed assets as approved by the Commission on the opening assets values recorded in the Balance Sheet as per transfer scheme notification. For new assets the depreciation shall be given on the date of commercial operation. Consumer contribution or grant subsidy shall be excluded from the asset value for purpose of depreciation. Depreciation shall be calculated as per CERC norms. Depreciation shall be chargeable from the 1st year of commercial operation. In absence of information on grants and consumer's contribution, the Commission has allowed provisionally a part of charges.

Bad and Doubtful Debt – The Commission may after the distribution licensee gets the receivable audited allow a provision for bad debts not exceeding an amount equal to 1% receivable in the revenue requirement. In the absence of audited accounts, the Commission has provisionally provided a token amount.

4.16 **Forecast of Revenue** – The revenue of the distribution licensee shall be calculated from the sale of power to each category of consumer, non tariff income and income from other sources. The non tariff income shall consist of delay payment surcharge, meter rent, income from investment, etc. The Commission has allowed non tariff income based on previous year actuals.

4.17 Revenue gap – For the tariff year, the difference between the net annual revenue requirement and expected revenue at the current tariff shall be the revenue gap. This gap shall be bridged by improvement in internal efficiency, utilisation of reserves and tariff changes as approved by the Commission.

4.18 Tariff Design – Tariff should be designed in two parts comprising fixed charges and energy charges. Tariff shall be applicable to consumer categories and as per slab as determined by the Commission. The Commission may rationalise the tariff structure so that is beneficent to consumers and the licensee. A differential tariff for peak and off peak may be designed to promote demand site management. The Commission has directed the licensee to propose time of day tariff for all HT/EHT consumers. However, the distribution licensee has requested the Commission to allow them time for programming their existing meters in accordance with the peak hours. Therefore the Commission could not apply TOD rates in 2014-15. The Commission on the proposal of licensee has introduced KVAH tariff for HT commercial consumers.

4.19 Validation of ARR – Regulation prescribes that previous year expenses should be based on audited accounts of the licensee so as to validate the details of expenses and revenue in the ARR for ensuing year. In the absence of audited accounts for 2010-11 and onwards of MeECL, the Commission has allowed tariff the basis of actual data of first half of 2013-14.

The Commission while determining the tariff for FY 2014-15 has followed its Regulation keeping in view the ground realities of the State. The Commission has tried to make a balance between the interest of the consumers and the interest of licensee.

5. Review of Performance of MePDCL

The Commission had issued a number of directives to the MePDCL on reduction of distribution losses, (AT&C loss), Computerisation of billing, Energy audit in the tariff order dated 20th January 2012. The Licensee had submitted the action taken report vide letter dated 30th April 2012 as below:

1. Reduction of AT&C losses:

MePDCL has reported action taken on reduction of AT&C losses as follows

a) The process of achieving 100% metering is undertaken.

b) The process of billing of consumers in the urban area is taken up on the monthly basis and urban areas on bi-monthly basis.

c) Action is initiated to speedy replacement of defective meters in consumer installations by procuring 3898 meters in the process of replacing defective meters.

d) The DISCOM has obtained sanction of procuring 20,000 meters to be installed for unmetered consumers. It proposes to complete the process by August 2013.

e) MePDCL has created a cell in Byrnihat area to analyse the consumption trend in industries.

f) It is further submitted that the DISCOM has replaced electromagnetic meter with electronic meter at all HT, EHT consumers and regular meter readings are organised for taking meter readings by Meter Reading Instrument (MRI).

g) In order to control losses, the MePDCL has also initiated intensive disconnection drive to improve revenue collection.

h) MePDCL is also conducting inspections and surveillance to check theft and pilferage of electricity.

The MePDCL has also pursuing with State Govt. to setup special police station to strengthen the vigilance activities related to theft/pilferage of electricity and unauthorised use of electricity.

2. Computerisation of Billing:

The MePDCL has reported the action initiated on the revenue realisation from consumers

a) Web based payment will be operational in nine towns- Shillong, Tura, Nongstoin, Jowai, Mairang, Cherra, Resubelpara, Williamnagar and Nongpoh after completion of R-APDRP schemes.

b) Facility is created for payment of bills through cash or cheque in the urban areas and preference has been given to senior citizens especially in Shilling.

c) Since the number of consumers making payments in a single day is not high in rural areas, normal cash counters are open. MePDCL has also started collecting payment from the villages through special camp in market base.

The facility of common service centre is also being examined for collection of revenue.

d) After completion of R-APDRP project, the facility of deposit of bills at collection centres will be operational.

e) Drop boxes at various collection centres at different branches of Axis bank are introduced.

f) Separate counter is introduced for women and senior citizen in Shillong.

3. Energy Audit:

The MePDCL has submitted that the energy audit is not being done at all the 33 kV sub-stations. However, for sample case, energy audit is being done at Keating Road Service Station. Similarly, energy audit at distribution transformer level is being done at Police Reserve Complex in Shillong. MePDCL informed that 11kV feeder supplying energy at Malki has above 36 consumers and loss level of the feeder is 14.20%. Similarly, the loss level of 11 kV Laban feeder is 20.70% are for 11 kV Bara Bazar feeder is 15.20%.

Commission's Initiatives:

On receipt of MePDCL report discussed above, the Commission has initiated suo-motu case for further examination of distribution losses in Shillong on sample basis. After hearing, the Commission has passed an order on 7th May 2013 issuing directives as under:

a) 11 kV Laban feeder, 11 kV Malki feeder and 11 kV Bara Bazaar feeder shall be further studied for losses.
b) The concerned officials/staff shall record the recording of meters installed at sub-stations and distribution transformers for assessment of losses.
c) The Commission has also identified eight number of distribution transformers in Bara Bazaar area for the purpose of calculation of distribution losses.
d) The Commission also directed the Licensee to strengthen the Energy Audit cell and expedite the audit exercise.

MePDCL has submitted a report on energy audit on 7th June 2013 giving details of losses at selected feeders as shown below:

Sl. No.	11 KV feeder	Period		Line Loss (%)
		From	To	
1	Bara Bazar	01.04.13	01.05.13	13.13
2	Malki	26.04.13	24.05.13	10.68
3	Laban	25.04.13	24.05.13	19.72

The Commission, on receiving the action taken by MePDCL on energy audit and reducing Distribution losses, has passed an order on 14th June 2013. The extract of the order is as follows:

"The Commission in its tariff orders for FYs 2011-12 & 2012-13 provided a trajectory for the licensee to reduce their line losses in next four years and improve its revenue. Further, in its tariff order for FY 2013-14, the Commission fixed an annual target of 1.5% improvement in the commercial losses so as to enable the MePDCL to get additional revenue of about 10 Crore in the financial year. Accordingly, the Commission directed the licensee to prepare an action plan for reduction of losses in each circle and nominate a nodal officer in each circle to send a report on revenue as billed & collected each month and the actual losses taking place to the Commission. The reduction of losses can be done by replacing defective meters, improvement in billing/collection, checking pilferages/thefts, conducting vigilance/inspections and changing electro mechanical meters with electronic meters for high revenue yielding consumers. In Chapter 8 of the tariff order dated 30.03.2013 for FY 2013-14, the Commission issued a number of directives that will help reduce the AT & C losses in the State of Meghalaya. MePDCL in its letter dated 30.04.2013, informed the Commission that suitable measures are being taken up for improving the current level of losses and that the 33/11 KV Keating Road substation was selected as a case study for the purpose of energy audit. MePDCL submitted a report on the energy audit for 11 KV feeders at Malki, Laban and Bara Bazaar as on 30th April 2013 and the revelation is that the losses are in the range of 15-20%. The losses as reported are significantly high and are a matter of concern for all stakeholders. Accordingly the Commission took a note of it and initiated a suo-moto case in the matter of energy audit on sample basis on 2.5.2013. This exercise was undertaken to study, analyse and take measures on some of the high yielding revenue area in the Shillong city and to tackle the current level of line losses. The case was registered and a notice was issued to MePDCL to be present in the hearing on 07.05.2013 with all relevant records pertaining to sample energy audit exercise done for Keating Road substation.

At the hearing held on 07.05.2013, the Commission discussed the matter of energy accounting at feeder and DT levels with the officers of MePDCL. The Commission selected 3 feeders for further study for the purpose of energy accounting namely the 11 KV Laban feeder, the 11 KV Malki feeder and the 11 KV Bara Bazaar feeder. MePDCL was directed to record the readings of meters installed at substation and meters placed at connecting distribution transformers on the same day and to note the level of losses. Similarly, the Commission identified some distribution transformers for the purpose of calculation of billing losses on high revenue yielding consumers located at the Bara Bazaar feeder. MePDCL was further directed to strengthen their energy audit cell so as to initiate and complete the energy audit exercise expeditiously. The data on this exercise was to be given by 7th June 2013. MePDCL submitted on 10th June, 2013 the information relating to energy losses in the selected feeders during the month of April 2013 and details of billing for consumers connected with the feeders. After preliminary examination of the data the Commission noted that the losses in the 11 KV feeders are in the range of 10-19%. In the Bara Bazaar, the 11 KV feeder has an overall loss of 13.13%. Some of the consumers connected on this feeder have line losses of not less than 15-20%. Similarly, at the Malki feeder, the overall loss level is 10.68%. The Laban feeder has the loss of 19.72%. All three feeders are having predominantly commercial consumers/offices. From the records, it is evident that there is an ample scope to tackle the present level of losses in order to fetch additional revenue for the licensee. Accordingly, the Commission fixed a hearing on 14.06.2013 to discuss the matter with MePDCL officers. The meeting was attended by Chief Engineer (Distribution) along with concerned officers of MePDCL. Today at the hearing, the Commission required MePDCL to explain its position on the distribution losses in Bara Bazaar and other areas. MePDCL explained to the Commission that there is a time lag in taking readings at the DT meters and at the consumer's *meters which may not indicate correct loss level at Bara Bazaar feeder. MePDCL requires 3 months time to complete the energy audit on the selected feeders by taking suitable measures. They further submitted that they are in the process of checking connections, replacing defective meters/incorrect meters with the meters as specified in the CEA's regulation in the selected areas. The Commission appreciates the efforts being taken up by the licensee in this exercise. After discussions, the Commission is of the view that the licensee should take suitable measures for reducing the losses in the above mentioned areas by doing the following:*

1) *That commercial consumers related with the current exercise have correct meters in accordance with CEA's Regulations.*
2) *That the reconciliation of energy accounts at the feeder's end with the consumer's billing to be done every month for another 3 months.*
3) *That the metering system at feeders' end, at distribution transformers' and at consumers' end selected for this exercise, is in order.*

The Commission anticipate that with this exercise the distribution losses in the selected areas will come within 9-10% in 3 months. The Commission shall review the matter after 3 months and pass orders as may be necessary"

The MePDCL has submitted further report on 13th September 2013 furnishing the details of commercial losses at different commercial complexes in Shillong under Bara Bazaar feeder and other feeders as below:

Sl. No.	**Name of feeder**	**Period**		**losses**
	11 KV	**From**	**To**	**%**
1	Bara Bazar feeder	01.04.13	01.05.13	13.13
		01.05.13	25.06.13	11.80
		25.06.13	01.08.13	9.96
		01.08.13	26.08.13	9.81
2	Malki feeder	26.04.13	24.05.13	10.68

		24.05.13	26.06.13	10.71
		26.06.13	02.08.13	10.15
3	Laban feeder	25.04.13	24.05.13	19.7
		24.05.13	26.06.13	38.10
		26.06.13	01.08.13	17.13
		01.08.13	27.08.13	10.14

The Commercial losses at different commercial complexes were further examined by MePDCL and the report is as follows:

Sl. No.	Name of complex	Period		losses
		From	To	%
1	Hotel Monsoon	25.06.13	11.09.13	22.04
2	MD Goenka Complex	25.06.13	26.08.13	8.18
3	Mirrulah Building	25.06.13	11.09.13	17.59
4	J Kharchandy Complex	25.06.13	26.08.13	1.55
5	Ajmera Marble Complex	25.06.13	11.09.13	5.89

1) MePDCL in its exercise has replaced 14 out of 20 consumers meters in Hotel Monsoon, 24 out of 45 energy meters in MD Goenka Complex, 11 out of 57 meters in Mirrulah Complex and 2 out of 7 energy meters has been replaced in J Kharchandy Complex. The Commission has advised MePDCL to encourage this kind of exercise in other circle so as to reduce losses from the present level.
2) On 8th January, MePDCL informed that due to addition of two distribution transformer in the Bara Bazaar their losses have been increased. However, for the commercial complexes Mirullah building and Ajmera Complexes have shown increase in losses.
3) MePDCL vide their letter dated 14.032014 submitted the latest position of energy audit. These details are related with energy audit of 11 KV feeders eminating from 33/11 KV keating road sub-station, namely the 11 KV Bara Bazar feeder, the 11 KV laban feeder the 11 KV Malki feeder. MePTCL has also submitted the report on commercial losses at the commercial buildings connected on 11 KV Bara Bazar feeder the latest position of energy audit is given below:

SN	Feeder	Period	Loss	Period	Loss	Period	Loss	Period	Loss	Period	Loss	Average Losses
1	11 KV Bara Bazaar	01.08.13 To 26.08.13	9.81%	26.08.13 To 21.11.13	9.76 %	21.11.13 to 19.12.13	20.67 %*	19.12.13 to 28.01.14	10.91 %	28.0 1.14 to 27.02.14	10.43 %	**10.23%**
2	11 KV Laban	01.08.13 To 27.08.13	10.14 %	27.08.13 To 21.11.13	9.48%	21.11.13 to 19.12.13	10.97 %	19.12.13 to 28.01.14	11.05 %	28.0 1.14 to 27.02.14	11.09 %	**10.55%**
3	11 KV Malki	02.08.13 To 27.08.13	10.15 %	27.08.13 To 22.11.13	12.96 %	22.11.13 to 20.12.13	11.17 %	20.12.13 to 28.01.14	11.28 %	28.0 1.14 to 28.02.14	11.19 %	**10.95%**

*It is reported that during this period a new transformer was added to the feeder and the same was not taking while calculating losses.

MePDCL also reported the losses at four big commercial complexes connected on bara bazaar feeder the details of energy audit are given below:

S N	Complex	Period	Loss	Period	Loss	Period	Loss	Period	Loss	Period	Loss	Average Losses
1	Hotel Monsoon	25.06.13 to 11.09.13	22.04%	21.11.13 to 19.12.13	3.92 %	19.12.13 to 28.01.14.	8.60 %	28.01.14 To 28.01.14	10.91 %	28.0 1.14 to 28.02.14	7.15%	**6.55%**
2	MD Goenka	25.06.13 to 26.08.13	8.18%	21.11.13 to 19.12.13	4.06 %	19.12.13 to 28.01.14.	9.54 %	19.12.13 to 28.01.14	11.05 %	28.0 1.14 to 28.02.14	6.43%	**7.05%**
3	Mirulla	25.06.13 to 11.09.13	17.59%	21.11.13 to 19.12.13	21.37 %	19.12.13 to 28.01.14.	23.2 9%	20.12.13 to 28.01.14	11.28 %	28.0 1.14 to 28.02.14	9.80%	**9.80%**
4	Ajmera Marble	25.06.13 to 11.09.13	5.89%	21.11.13 to 19.12.13	10.78 %	19.12.13 to 28.01.14.	7.05 %			28.0 1.14 To 28.02.14	7.64%	**7.84%**

Commission Analysis

After examining the data presented by MePDCL, the Commission has observed that the losses at the feeder level and at commercial complexes are still on higher side. The target should be set by MePDCL to reach at 9% overall losses at 11 KV feeders. Similarly at consumers level at DT level losses should not be more than 6%. Now these are the targets set for MePDCL to achieve in the above exercise. However, with this exercise the Commission has reached to a conclusion that there is a hope to control the losses at high revenue yielding areas by initiating such type of exercise. The Commission therefore direct the licensee to do the following immediately:

1. Constitute a dedicated team at head quarter level to monitor energy audit on regular basis at high revenue commercial consumers.
2. Select high yielding revenue areas in Shillong and other important places and identify 11 KV feeders and connecting sub-stations.
3. Delegate responsibility of energy recording and energy audit to the concerned meter reader, linemen, and Junior Engineers/AE and make them accountable.
4. Metering at selected Distribution Transformers connecting high yielding revenue consumers.
5. Smart metering at high revenue commercial consumers.
6. Regular energy audit of such feeders, distribution transformer and consumers billing.
7. Report the compliance to the Commission by 30th June 2014 and start sending report from 1st July 2014.

6. Aggregate Revenue Requirement (ARR) and determination of Tariff for FY 2014-15

6.1 Energy Sales

Proper estimation of category-wise energy sales for FY 2014-15 is essential to arrive at the quantum of power to be purchased and the likely revenue by the sale of energy.

This section examines in detail the consumer category-wise energy sales projected by MePDCL in its Petition for FY 2014-15 for approval of ARR.

6.2 Consumer Category

The MePDCL serves over 3.12 lakh consumers in its licensee area and the consumers are broadly categorised as under:

LT Category

Domestic

Commercial

Industrial LT

Public Lighting

Public water works

Agriculture

General Purpose

HT Category

Industrial HT, EHT

HT (bulk supply)

The DISCOM serves the consumers at different voltages at which the consumers avail supply. The rural consumers are not metered and their consumption is assessed.

6.2.1 Over all approach to sales projection

MePDCL has projected the energy sales for FY 2014-15, taking the estimated sales for FY 2013-14 as its base. It is stated that it has estimated the category wise energy sales for FY 2014-15 are based on the past trend of energy consumption for different categories of consumers. It is further stated that the projection of energy sales for FY 2014-15 is based on the steps mentioned below:

Step 1: Energy sales estimation for FY 2013-14	- **Industrial (HT& EHT) Categories:** Based on actual sales during first half of FY 2013-14. - **Other Categories:** Based on actual sales during 1st quarter of FY 2013-14.
Step 2: Growth rate determination for different categories	- **Industrial (HT, EHT) Category:** Because of declining trend no growth rate is considered. - **Other categories:** • 5 year CAGR till the year 2013 considered for categories having positive CAGR. • 5% growth rate considered for categories having negative 5 year CAGR. • 10% growth rate considered for categories having 5 year CAGR of more than 10%.
Step 3: Energy sale projections for FY 2014-15	**Within the state energy sale:** - Growth rate derived in Step 2 applied on FY 2013-14 estimated energy sales for respective categories. - Outside state energy sale through swapping as per MePDCL's obligation to

meet return swap obligation of MePDCL.

The MePDCL has furnished the category wise energy sales over the last 5 years (FY 2008-09 to FY 2012-13) based on the actual and projected the sales to the year 2014-15. The category wise sales over the last 5 years as furnished by the MePDCL and category-wise growth rates computed are shown in the Tables below:

Table 6.1: Historical data on category-wise energy sales

Sl. No	Category	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	CAGR
1	Domestic	231	232	271	317	334	9.55%
2	Commercial	44	52	62	76	75	13.82%
3	Industrial LT	5	6	7	7	6	3.65%
4	Industrial HT & EHT	524	463	477	513	477	-1.05%
5	Public Lighting	2	1	1	1	1	-2.52%
6	Public Water Works	31	32	34	38	37	6.93%
7	Agriculture	1	1	0.4	0.4	0.3	-11.17%
8	General Purpose LT	9	12	14	15	14	8.04%
9	HT(Bulk Supply)	65	63	64	70	68	0.37%
10	Crematorium	0.22	0.22	0.77	0.18	0.2	-2.89%
11	MeECL offices & Employees	36	37	37	38	39	-0.27%
12	**Total Sale**	**945**	**898**	**969**	**1075**	**1042**	**3.13%**

The category-wise growth rates computed are given in the Table below:

Table 6.2: Category-Wise Growth Rate of sales (%)

Sl. No.	Category	4 year CAGR FY 2013 over 2009	2 year CAGR FY 2013 over 2011	year on year CAGR FY 2013 over 2012
1	Domestic	9.66	11.02	5.36
2	Commercial	14.26	9.99	-0.66
3	Industrial LT	4.66	-7.42	-7.42
4	Industrial HT & EHT	-2.32	0	-3.57
5	Public Lighting	-15.91	0	0

Sl. No.	Category	4 year CAGR FY 2013 over 2009	2 year CAGR FY 2013 over 2011	year on year CAGR FY 2013 over 2012
6	Public Water Works	4.52	4.32	-1.32
7	Agriculture	-25.99	-13.4	-13.4
8	General Purpose LT	11.68	0	-3.39
9	HT (Bulk Supply	1.13	3.08	-1.44
10	Crematorium	-2.35	-49.04	5.41
11	MeECL officers & Employees	2.02	2.67	1.31
12	**Total Sale**	**2.47**	**3.7**	**-1.55**

6.2.2 Category wise projected energy sales

Based on the growth rates and methodology indicated above MePDCL has projected category-wise energy sales for the year 2014-15 as given in the Table below:

Table 6.3: Projected category wise Energy sales

Sl. No	Consumer Category	FY 2013-14 (Approved) (MU)	FY 2013-14 (Estimated) (MU)	Growth Rate considered	FY 2014-15 (P) (MU)
	LT CATEGORY				
1	Domestic (DLT) including MeECL's Office & Employees	345.89	323.11	8%	348.18
2	Commercial (CLT)	64.83	59.07	10%	64.98
3	Industrial (ILT)	8.71	5.74	5%	6.01
4	Agriculture (Ape)	0.45	0.16	5%	0.17
5	Public Lighting (PL)	1.1	1.2	5%	1.25
6	Water Supply (WSLT)	8.09	8.19	9%	8.89
7	General Purpose	16.99	16.45	10%	18.09
8	Kutir Jyoti	17.17	17.03	10%	18.73
9	Crematorium	0.26	0.23	5%	0.24
	HT CATEGORY				
11	Water Supply (WS HT)	35.15	26.9	4%	27.89
12	Bulk Supply	70.63	63.49	1.00%	64.15
13	Domestic (DHT)	22.14	18.81	4.66%	19.68
14	Commercial (CHT)	39.12	16.89	10%	18.58
14	Industrial (IHT)	350	253.12	0%	253.12

Sl. No	Consumer Category	FY 2013-14 (Approved) (MU)	FY 2013-14 (Estimated) (MU)	Growth Rate considered	FY 2014-15 (P) (MU)
	EHT CATEGORY				
15	Industrial	350	168.5	0%	168.5
	Within the state sale	**1,330.53**	**978.89**	**3.13%**	**1,018.48**
	OUTSIDE SALE				
16	Assam (33kV)	20	20.21	10%	22.23
17	U.I / Bilateral	315	177.62		
18	Swapping (NVVN)		116.4		159.5
19	**Total**	**1,665.53**	**1,293.12**		**1,200.23**

6.2.3 Category wise number of consumers and connected load

MePDCL has stated that as on 31st March, 2013, the total number of consumers in its area of operation is 3,11,781. The number of consumers and connected load is projected based on past trend and number of pending applications.

The category-wise number of consumers and connected load as submitted by MePDCL are as indicated in the Table below:

Table 6.4: The Category-wise number of consumers and connected load

Sl. No	Consumer Category	FY 2011-12		FY 2012-13		FY 2013-14 (E)		FY 2014-15 (P)	
		No of consumers	Connected Load (MVA)	No of consumers	Connected Load (MVA)	No of consumers	Connected Load (MVA)	No of consumers	Connected Load (MVA)
	LT CATEGORY								
1	Domestic (DLT)	2,29,211	314	2,42,241	328	2,39,714	333	2,46,924	359
2	Commercial (CLT)	19,405	53	18,534	54	19,329	58	20,296	61
3	Industrial (ILT)	830	12	824	12	849	12	892	13
4	Agriculture (Ape)	32	0.4	30	0.4	34	0.4	34	0.4
5	Public Lighting (PL)	60	0.3	60	0.3	54	0.3	57	0.3
6	Water Supply (WSLT)	509	6	424	5	468	6	515	6
7	General Purpose	1,936	11	2,005	12	1,997	11	2,097	12
8	Kutir Jyoti	44,058	11	47,135	12	52,060	13	60,398	15
9	Crematorium	1	0.2	1	0.2	1	0.2	1	0.2
	HT CATEGORY								
10	Domestic HT	66	15	67	15	71	17	76	19
11	Water Supply (WS HT)	30	8	27	8	31	9	32	10
12	Bulk Supply	155	43	156	46	161	42	163	44
13	Commercial (CHT)	151	15	122	16	85	18	90	20
14	Industrial (IHT)	144	152	145	151	150	163	158	167
	EHT CATEGORY								
15	Industrial	12	91	10	86	13	91	13	92
16	**Total**	**2,96,600**	**731**	**3,11,781**	**747**	**3,15,017**	**776**	**3,31,745**	**819**

6.3 Detailed analysis of energy sales projected

The category-wise energy sales given in Table 6.1 for the years 2008-09 to FY 2012-13 are the actual, the energy sales for FY 2013-14 are estimated and the energy sales for the year 2014-15 are projected based on the 4 year/2 year CAGR between the period FY 2008-09 and FY 2012-13 and year on year for the period between the year 2011-12 and FY 2012-13.

Since the revised estimates submitted by MePDCL for FY 2013-14 are the latest consumption figures, it is considered appropriate to project the sales for FY 2014-15 based FY 2013-14 (revised estimate) figures. In the absence of proper data, the Commission has considered the methodology adopted by MePDCL for estimation of energy sales wherever it is found to be appropriate.

6.3.1 Domestic (DLT) & MeECL's Officers & Employees.

Petitioner's submission

The sales to the domestic category constitute about 32% of total energy sales of the utility. While MeECL's Officers and Employees consumption is about 4%. Hither to there is a separate tariff for MeECL's Officers and employees. Now the MePDCL has admitted that the Board of Directors have decided to discontinue the employees category from FY 2014-15. Thus, MePDCL has projected the energy sales to domestic (DLT) category including MeECL' Officers and employees at 348.18 MU for FY 2014-15. MePDCL has projected the energy sales for the category at 348.18 MU adopting a growth rate of 8.0% against 9.55% CAGR for the period (FY 2008-09 to FY 2012-13). The Petitioner has not explained the basis for adopting 8% growth over estimated sales of FY 2013-14.

Commission's analysis

The projected growth for the last 4 years was 9.55%, MePDCL expects a growth rate of 8.0% during FY 2014-15. The basis for the growth rate of 8.0% is not explained. The CAGR over 4 year, 2 year and YoY growth rate computed are 9.66%, 11.02% and 5.36% respectively. There is no consistency in the trend. In view of the declining trend the growth of 8.0% adopted by MePDCL is considered reasonable but work out to 389MU.

The Commission approves the sales of 389 MU to domestic category including MeECL officers and employees for FY 2014-15.

6.3.2 Commercial (CLT)

The sales to this category constitute about 7.2% of total sales of the company.

Petitioner's submission

MePDCL has projected the energy sales to this category at 64.98MU for FY 2014-15 at a growth rate of 10% against 4 year CAGR of 13.82%.

Commission's Analysis

CAGR over the 4 year period (FY 2008-09 to FY 2012-13) is 14.26%, CAGR over 2 year period (FY 2010-11 to FY 2012-13) is 9.99% and YoY FY 2011-12 over FY 2012-13 is (-)0.66%. The Commission considers the growth rate of 10% (2 year CAGR) which workout to 68MU.

The Commission approves the sales of 68 MU for FY 2014-15 to Commercial category.

6.3.3 LT Industry

The sales to the category constitutes about 0.6% of total sales of the company.

Petitioner's submission

MePDCL has projected the sales to this category at 6.01MU at 5% growth in the methodology adopted by MePDCL for projection of sales for FY 2014-15. MePDCL has indicated that where the growth is negative, a growth of 5% is considered. Based on this methodology MePDCL has considered 5% growth for sales in LT industry.

Commission's Analysis

The CAGR of this category was 4.66% over a 4 year period (FY 2008-09 to FY 2012-13), (-)7.42% over a 2 year period (FY 2010-11 to FY 2012-13) and growth of (-)7.42% over a YoY (FY 2011-12 over FY 2012-13).

Since the growth rates over 2 year's period and YoY are negative, 5% is adopted by the Petitioner as per methodology indicated above. In the absence of proper data, it is appropriate to consider reasonable growth as the growth would not be negative. Hence the Commission considers the 5% growth projected by the MePDCL as per methodology indicated.

The Commission approves the sales of 7MU to LT industry for FY 2014-15.

6.3.4 Agriculture

Petitioner's submission

MePDCL has projected the sales of 0.17MU to this category at a growth rate of 5% as the sales to this category has recorded negative growth.

Commission's Analysis

The CAGR of this category was (-)25.99% over a 4 year period (FY 2008-09 to FY 2012-13), (-)13.4% over 2 year period (FY 2010-11 to FY 2012-13) and (-)13.4% YoY during FY 2012-13 over FY 2011-12. In view of the negative growth, the Petitioner has adopted 5 year growth as per methodology indicated. As discussed earlier the Commission considers 5 % growth where negative growth was recorded.

The Commission approves the sales of 0.17MU to Agriculture category for FY 2014-15.

6.3.5 Public Lighting

Petitioner's submission

The Petitioner has projected the sales to this category at 1.25 MU at a growth rate of 5%, as per methodology indicated above as the growth has been negative.

Commission's Analysis

The CAGR over a 4 year period (FY 2008-09 to FY 2012-13) was (-) 15.91%, over a 2 year period (FY 2010-11 to FY 2012-13) was 0 and also YoY growth rate was 0. Hence the MePDCL has adopted 5% growth as per methodology indicated. The Commission considers the growth of 5% as projected by the Petitioner as the growth cannot be negative for public lighting.

The Commission approves the sales of 1.25MU to public street lighting for FY 2014-15.

6.3.6 Public water supply (LT)

Petitioner's submission

The MePDCL has projected the sales to this category at 8.89 MU at a growth rate of 5% for public water works (LT).

Commission's Analysis

The MePDCL has not discussed the energy consumption of this category separately over the last 4 years. The sale during FY 2012-3 are 8MU and projected the sales of this category at 8.89 MU for FY 2014-15 at a growth rate of 9%. But, it actually workout to 10MU

The Commission approves the sales of 10MU to the category for FY 2014-15.

6.3.7 General Purpose

The sales to this category constitute about 1.3% of the total sales of the company.

Petitioner's submission

The MePDCL has projected the sales to the category at 18.09 MU for FY 2014-15 at a growth rate of 10% as per methodology adopted for projection of sales for FY 2014-15.

Commission's Analysis

The CAGR of the category was 11.68% over a 4 year period (FY 2008-09 to FY 2012-13), 0% over a period of 2 years (FY 2010-11 to FY 2012-13) and (-)3.39% the YoY consumption of this category is constant over the last 4 years at about 12 to 15 MU. Hence a growth of 5% is considered against 10% projected by the Petitioner.

The Commission approves the sales to the category at 17 MU for FY 2014-15.

6.3.8 Kutir Jyoti

The sales to Kutir Jyoti consumers constitute about 1.25% of total sales of the company.

Petitioner's submission

MePDCL has projected the sales to the Kutir Jyoti category at 19MU at 10% growth rate. The Petitioner has not provided past trend to the category.

Commission's Analysis

Kutir Jyoti consumers come under BPL category. Since a number BPL households are being electrified under RGGVY program of Government of India, the 10% growth adopted for Kutir Jyoti consumers is justified. However, the Commission considers the sales of 16MU for FY 2014-15.

The Commission approves the sales to Kutir Jyoti at 16MU for FY 2014-15.

6.3.9 Crematorium

The sales to this category are hardly about 0.23 to 0.24MU, hence the commission approves the sales to crematorium at 0.24MU for FY 2014-15.

6.3.10 HT and EHT Industries

The consumption of HT and EHT Industries constitute about 46% of total sales of the company.

Petitioner's submission

The MePDCL has projected the sales to HT and EHT category at 421.62 (253.12+168.5) with 0% growth in 2014-15. However, in 2012-13 the actual sale was 477MU (HT 274MU+ EHT 203MU). The Petitioner has not explained the reason for considering 0% growth rate for HT and EHT industry.

Commission's Analysis

The sales to these two categories HT and EHT together constitute to about 46% of total sales and contribute substantial revenue to the DISCOM. Though the Petitioner has not explained the reasons for considering Zero growth for projection of sales for FY 2014-15, it is considered that general recession in industry in the Country and new EHT industry opting to obtain power from outside utilising the open access facility might have contributed to zero growth in these two categories.

Hence the projection of 274MU for HT industry and 203MU for EHT industry in 2012-13 actual is considered by the Commission for FY 2014-15 with 0% growth.

The Commission approves the sales at 274MU to HT industry and 203MU to EHT industry for FY 2014-15.

HT (Others)

6.3.11 Water Supply (WS HT)

The MePDCL has projected the sales to the category at 27.89MU for FY 2014-15 at a growth rate of 4%. Past trend has not been provided. However the Commission considers 4% growth over actual sale of 28MU during FY 2012-13 for water works which work out to 30MU.

The Commission approves the sale of 30 MU to water supply (WS HT) for FY 2014-15.

6.3.12 Domestic (DHT)

The MePDCL has projected the sales to Domestic (DHT) at 19.68MU at a growth rate of 4.66% for FY 2014-15. As there is potential for growth in this category the **Commission approves the sales to Domestic (DHT) at 22MU as against MePDCL projection of 20MU for FY 2014-15.**

6.3.13 Commercial (CHT)

The MePDCL has projected the sales to Commercial (CHT) at 18.58 MU at a growth rate of 10% for FY 2014-15. The past trend to this category is not provided by the Petitioner. Since there is considerable potential for growth of commercial sector, the Commission considers the projection at 10% growth p.a. over actual sale of 19MU during FY 2012-13 which workout to 23MU.

The Commission approves the sales to Commercial (CHT) at 23 MU for FY 2014-15.

6.3.14 Bulk Supply

The sales to the Bulk Supply constitute about 6.5% of the total sales of the company.

Petitioner's submission

The MePDCL has projected the sales to HT (Bulk Supply) at 64.15 MU for FY 2014-15 at a growth rate of 1%.

Commission's Analysis

The CAGR over a 4 year period (FY 2008-09 to FY 2012-13) was 1.13%, 2 year period (FY 2010-11 to FY 2012-13) was 3.08% and YoY FY 2012-13 over FY 2011-12 was (-) 1.44%. Based on the trend available, the growth rate of 1% adopted by the Petitioner is considered reasonable by the Commission which workout to 69MU.

The Commission approves the sales to HT (Bulk Supply) at 69 MU for FY 2014-15.

6.4 Total Energy Sales

Total energy sales as projected by MePDCL and as approved by the commission for the FY 2014-15 are given in the Table below:

Table 6.5: Energy Sales projected by MePDCL and approved by the Commission for FY 2014-15

(MU)

Sl. No.	Consumer Category	Projected by MePDCL	Approved by the Commission
	LT Category		
1	Domestic (DLT) (Including MeECL's Officers and Employees).	348.18	387
2	Commercial (CLT)	64.98	68
3	Industrial (ILT)	6.01	7
4	Agriculture (Ape)	0.17	0.17
5	Public Lighting (PL)	1.25	1.25
6	Water Supply (WSLT)	8.89	10
7	General Purpose	18.09	17
8	Kutir Jyoti	18.73	16
9	Crematorium	0.24	0.24
	HT Category		
10	Industrial (HT)	253.12	274
11	Water Supply (WS HT)	27.89	30
12	Domestic (DHT)	19.68	22
13	Commercial (CHT)	18.58	23
14	Bulk Supply (HT)	64.15	69
15	**EHT Category**		
16	Industrial (EHT)	168.50	203
17	ASEB (General purpose)	22.23	22.23
18	**Total**	**1040.69**	**1149**

The Commission approves the total sales at 1149 MU for FY 2014-15 as against the proposal 1040.69 MU.

6.5 Distribution Losses

The MePDCL has projected the distribution losses at 27.34% for FY 2014-15.

Petitioner's submission

The MePDCL has submitted that there is considerable number of unmetered consumers in domestic category mainly in rural areas. The consumption of unmetered category is assessed, and the thus there is a possibility of higher actual consumption resulting in lower computation of distribution loss. The proposed distribution loss for FY 2014-15 is 27.34%.

Commission's Analysis

The Commission in its Tariff Order for FY 2013-14 has approved the distribution loss of 25% for FY 2013-14. The distribution loss should be lower for FY 2014-15than what was approved for FY 2013-14. Hence the Commission considers the distribution loss of 24% for FY 2014-15. The MePDCL should meter all the consumers to record actual consumption and conduct energy audit to arrive at accurate distribution losses. A directive to this effect is issued separately.

6.6 Energy Requirement

The total energy requirement of a distribution company to meet the total demand of its consumers would be the sum of estimated energy sales and the system losses (Distribution Losses) as approved by the Commission. Based on the energy sales and the distribution losses as discussed above, the energy requirement as projected by MePDCL and as approved by the Commission are given in the Table below:

Table 6.6: Total energy requirement for FY 2014-15

Sl. No	Particulars	Projected by MePDCL	Approved by the Commission
1	Estimated Energy Sales (MU)(including ASEB)	1041	1149
2	Distribution losses (MU)	392	363
3	Distribution losses (%)	27.34%	24%
4	Energy input required at the distribution periphery (MU)	1433	1512

6.7 Energy Availability.

Petitioner's submission

The MePDCL has submitted that it procures power from MePGCL, inter-state generating stations, located in NER and ER regions etc. while calculating the energy availability at transmission periphery from generating stations located in NER, only NER POC loss is taken and for stations in ER, the loss of ER and NER are considered.

The MePDCL has considered the intra-state transmission loss at 4%, the ER loss at 3% and NER loss at 1.9%.

The energy availability projected by MePDCL is given in the Table below:

Table 6.7: Energy Availability for FY 2014-15

Sl. No.	Station	Capacity (MW)	Firm allocation to MePDCL		Available to MePDCL
1	2	3	4 (%)	5 (MW)	6
1	**NTPC**				
	a) Farrakka -FSTPS-I&II	1600	0.50%	8.44	57.84
	b) KHSTPS STAGE - I	840	0.50%	4.43	30.36
	c) KHSTPS STAGE - II	1500	1.50%	22.06	151.14
	d) TSTPS STAGE - I	1000	2.20%	5.28	36.15
2	**NHPC**				
	a) Loktak HEP	105	12.40%	13.01	50.69
3	**NEEPCO**				
	a) Kopili Stage-I HEP	200	17.40%	34.79	85.02
	b) Kopili Stage-II HEP	25	13.70%	3.42	8.96
	c) Khandong HEP	50	16.90%	8.45	17.34
	d) Ranganadi HEP	405	11.50%	46.6	31.99
	e) Doyang HEP	75	11.50%	8.59	0
	f) AGBPP	291	11.80%	34.38	0
	g) AGTPP	84	11.80%	9.92	0
	h) Free power				60.48
4	**OTPC -PALLATANA GPP**	363.3	10.90%	39.5	275.22
5	**MePGCL**				
	a) Sonapani	1.5	100%	1.5	5.85
	b) Lakroh	1.5	100%	1.5	5.85
	c) Umiam Stage-I HEP	36	100%	36	76.58
	d) Umiam Stage-II HEP	20	100%	20	40.17
	e) Umiam Stage-III HEP	60	100%	60	124.37
	f) Umiam Stage-IV HEP	60	100%	60	162.13
	g) Umtru HEP	11.2	100%	11.2	21.88
	h) Myntdu-Leishka HEP	126	100%	126	428.4
6	**Total**				**1670.43**

Commission's Analysis

MePDCL has allocation of Power from the central generating stations of NEEPCO located in North Eastern Region (NER) and four stations of NTPC in Easter Region (ER).

In addition the generation from MePGCL stations is available to MePDCL. MePDCL has submitted that inview of the Power Regulation by NEEPCO, no energy supply is considered from Doyang, Ranganadhi, AGBPP and AGTPP stations.

The Commission considers the allocation of energy from all central generating stations including Doyang, Ranganadhi, AGBPP and AGTPP as per allocation to MePDCL. It is understood that the Power from Doyang, Ranganadhi, AGBPP and AGTPP is not available to MePDCL due to default in payment. This should be got resolved and energy has to be drawn from these stations also as the DISCOM has to pay heavy fixed costs without drawing power and variable costs of these stations are comparatively low. The surplus power, if any MePDCL may sell in the market instead of foregoing the allocation from central generating stations. In regard to MePGCL stations, the Commission has considered the generation (Net) approved for FY 2014-15. The energy available from NTPC, NHPC, NEEPCO and MePGCL stations for FY 2014-15 is given in Table below:

Table 6.8: Source-wise Energy Availability Approved by the Commission

(MU)

Sl. No.	Station	Capacity (MW)	Firm allocation to MePDCL		Actual Utilised	Firm Energy Entitlement
1	2	3	4 (%)	5 (MW)	6	7
1	**NTPC**					
	a) Farrakka -FSTPS-I&II	1600	0.50%	8.44	57.84	57.84
	b) KHSTPS STAGE - I	840	0.50%	4.43	30.36	30.36
	c) KHSTPS STAGE - II	1500	1.50%	22.06	151.14	151.14
	d) TSTPS STAGE - I	1000	2.20%	5.28	36.15	36.15
	Sub-Total of NTPC				**275.49**	**275.49**
2	**NHPC**					
	a) Loktak HEP	105	12.40%	13.01	50.69	50.69
	Sub-Total of NHPC				**50.69**	**50.69**
3	**NEEPCO**					
	a) Kopili Stage-I HEP	200	17.40%	34.79	85.02	85.02
	b) Kopili Stage-II HEP	25	13.70%	3.42	8.96	8.96
	c) Khandong HEP	50	16.90%	8.45	17.34	17.34
	d) Ranganadi HEP	405	11.50%	46.6	127.95	127.95
	e) Doyang HEP	75	11.50%	8.59	23.98	23.98
	f) AGBPP	291	11.80%	34.38	194.70	194.70
	g) AGTPP	84	11.80%	9.92	70.83	70.83
	h) Free power				60.48	60.48

Sl. No.	Station	Capacity (MW)	Firm allocation to MePDCL		Actual Utilised	Firm Energy Entitlement
1	2	3	4 (%)	5 (MW)	6	7
	Sub-Total of NEEPCO				**589.26**	**589.26**
4	**OTPC -PALLATANA GPP**	363.3	10.90%	39.5	275.22	275.22
	Sub-Total of OTPC				**275.22**	**275.22**
5	**MePGCL**					
	a) Sonapani	1.5	100%	1.5	5	5
	b) Lakroh	1.5	100%	1.5	-	-
	c) Umiam Stage-I HEP	36	100%	36	115	115
	d) Umiam Stage-II HEP	20	100%	20	45	45
	e) Umiam Stage-III HEP	60	100%	60	138	138
	f) Umiam Stage-IV HEP	60	100%	60	204	204
	g) Umtru HEP	11.2	100%	11.2	39	39
	h) Myntdu-Leishka HEP	126	100%	126	480	480
	Sub-Total of MePGCL				**1026**	**1026**
6	**Total**				**2216.66**	**2216.66**

6.8. Energy Balance.

Energy balance projected by MePDCL is furnished in table below:-

Table 6.9: Energy Balance projected by MePDCL for FY 2014-15

(Rs crore)

Sl. No.	Item	2014-15 (Projected)
A	**ENERGY REQUIREMENT**	
1	Energy sales within the State	1,018.48
2	Sales to common pool consumers	
3	Energy Sale to ASEB (33kV)	22.23
4	Sales to electricity traders	159.52
5	Sales to other distribution licensees	
6	**Total Sale within the state**	**1,040.71**
7	Distribution Losses	
(i)	MU	391.63
(ii)	%	27.34%
8	Total energy requirement (6+7(i))	1,432.34
B	**ENERGY AVALABILITY**	
1	Net thermal generation (own)	-
2	Net Power Purchase from MePGCL	830.63
3	Net Power Purchase from	
	a) Outside State	601.71
4	Net Power Purchase (1+2+3)	1,432.34

Commission's Analysis

The energy loss for NER system and ER system as verified by the Commission from NERLDC and ERLDC are at 3.48% and 2.3% respectively. The Commission has considered the losses accordingly.

Based on the approved energy sales, distribution losses and transmission losses, the losses in NER and ER systems at 3.48% and 2.3% respectively. The approved energy balance is as given in the Table below:

Table 6.10: Approved Energy Balance for FY 2014-15

Sl. No	Particulars	FY 2014-15
1	Energy sales (MU)	1127
2	Sales to ASEB (33KV)	22
3	Total sales within the state	1149
4	Distribution loss (MU) at 24%	363
5	Energy requirement at distribution periphery (MU)	1512
6	Transmission losses (MU)	63
7	Transmission losses (%)	4.0
8	Total Energy to be input to transmission system (MU)	1575
9	Energy availability from ER system	275.49
10	ER system losses (MU)	6.34
11	ER system losses (%)	2.3
12	Energy availability at NER system periphery	269.15
13	Energy available from NER stations	915.17
14	Total Energy flow on NER system (12+13)	1184.32
15	Losses in NER system (MU)	41.21
16	Losses in NER system (%)	3.48
17	Energy available from outside at state transmission periphery (14-15)	1143.11
18	Net energy available from MePGCL stations	1026
19	Total Energy available (17+18)	2169.11
20	Surplus/(deficit) (19-8)	594.11

The Commission has allowed power purchase from all sources as per entitlement. The Commission has not accepted the proposal of MePDCL to allow the fixed charges from NEEPCO without getting power from it. This will burden the consumers of the State. Therefore the Commission has considered all power available to MePDCL. MePDCL shall sell/bank/swap the surplus power after meeting the State requirement without restriction in supply. The revenue from such surplus sale has been adjusted in the ARR for 2014-15. MePDCL shall in compliance to the power purchase regulations make the demand schedule for all months in the year and mange the load accordingly.

6.9 Revenue Requirement for FY 2014-15

The components for calculation of revenue requirement (total expenses) for the FY 2014-15 are as follows:

- Power Purchase Cost
- Operation and Maintenance expenses
- Depreciation
- Interest on loans and Finance charges
- Interest on Working Capital
- Provision for Bad debts
- Return on Equity
- Provision for Tax

The projected expenses by MePDCL under each head and the analysis and decisions of the Commission are discussed below:

6.10 Power Purchase cost

6.10.1 Petitioner's submission

The MePDCL has submitted that the Power Purchase cost is projected as per the following assumptions:

- Power Purchase cost from inter-state generating stations is projected based on the prevailing CERC tariff and historical data. The fixed and variable cost for each generating station is projected by the overall weighted average rate from FY 2012-13 to FY 2013-14.
- The cost of procurement of power from MePGCL is projected considering nominal increase of 5.72% in the approved cost for FY 2013-14. However the cost of procurement from MePGCL will be the same as approved AFC by the Commission for FY 2014-15.
- Any additions claimed from central generating stations due to revision of Regulations etc, the additional Power Purchase cost will be claimed through Power Purchase Price Adjustment (FPPPA) mechanism.

➢ It is further submitted by MePDCL that in case of Power Purchase from short term market in addition to projected sources, the cost of the same may be allowed through Power Purchase Price Adjustment (FPPPA) mechanism.

The Power Purchase cost projected for FY 2014-15 in format D-4 is given in the Table below:

Table 6.11: Power Purchase cost Projected for FY 2014-05

Sl. No	Source	Energy (MU)	Fixed Cost (Rs Cr)	Variable rate (Rs/Unit)	Variable Cost (Rs Cr)	Total Cost (Rs Cr)	Unit cost/kWh
	NTPC						
1	Farakka	57.84	6.36	2.94	17.01	23.37	4.04
2	Talchar	36.15	4.14	1.74	6.3	10.44	2.89
3	Kahalgaon-I	30.36	4	2.81	8.55	12.54	4.13
4	Kahalgaon-II	151.14	20.93	2.72	41.13	62.06	4.11
5	BTPS	-					
6	**OTPC Palatana**	275.22	42.66	1.19	32.75	75.41	2.74
	NEEPCO	-					
7	Kopili Stage-I	85.02	4.73	0.51	4.35	9.08	1.07
8	Kopili Stage-II	8.96	0.73	1.06	0.95	1.67	1.86
9	Khandong HEP	17.34	3.93	1.25	2.17	6.1	3.52
10	Free Power (6% of Kopili I, II & Khandong)	60.48		-	-	-	
11	RANGANADI HEP	31.99	26.94	1.37	4.38	31.32	9.79
12	DOYANG HEP	-	5.63	2.33	-	5.63	-
13	AGTPP	-	9.99	2.55	-	9.99	-
14	AGBPP	-	33.18	2.05	-	33.18	-
	NHPC						
17	Loktak	50.69	9.03	1.37	6.95	15.98	3.15
	MePGCL						
18	Sonapani	5.85	0.33	0.6	0.35	0.68	1.16
19	Lakroh	5.85	0.42	0.39	0.23	0.65	1.11
20	Umiam Stage-I	76.58	5.89	0.51	3.93	9.82	1.28
21	Umiam Stage-II	40.17	3.28	0.73	2.93	6.2	1.54
22	Umiam Stage-III	124.37	9.83	0.71	8.88	18.71	1.50
23	Umiam Stage-IV	162.13	9.83	0.48	7.8	17.63	1.09
24	Umtru HEP	21.88	1.83	0.48	1.04	2.88	1.32
25	Myntdu-Leishka	428.4	71.65	1.5	64.09	135.73	3.17
	Total	**1,670.43**	**275.32**		**213.76**	**489.08**	**2.93**

6.10.2 Transmission Costs

Petitioner's submission

Inter-state Transmission Cost

It is submitted by MePDCL that inter-state transmission charges include power grid charges, scheduling and operating charges of RLDC and other Open access charges. The inter-state transmission charges are projected considering increase in share, addition of new inter-state transmission lines. Further a yearly increase of 10% is considered for per MW/month rate of PGCIL and POSOCO.

MePTCL Transmission cost

MePDCL has considered a nominal increase of 5.72% over the transmission cost of FY 2013-14. However it is submitted by MePDCL that MePTCL transmission cost will be the same as approved by the Commission for FY 2014-15

A summary of projected transmission costs pertaining to inter-state and MePDCL are given in the Table below:

Table 6.12: Transmission cost for FY 2014-15

(Rs crore)

Sl.No.	Particulars	FY 2013-14 (Approved)	FY 2014-15 (Projected)
1	Inter-state Transmission Cost	57.50	61.82
2	MePDCL Transmission cost	58.32	61.66
3	**Total**	**115.82**	**123.48**

Commission's Analysis.

MePDCL has projected the Power Purchase Cost at Rs 489.08 crore for purchase of 1670 MU from various sources for FY 2014-15. For purchase of power from central generating stations of NTPC, NHPC and NEEPCO, the Commission has considered the rates furnished by MePDCL in its FPPPA petition dated 31.10.2013. The cost of purchase of Power from MePGCL stations is considered as approved by the Commission for FY 2014-15. The additional cost if any, may be claimed under FPPPA mechanism by MePDCL. The Power Purchase Cost approved by the Commission is shown in the Table below:

Table 6.13: Power Purchase Cost Approved by the Commission for FY 2014-15

Sl. No.	Source	Energy Received (MU)	Variable Cost (Rs./Unit)	Total Variable Cost	Total Fixed Cost	Total Cost (5+6)	Unit Cost (Rs./kWh)
1	2	3	4	5	6	7	8
1	**NTPC**						
a	Farakka-I	57.84	2.75	15.91	6.06	21.97	3.80
b	Kahalgaon-I	30.36	2.59	7.86	3.70	11.56	3.81
c	Kahalgaon-II	151.14	2.49	37.63	19.00	56.63	3.75
d	Talcher-I	36.15	1.44	5.21	3.51	8.72	2.41
e	BTPS						
	Sub-Total of NTPC	**275.49**		**66.61**	**32.27**	**98.88**	**3.59**
2	**NHPC**						
a	Loktak HEP	50.69	1.21	6.13	8.28	14.41	2.84
	Sub-Total of NHPC	**50.69**		**6.13**	**8.28**	**14.41**	**2.84**
3	**NEEPCO**						
a	Kopili-I HEP	85.02	0.45	3.83	4.83	8.66	
b	Kopili-II HEP	8.96	0.94	0.84	0.66	1.50	1.68
c	Khandong HEP	17.34	1.11	1.92	3.56	5.48	3.16
d	Ranganadi HEP	127.95	1.22	15.61	24.42	40.03	3.13
e	Doyang HEP	23.98	2.08	4.99	5.49	10.48	4.37
f	AGBPP	194.7	1.84	35.82	29.49	65.31	3.35
g	AGTPP	70.83	2.36	16.72	9.23	25.95	3.66
h	Free Power	60.48					0.00
	Sub-Total NEEPCO	**589.26**		**79.73**	**77.68**	**157.41**	**2.67**
4	**OTPC-PALLATANA**	275.22	1.19	32.75	42.66	75.41	2.74
	Sub-Total of OTPC	**275.22**		**32.75**	**42.66**	**75.41**	**2.74**
5	**MePGCL**						
a	Sonapani	5	0.68	0.37	0.37	0.74	1.07
b	Lakroh						
c	Umiam-I HEP	115	0.58	6.67	6.65	13.31	0.91
d	Umiam-II HEP	45	0.82	3.69	3.7	7.39	
e	Umiam-III HEP	138	0.81	11.09	11.09	22.18	1.27
f	Umiam-IV HEP	204	0.54	11.09	11.09	22.18	0.86
g	Umtru HEP	39	0.54	2.07	2.07	4.14	0.84
h	Myntdu-Leishka HEP	480	1.41	67.77	67.77	135.54	
	Other charges to MePGCL (as per order for 2014-15)				2.91	2.91	
	Sub-Total of MePGCL	**1026**		**102.74**	**105.65**	**208.39**	**2.03**
6	**Total Power Purchase Cost**	**2216.66**		**287.96**	**266.54**	**554.50**	**2.49**

6.10.3 Transmission Costs

The transmission costs include the cost to be paid to PGCIL for regional transmission and cost of MePDCL for inter-state transmission.

The transmission charges of PGCIL are approved by CERC and to be paid by MePDCL on the basis of calculation in the regional accounts of North Eastern Region by NERLDC/NEPCO. Hence the Commission accepts the projections of MePDCL for PGCIL charges. The transmission charges of MePTCL are approved by the Commission in the Tariff Order for FY 2014-15. The transmission charges payable to PGCIL and MePTCL are as given in the Table below:

Table 6.14: Transmission Charges Approved by the Commission for FY 2014-15

(Rs crore)

Sl. No.	Particulars	FY 2014-15
1	Transmission charges of PGCIL	61.82
2	Transmission charges of MePTCL	72.79
3	**Total**	**134.61**

The Commission approves power purchase cost at Rs.689.11 crore including Transmission charges of Rs.134.61 crore for FY 2014-15 with an average cost of Rs. 3.11/kWh.

6.11 Operation and Maintenance Expenses

The O&M expenses comprises of employee expenses repairs and maintenance expenses and administration general expenses.

Item wise expenses projected by MePDCL for FY 2014-15 and Commission's approvals are discussed below:

6.11.1 Employee Cost

The MePGCL has projected employee cost at Rs. 163.80 Crore for FY 2014-15.

Employee Cost comprises of Basic Pay, Dearness Allowances, House Rent allowances, Medical Allowance etc and terminal benefits such as leave encashment, exgratia, pension and related allowances.

The actual expenses incurred during FY 2012-13, estimated for FY 2013-14 and projected for FY 2014-15 are furnished in Table below:

Table 6.15: Employee Cost furnished by MePDCL for FY 2014-15

(Rs crore)

Sl. No.	Particulars	FY 2012-13 (Provisional)	FY 2013-14 (Estimated)	FY 2014-15 (Projected)
	SALARIES & ALLOWANCES			
1	Basic Pay	51.86	55.66	57.33
2	Arrear Pay	9.81	-	-
3	Dearness Allowances	12.23	19.41	26.37
4	House rent allowance	-	-	-
5	Fixed Medical Allowance	9.79	10.09	10.90
6	Medical re-imbursement charges	1.28	1.40	1.52
7	Over time payment	0.77	0.79	0.85
8	Other Allowances	-	-	-
9	Generation and Other incentive	0.09	0.09	0.10
10	Bonus	-	-	-
11	Sub-Total	85.83	87.44	97.06
	Terminal Benefits			
12	Leave encashment	1.93	1.46	1.58
13	Staff Welfare	0.04	0.04	0.04
14	CPS	0.03	0.03	0.03
15	Workman compensation	0.13	0.15	0.16
16	Ex-gratia	1.07	1.13	1.22
17	Sub-Total	3.20	2.81	3.04
18	**Pension Payment**			
19	Basic Pension	25.56	26.94	29.11
20	Dearness Pension	-	-	-
21	Dearness Allowance	1.37	1.40	1.51
22	Any other expenses	27.33	30.07	33.08
	Sub-Total	**54.26**	**58.41**	**63.70**
	Total (11+17.22)	**143.29**	**148.66**	**163.80**
23	Amount capitalised	-	-	-
24	Net Amount	143.29	148.66	163.80
25	Add prior period expenses	0.92	-	-
26	**Grand Total**	**144.21**	**148.66**	**163.80**

Source: Table 12 of petition

The Employee cadre strength and productive parameters furnished by the MePDCL are detailed in Table below:

Table 6.16: Employee Cadre strength

(Rs crore)

Sl. No.	Particulars	FY 2012-13 (Provisional)	FY 2013-14 (Estimated)	FY 2014-15 (Projected)
1	Number of employees as on	2883	2862	2802

	1st April			
2	Number of employees on deputation/ foreign service as on 1st April	1	1	1
3	Total Number of employees (1+2)	2884	2863	2803
4	Number of employees retired/retiring during the year	59	62	80
5	Number of employees newly joined during the year	38	2	0
6	Number of employees at the end of the year (3-4+5)	2863	2803	2723

Table 6.17: Employees productive parameters

Sl. No.	Particulars	FY 2012-13 (Provisional)	FY 2013-14 (Estimated)	FY 2014-15 (Projected)
1	Number of consumers in million	0.31	0.32	0.33
2	Connected Load in kW	634,703	659,358	695,800
3	Line circuit in KM (LT+HT)			
4	Energy sold in MU	1061	999	1041
5	Employees per 1000 consumers	2.7	2.8	2.6
6	Employees per 1000 consumers	9.2	8.9	8.2
7	Share of employees cost in total expenses	NA*	19%	19%
8	Employee cost in paise/kWh of energy sold	NA*	144.34	142.84
9	Line circuit KM (EHT Lines)	-	-	-
10	Employees per KM of EHT line (Transmission related)	-	-	-
11	Power station installed capacity own generation (MW)	-	-	-
12	Employees per MW of capacity for generating company	-	-	-

* For FY 2012-13 separate ARR for MePDCL was not determined
Source: Format 3 of petition

Commission's analysis

The MePDCL in its letter dated 31.1.2014 has provided the actual employee expenses incurred during April 2013 to November 2013 (8 months) as detailed below:-

Sl	Particulars	Amount (Rs. In crore)
1	Management expenses for 8 months in FY 2013-14	48.22

2	1/3 of Management expenses	16.07
3	Prorata increase for FY 2013-14 (12 months)	24.11
4	Distribution employee cost for 8 months in FY 2013-14	51.88
5	Prorata increase for FY 2013-14 (12 months)	77.82
6	Total expenses for FY 2013-14 (3 + 5)	101.93

Considering the combined inflation of WPI and CPI, the Commission considers it reasonable to adopt annual increase of 9% over the above estimated expenditure during FY 2013-14 to project expenditure for FY 2014-15 which workout to Rs. 111 Crore.

The Commission approves employee expenses at Rs. 111 crores for FY 2014-15 as against Rs. 163.80 crore projected by MePDCL.

6.11.2 Repairs and Maintenance (R&M) Expenses

The MePDCL has projected R&M expenses at Rs. 13.35 crore for FY 2014-15. The petitioner submitted that Meghalaya being a hilly terriers and due to recent expansion in rural areas under RGGVY schemes the state demands comparatively more expenditure for maintaining the distribution network. Owing to on going restructuring activities and revenue deficit faced by MePDCL and its subsidiaries, MePDCL has not able to take up R&M works in extremely planned manner. The actual expenditure during FY 2012-13 and estimated for FY 2013-14 and projected for FY 2014-15 is furnished in Table below:

Table 6.18: R&M Expenses projected by MePDCL for FY 2014-15

(Rs crore)

Sl. No.	Particulars	FY 2012-13 (Provisional)	FY 2013-14 (Estimated)	FY 2014-15 (Projected)
1	Plant and Machinery	1.29	2.38	2.72
2	Building	0.75	1.39	1.60
3	Hydraulic Works	0.01	0.02	0.02
4	Lines and Cables	3.56	6.57	7.52
5	Vehicles	0.27	0.46	0.53
6	Furnitures and Fixtures	0.08	0.13	0.14
7	Office Equipments	0.15	0.25	0.28
8	Civil Works	0.25	0.46	0.53
9	**Total**	**6.36**	**11.66**	**13.35**

Sl. No.	Particulars	FY 2012-13 (Provisional)	FY 2013-14 (Estimated)	FY 2014-15 (Projected)
10	Add: Deduct share of other	-	-	-
11	**Total expenses**	**6.36**	**11.66**	**13.35**
12	Less: Capitalised	-	-	-
13	**Net expenses**	**6.36**	**11.66**	**13.35**
14	Add: Prior period	-	-	-
15	**Total expenses charges to revenue as R&M expenses**	**6.36**	**11.66**	**13.35**

Source: Table 13 of petition

Commission's analysis

AS verified from the Table the MePDCL has estimated at an escalation of 83% for FY 2013-14 over the actual expenditure during FY 2012-13 and projected with an increase of 15% for FY 2014-15 over the estimated expenditure during FY 2013-14. The Commission considers it reasonable to allow an escalation of 15% PA over the actual expenditure during FY 2012-13 to project R&M expenditure for FY 2014-15 which works out to Rs. 8.41 crore.

The Commission approves R&M expenditure of Rs. 8.41 crore for FY 2014-15 as against Rs. 13.35 crore projected by MePDCL.

6.11.3 Administrative and General Expenses (A&G)

The MePDCL has projected Administrative and General Expenses (A&G) at Rs. 9.25 crore for FY 2014-15. A&G Expenses comprise of rent, rates and taxes. Conveyance and travel, telephone and postage expenses professional and technical fee, electricity and water charges etc. MePDCL has furnished actual expenses during FY 2012-13, estimated for FY 2013-14 and projection for FY 2014-15 as detailed in Table below:

Table 6.19: A&G expenses for FY 2014-15 projected by MePDCL

(Rs crore)

Sl. No.	Particulars	FY 2012-13 (Provisional)	FY 2013-14 (Estimated)	FY 2014-15 (Projected)
1	Rent, Rates and Taxes	0.04	0.05	0.06
2	Insurance	0.51	0.68	0.80
3	Telephone, Postage and Telegrams	0.12	0.17	0.19
4	Consultancy Fees	-	-	-
5	Technical Fees	0.00	0.00	0.00

Sl. No.	Particulars	FY 2012-13 (Provisional)	FY 2013-14 (Estimated)	FY 2014-15 (Projected)
6	Other professional charges	0.25	0.30	0.35
7	Conveyance & Travel expenses	3.90	5.45	6.34
8	Electricity & Water Charges	0.01	0.01	0.01
9	Others	0.58	0.79	0.92
10	Freight	-	-	-
11	Other material related expenses	0.35	0.49	0.57
12	**Total expenses**	**5.76**	**7.95**	**9.25**
13	Less: Capitalised	-	-	-
14	**Net Expenses**	**5.76**	**7.95**	**9.25**
15	Add: Prior period	0.28	-	-
16	**Total expenses**	**6.04**	**7.95**	**9.25**

Source: Table 14 of petition

Commission's analysis

AS verified from the above Table the MePDCL has incurred expenditure to a tune of Rs. 6.04 crore towards A&G expenses during FY 2012-13 out of which Rs. 0.28 crore are prior period expenses. So the actual expenditure for FY 2012-13 is Rs. 5.76 crore (6.04-0.28). The MePDCL has estimated expenditure during FY 2013-14 at an escalation of 38% over actual expenses during FY 2012-13 and projected for FY 2014-15 at an escalation of 16% over estimated expenditure during FY 2013-14, which is on very high side. The Commission considers it reasonable to allow 15% escalation PA over the actual expenditure during FY 2012-13, in view of general increase in cost. This works out to Rs. 7.62 crore.

The Commission approves Rs. 7.62 crore towards A&G expenses for FY 2014-15 as against Rs. 9.65 crore projected by MePDCL.

Summary of O&M expenses for FY 2014-15. Summary of O&M expenses approved by the Commission for FY 2014-15 are furnished in Table below:

Table 6.20: O&M Expenses approved by the Commission for FY 2014-15

(Rs crore)

Sl. No.	Particulars	Projected by MePDCL	Approved by the Commission
1	Employee Cost	163.80	111
2	R&M Expenses	13.35	8.41

3	A&G Expenses	9.25	7.62
4	Total O&M Expenses	186.40	127.03

6.12 Capital Investment Plan

The MePDCL has projected capital investment of Rs. 82.28 crore and capitalisation of Rs. 179.25 crore during FY 2014-15. MePDCL has submitted various schemes under R-APDRP are being implemented for establishment of base line data, IT applications for energy accounting/ auditing, meter reading, billing and collection and for consumer servicing.

RGGVY project is being implemented in Jaintia Hills and Ribhoi Districts under 10th plan and East Khasi Hills South Garo, West Garo, East Garo and West Khasi Hills districts under 11th Plan which will cover a total of 1,09,275 BPL consumers, 1865 unelectrified villages and 3087 electrified villages.

- **Solar Lighting:** The green city project for Shillong & Tura envisages replacement of street lights by solar LED street lighting system in two phases. Out of total estimate of Rs. 25 crore earmarked Rs. 5 crore sanctioned for 1st Phase.
- **Pilot Wind Project:** Pilot Project of upto 1 MW is being developed in Jainta Hills District Rs. 7 crore under special assistance (2011-12) is sanctioned by Government of Meghalaya. Opening CWIP and the actual investment made during 2012-13 and estimated during 2013-14 and projected investment capitalisation are furnished in Table below:

Table 6.21: CWIP

(Rs crore)

Sl. No.	Particulars	FY 2012-13 (Provisional)	FY 2013-14 (Estimated)	FY 2014-15 (Projected)
1	Opening Balance	42925	41766	17140
2	Add: New Investments	7737	3802	8228
3	Total	50662	45568	25367
4	Less: Investment Capitalised	8896	28428	17925
5	Closing Balance	41766	17140	7442

Source: Format 17 of petition

Commission's analysis

The Government of Meghalaya has unbundled and restructured the erstwhile Meghalaya State Electricity Board with effect form 31st March, 2010 into Generation, Transmission and Distribution Businesses.

In the notification dated 31.03.2010 Government of Meghalaya has segregated assets between the above three functions as on 01.04.2008. According to the above notification, function wise capital work in progress as on 01.04.2008 is as detailed in Table below:

Table 6.22: CWIP as on 01.04.2008

(Rs crore)

Sl. No.	Name of the function	Amount (Rs. crore)
1	Generation	464.02
2	Transmission	28.24
3	Distribution	244.56
4	Holding Company	-
5	**Total**	**736.82**

Subsequently in notification dated 16th September, 2013 the government of Meghalaya has modified the transfer value of the assets and liabilities replacing earlier declared transfer value as on 01.04.2008 and according to which the total CWIP as on 01.04.2010 is Rs. 1330.80 crore (Function wise segregation is not furnished).

Thus from out of the total opening CWIP of Rs. 1330.80 crore as on 01.04.2010. The share of the MePDCL is furnished as Rs. 429.25 crore and new investments and capitalisation are as furnished in Table supra.

The capital investment of Rs. 82.28 crore and capitalisation of Rs. 179.25 crore during FY 2014-15 as furnished by MePDCL are considered.

6.13 Gross Fixed Assets (GFA)

The MePDCL has furnished gross fixed assets as on 01.04.2012 at Rs. 235.35 crore (after allotting GFA of MeECL proportionately to MePDCL, MePGCL and MePTCL) and furnished growth of GFA as detailed in Table below:

Table 6.23: Growth of GFA furnished by MePDCL

(Rs crore)

Sl. No.	Particulars	FY 2012-13	FY 2013-14	FY 2014-15
1	Opening GFA	235.35	327.47	611.74
2	Add: Additions to GFA during the FY	92.24	284.28	179.25
3	Less: Withdrawn during the year	0.13	-	-
4	Closing GFA at the end of FY	327.47	611.74	790.99

Source: Table 9 of petition

Commission's analysis

The Government Meghalaya in its notifications dated 31.03.2010 and 16.09.2013, has furnished segregated opening GFA as on 01.04.2008 and consolidated opening GFA as on 01.04.2010 as detailed in Table below:

Table 6.24: GFA as on 01.04.2008 (As per GoME notification dated 31.03.2010)

(Rs. crore)

Sl. No.	Particulars	Amount
1	Generation	286.49
2	Transmission	58.20
3	Distribution	175.48
4	Holding Company	5.00
5	Total	525.17
6	Consolidated GFA as on 01.04.2010 (Replacing transfer value as on 01.04.2008)	607.51

While so the MePDCL has furnished opening balance of GFA as on 01.04.2012 as Rs. 235.35 crore and additions during FY 2012-13 as Rs. 92.24 crore. But as per the data furnished in Table 2.21 above Rs. 88.96 crore are stated to be capitalised during FY 2012-13. Accordingly the growth GFA is reassessed as detailed in Table below:

Table 6.25: Growth of GFA approved by the Commission

(Rs crore)

Sl. No.	Particulars	2012-13	2013-14	2014-15
1	Opening GFA	235.35	324.18	608.46
2	Additions during the year	88.96	284.28	179.25
3	Deletions during the year	0.13	-	-
4	Closing GFA	324.18	608.46	787.71

6.14 Depreciation

The MePDCL has claimed depreciation of Rs. 35.80 crore for FY 2014-15 as detailed in Table below:

Table 6.26: Value of GFA & Depreciation for FY 2014-15 furnished by the MePDCL

(Rs crore)

Sl. No.	Particulars	Value of Assets at the beginning	Addition during the year	With drawn during the year	Value of assets at the end of year	Rate of depreciation	Depreciation charges for the year
1	Land	0.35	-	-	.35	0	-
2	Buildings	6.47	8.07	-	14.54	3.34	0.32
3	Hydraulic Works	0.01	-	-	0.014	5.28	0.00
4	Other Civil works	32.57	16.86	-	49.43	3.34	1.23
5	Plant & Machinery	63.89	27.19	-	91.08	5.28 & 6.33	4.05
6	Lines & cables	473.04	103.85	-	576.89	5.28	24.95
7	Vehicles	1.58	-	-	1.58	9.50	0.14
8	Furniture	1.53	-	-	1.53	6.33	0.09
9	Office equipment	3.70	15.65	-	19.35	6.33	0.66
10	IT Equipment	28.61	7.63	-	36.24	15.00	4.38
11	**Total**	**611.74**	**179.25**	**-**	**790.99**	**0.00**	**35.80**

Source: Format 6 of Petition

Commission's analysis

As seen from the capital investment plan furnished by the MePDCL most of the works are covered under R-APDRP and RGGVY schemes. Generally in such schemes 90% of funding is grant and 10% as loan subject to fulfillment of certain conditions. The MePDCL has not furnished the value of grants received so far and contemplated in current and ensuring years. Further the value of consumer contribution for capital works is also not furnished by MePDCL. As such 10% of total depreciation worked out is considered. Further as per regulation 106 of MSERC (Terms and Conditions for determination of tariff) Regulations 2010 depreciation shall be calculated on straight line method upto 90% of capital cost of the asset.

Depreciation has to be calculated on average cost of GFA at the applicable rate of depreciation. For distribution function the average applicable rate of depreciation is 5.28%.

Accordingly depreciation for MePDCL for FY 2014-15 is worked out as detailed in Table below:

Table 6.27: Depreciation for MePDCL for FY 2014-15 approved by the Commission

(Rs crore)

Sl. No.	Particulars	Depreciation for FY 2014-15
1	Opening GFA as on 01.04.2014	608.46
2	Additions during the year	179.25
3	Less: Deletions during the year	-
4	Closing GFA as on 31.03.2015	787.71
5	Average GFA	698.09
6	Rate of Depreciation	5.28%
7	Total Depreciation	36.86
8	10% (7)	3.69

However, the licensee has proposed repayment of loan to a tune of Rs. 4.37 crore during FY 2014-15 as such the Commission consider it reasonable to allow depreciation to the extent of repayment loan proposed by the licensee.

The Commission accordingly approves depreciation at Rs. 4.37 crore for FY 2014-15 as against Rs. 35.80 claimed by MePDCL.

6.15 Interest and Finance Charges

The MePDCL has projected interest and finance charges at Rs. 15.40 crore for FY 2014-15.

The MePDCL has furnished outstanding loans as on 01.04.2014 and proposed additional loans and rates of interest as detailed in Table below:

Table 6.28: Details of Loans for FY 2014-15 furnished by MePDCL

(Rs crore)

Sl. No.	Particulars	Opening Balance	Rate of Interest	Addition during the year	Repayment during the year	Closing Balance	Amount of interest paid
1	REC (Reschld)	4425.60	8%		78.98	4346.62	737.02
2	REC (REGVY)	4533.24	12.10%	738.10	358.30	4913.04	484.29
3	PFC (R-APDRP)	3397.40	9.00%			3397.40	305.76
4	Commercial Banks						
	Sub-total	**12356.21**		**738.10**	**437.28**	**12657.06**	**1527.07**
5	LIC					0	
6	Bills Discounting					0	
7	Lease Rental					0	
8	GPF					0	
9	CSS			0.00	0.00	0	0.00

Sl. No.	Particulars	Opening Balance	Rate of Interest	Addition during the year	Repayment during the year	Closing Balance	Amount of interest paid
11	Other (details to be given)	0.00				0.00	
12	Total	12356.24	0.00	738.10	437.28	12657.06	1527.07
13	Add: State Govt. Loan	98.80	9.31%	108.68		207.48	14.26
14	Total (12+13)	12455.04	0.09	846.78	437.28	12864.54	1541.33
15	Less: Capitalisation						
16	Net Interest						1541.33
17	Add: Prior Period						
18	Total Interest						1541.33
19	Finance Charges						12.63
20	**Total Interest and Finance Charges**						**1553.93**

Source: Format 7 of Petition

The MePDCL has stated that interest on Government Loans has not been considered. The summarised computation of interest and finance charges furnished by MePDCL has been furnished in Table below:

Table 6.29: Computation of interest and finance charges for FY 2014-15 as furnished by MePDCL

(Rs crore)

Sl. No.	Particulars	FY 2013-14	FY 2014-15
1	Opening Balance	93.98	123.56
2	Additions during the year	30.49	7.38
3	Repayment during the year	0.91	4.37
4	Closing Balance	123.56	126.57
5	Average Interest Rate	12.2%	12.1%
6	Interest Payable	15.02	15.27
7	Add: Finance Charges	0.11	0.13
8	**Total Interest and Finance Charges**	**15.14**	**15.40**

Source: Table 11 of Petition

Commission's analysis

The MePDCL has proposed additional loans of Rs. 7.38 crore from REC under RGGVY scheme and repayment of 0.7898 crore under REC normal and Rs. 3.583 crore under REC (RGVY). Accordingly the interest has been recalculated as detailed in Table below:

Table 6.30: Interest and Finance Charges Calculated by the Commission

(Rs. crore)

Sl. No.	Particulars	Rate of Interest	Opening Balance	Additions during the year	Repay ment during the year	Closing Balance	Av Loan	Interest
1	REC (Normal)	8%	44.256	-	0.7898	43.4662	43.8611	3.50
2	REC (RGGVY)	12.1%	45.3324	7.381	3.583	49.1304	47.2314	5.71
3	PFC (R-APDRP)	9%	33.974	-	-	33.974	33.974	3.06
4	Total		123.5624	7.381	4.3728	126.7506	125.0665	12.27
5	Finance Charges							0.13
6	Total Interest and Finance Charges							12.40

The Commission approves interest and finance charges at Rs. 12.40 crore for FY 2014-15 as against Rs. 15.54 projected by MePDCL.

6.16 Interest on Working Capital

As per Regulations 104 (1) of MSERC (Terms and Conditions for determination of Tariffs) Regulation 2011 the working capital components will be

(a) One month power purchase cost including transmission cost
(b) One month expenses of O&M Cost
(c) Two Months receivables

The rate of interest on working capital shall; be equal to the short term PLR of SBI as on 1st April of the relevant year.

Interest on Working Capital shall be calculated on normative basis not withstanding that the licensee has not taken capital loan from any outside agency.

The MePDCL has projected interest on working capital at Rs. 30.32 crore for FY 2014-15 as detailed in Table below:

Table 6.31: Interest on working capital projected by MePDCL for FY 2014-15

(Rs crore)

Sl. No.	Particulars	FY 2014-15
1	Power Purchase Cost for 1 Month	51.05
2	One month O&M expenses	15.53

3	Two months receivables	143.26
4	**Total**	**209.84**
5	Working capital	209.84
6	Short term PLR of SBI on 01.04.2013	14.45%
7	**Interest on working capital**	**30.32**

Source: Table 16 & 17 of petition

Commission's analysis

Interest on Working Capital is calculated on the approved costs as detailed in Table below:

Table 6.32: Interest on Working Capital approved by the Commission for FY 2014-15

(Rs crore)

Sl. No.	Particulars	Total Cost	Working Capital for FY 2014-15
1	Power Purchase Cost One month (including Transmission charge)	689.11	57.42
2	O&M Expenses one month	127.03	10.58
3	Receivables two months	548.38	91.40
4	Total		159.4
5	SBI PLR as on 01.04.2013		14.45%
6	Interest on Working Capital		23.03

The Commission approves interest on working capital at Rs. 23.03 crore for FY 2014-15 as against Rs. 30.32 crore projected by MePDCL.

6.17 Return on equity

As per regulation 100 (1) of MSERC (Terms and Conditions for determination of Tariff) Regulations 2010 for the purpose of determination of tariff, the debt- equity ratio of 70:30 will be applied for all new investments during financial year. Where equity employees are more than 30%, the amount of equity for the purpose of tariff shall be limited to 30% and the balance shall be treated as loan. Where actual equity is less than 30% the actual equity shall be considered.

Provided that the Commission may in appropriate case consider equity higher than 30% for the purpose of determination of tariff, where the distribution licensee is able to establish to the satisfaction of the Commission that deployment of equity more than 30% is in the interest of general public.

As per regulation 101 (1) the return on equity shall be completed on the equity base in accordance with regulation 100 and shall be at 14%.

1. The equity amount appearing in the audited balance sheet or as per transfer scheme notification will be taken into account for the purpose of calculating the return on equity for the 1st year of operation subject to such notifications as may be found necessary upon audit of the accounts if such a balance sheet was not audited.
2. The premium received while issuing share capital shall be treated as part of equity provided the same is utilised for meeting capital expenditure.
3. Internal resources created out of free reserves and utilised for meeting the capital expenditure shall also be treated as a part of equity.

While so the MePDCL has projected return on equity for FY 2014-15 at Rs. 24.06 as detailed in Table below:

Table 6.33: Return on equity by projected by MePDCL for FY 2014-15

(Rs crore)

Sl. No.	Particulars	FY 2012-13	FY 2013-14	FY 2014-15
1	Opening Equity	136.56	171.84	17.84
2	Additions during the year	35.28	-	-
3	Closing equity	171.84	171.84	171.84
4	Equity considered for RoE	98.24	171.84	171.84
5	RoE %	14%	14%	14%
6	**ROE**	**13.75**	**24.06**	**24.06**

Source: Table 10 of petition

Commission's analysis

As per the Meghalaya Power Sector reforms transfer scheme 2010 notified as 31st March 2010, function wise opening equity as o 01.04.2008 is as detailed in Table below:

Table 6.34: Function wise opening equity as on 01.04.2008

(Rs. crore)

Sl. No.	Function	Amount
1	Generation	248.40
2	Transmission	68.61
3	Distribution	135.48
4	Holding Company	510.76
5	**Total**	**963.25**

The Government of Meghalaya in its latest notification dated 16.09.2013 has modified the transfer value of assets and liabilities and furnished revised considered equity amount of Rs. 775.17 crore replacing the earlier declared transfer value as on 01.04.2008.

In the absence of audited accounts and function wise segregated of equity amount in the latest notification the Commission is unable to accept the return in equity projected for MePDCL for FY 2014-15. However the Commission considers it proper to allow the return on equity of Rs. 9.43 crore allowed during FY 2013-14 on provisional basis for this year also.

The Commission accordingly approves return on equity at Rs. 9.43 crore for FY 2014-15 as against Rs. 24.06 crore projected by MePDCL.

6.18 Bad and doubtful debts

The MePDCL has projected provision for bad and doubtful debts at Rs 8.608 crore for FY 2014-15 as detailed in Table below:

Table 6.35: Provision for bad and doubtful debts for FY2014-15 Projected by MePDCL

(Rs crore)

Sl. No.	Particular	Amount
1	Net Annual Revenue Requirement	859.56
2	Provision of Bad and Doubtful debt (%)	1%
3	**Bad and Doubtful Debt**	**8.60**

Source: Table 19 of Petition

Commission's Analysis

As per regulation 107, the Commission may be after the distributor license gets the receivable and allow a provision for bad debts not executed an amount equal to 1 percent receivable in the revenue requirement of the licensee. Here the receivable mean outstanding dues from the consumers at the end of the year. Further no provision need to be made for arrears due from Govt. departments. The MePDCL has worked out the provision for bad debts an ARR which is in correct.

In as much as the auditing accounts are not made available the Commission consider a token provision of Rs. 0.15 crore towards bad debts for FY 2014-15.

The Commission approves a provision of Rs 0.15 crore towards bad debts for FY 2014-2015 as against Rs 8.60 crore Projected by MePDCL .

6.19 Non-Tariff Income

The MePDCL has projected Non-Tariff income of RS.31.668 for FY 2014-15 as detailed in Table below:

Table 6.36: Non Tariff income Projected by MePDCL for FY 2014-15

(Rs crore)

Sl. No.	Particulars	FY 2012-13 (Provisional)	FY 2013-14 (Estimated)	FY 2014-15 (Projection)
1	Meter/Service rent	1.59	1.74	1.74
2	Late Payment surcharge	64.83	20.00	20.00
3	Theft/Pilferage of energy charges	-	-	-
4	Misc. Receipts	(0.60)	0.71	0.71
5	Misc. Charges	9.79	4.24	4.24
6	Wheeling Charges	-	-	-
7	Interest on staff loans & advance	0.01	0.01	0.01
8	Income from trading	-	0.01	0.01
9	Income from welfare activities	-	-	-
10	Discount/ Rebate from suppliers contractors	-	0.60	0.60
11	Investments and Bank balances	2.11	4.35	4.35
12	**Total Income**	**77.72**	**31.66**	**31.66**
13	Add: Prior period income	0.70	-	-
14	**Total Non-Tariff Income**	**78.42**	**31.66**	**31.66**

Commission Analysis

As per Regulation 112 of MSERC (Terms and condition for determination of Tariff) Regulation 2011, Non –Tariff income shall comprises of

- Delayed payment surcharge
- Meter rent

- Custom charges
- Miscellaneous receipts from consumers
- Interest on staff loans
- Recovery of energy
- Any other income. etc

As per the above Table actual non-tariff income during FY2012-13 is Rs.78.42 cr. As the business is expanding year by year. The non Tariff income shall also be increased. As such the Commission consider non-tariff income of Rs.40 crore for FY 2014-15.

The Commission accordingly approves non-tariff income at Rs.40 crore for FY 2014-15 as against RS.30.66crore projected by MePDCL.

6.20 Cross subsidy surcharge

The MePDCL has projected cross subsidy surcharge from the open Access consumer of the state as Rs.5.77crore for FY 2014-15.

The Commission approves cross subsidy surcharge of Rs. 5.77 crore for FY 2014-15 as projected by MePDCL.

6.21 State Government Subsidy.

The MePDCL has stated the state Government has provided RE subsidy of Rs.10.36 crore during FY 2012-13 and the MEPDCL has kept a provision of Rs 16.04 crore during FY2013-14 and expects Rs.20 crore as RE subsidy for FY 2014-15.

The approved ARR as discussed above is given in Table below along with ARR projected by the MePDCL for FY 2014-15.

Table 6.37: Aggregate Revenue Requirement for FY 2014-15

(Rs crore)

Sl. No.	Item of expenditure	FY 2014-15 (Projected)	Approved by the Commission
1	Cost of Power Purchase	489.08	554.50
2	Inter-State Transmission Charge	61.82	61.82
3	MePTCL Transmission Charge	61.66	72.79
4	**Total Power purchase cost**	**612.56**	**689.11**
6	Employee Costs	163.80	111.00
7	R&M Expenses	13.35	8.41
8	A&G Expenses	9.25	7.62
9	Depreciation	35.80	4.37
10	Interest on Loan Capital	15.40	12.40
11	Interest on Working capital	30.32	23.03
12	Return on equity	24.06	9.43

13	Income Tax	-	-
14	Provision for bad and doubtful debt	8.60	0.15
15	Cost due to meet RPO as per Regualtions	3.86	3.86
16	**Total Revenue Requirement**	**916.99**	**869.38**
17	Less sale of surplus power	**-**	184.74
18	Less: Non-Tariff Income	31.66	40.00
19	Less: Cross subsidy surcharge	5.77	5.77
20	Less: RE Subsidy	20.00	20.00
21	**Net Revenue Requirement**	**859.56**	**618.87**

6.22 Revenue Gap

6.22.1 Revenue from existing Tariff

MePDCL has projected revenue from existing tariff as Rs.509.84 crore for FY 2014-15. Based on the approved energy sales, the revenue from existing Tariff works out to Rs. 537.80 crore as detailed in the Table below:

Table 6.38 Revenue from existing tariff for FY 2014-15 approved by the Commission

Sl.	Category	Energy Sale (MU)	Fixed/ Demand Charges (Rs. Crore) /kW/kVA/month	Energy Charges (Rs. Crore)	Total Revenue (Rs. Crore)	Average Revenue (Rs. /kWh)
A	**LT Supply**					
1	Kutir Jyoti	16	2.90*	3.20	6.05	2.66
2	Domestic	387	15.08	121.53	136.60	3.53
3	Commercial	68	5.12	32.25	37.38	5.52
4	Industrial	7	1.09	2.78	3.87	5.85
5	Public lighting	1.25	.03	.52	0.55	4.98
6	Water supply	10	.50	4.51	5.02	5.28
7	General purpose	17	1.01	8.05	9.05	5.35
8	Agriculture	.17	0.02	0.05	0.07	2.94
9	Crematorium	.24	.006	0.08	0.08	3.23
	Total LT	**506.66**	**25.76**	**172.92**	**198.68**	3.84
B	**HT Category**					
10	Domestic	22	2.14	9.63	11.77	5.37
11	Commercial	23	2.25	10.46	12.71	5.53
12	Industrial	274	18.79	130.94	149.73	5.47
13	Water Supply	30	1.13	14.03	15.15	5.00
14	Bulk Supply	69	4.95	30.52	35.47	5.11
	Total HT	**418**	**29.26**	**195.58**	**224.84**	5.37
C	**EHT**					
15	Industrial	203	10.35	93.81	104.16	5.13
D	**Outside State**					
16	Assam (General Purpose)	22.23	0.34	9.78	10.12	4.55
17	**TOTAL**	**1149.89**	**65.71**	**472.09**	**537.80**	**4.67**

*unmetered

6.22.2 Revenue Gap

The revenue gap projected by MePDCL and approved by the Commission for FY 2014-15 in furnished in Table below:

Table 6.39: Revenue Gap/ (Deficit) for FY 2014-15

(Rs crore)

Sl. No.	Particulars	Projected by MePDCL	Approved by the Commission
1	Net ARR	859.56	618.87
2	Less: Revenue from existing Tariff	509.84	537.80
3	**Revenue Gap**	**349.72**	**81.07**
4	Energy sales (MU)		1150
5	Cost of supply (Rs/KWh)		5.38

6.22.3 Revenue from revised tariff

As seen from the above Table there is a gap of Rs. 81.07 crore between aggregate revenue requirement and revenue from sale of power at existing tariff which works out to around 13% of ARR. To meet the gap the Commission has considered revision of Tariff keeping in view the nature of use of electricity by consumers in Meghalaya, concerns of State Government to improve revenue mobilization efforts and approved the revised tariff for different categories of consumers with an average increase of 13% to 17%. However, the net increase in the present revenue shall be 10% after withdrawing the FPPPA (effective from Dec-13-March14).

Tariff designing and fixation of tariffs are discussed in Chapter-7 of this order. Revenue with the revised tariff rates is shown in Table below:

Table 6.40 Revenue from Revised tariff for FY 2014-15 approved by the Commission

Sl.	Category	Energy sale (MU)	Fixed/ Demand charges (Rs. Crore) /kw/kva/month	Energy Charges (Rs. Crore)	Total Revenue (Rs. Crore)	Average Revenue (Rs. /kwh)
A	LT Supply					
1	Kutir Jyoti	16	2.9*	3.60	6.50	3.0
2	Domestic	387	17.22	139.28	156.51	4.04

3	Commercial	68	5.85	36.94	42.79	6.31
4	Industrial	7	1.25	3.11	4.39	6.64
5	Public lighting	1.25	0.03	0.58	0.62	5.66
6	Water supply	10	.58	5.03	5.71	6.01
7	General purpose	17	1.15	8.98	10.30	6.08
8	Agriculture	0.17	0.02	0.08	0.10	2.98
9	Crematorium	0.24	0.006	0.08	0.09	3.58
	Total LT	506.66	26.12	207.05	233.47	4.62
B	HT Category					
10	Domestic	22	2.57	11.16	13.72	6.27
11	Commercial	23	2.70	12.07	14.77	6.42
12	Industrial	274	22.55	146.79	169.33	6.18
13	Water Supply	30	1.35	15.76	17.11	5.65
14	Bulk Supply	69	5.94	35.38	41.32	5.96
	Total HT	418	35.11	221.24	256.35	6.12
C	EHT					
15	Industrial	203	12.42	105.64	118.06	5.82
D	Outside State					
16	Assam	22.23	0.40	11.35	11.75	5.52
17	TOTAL	1149.89	74.12	545.62	619.63	5.38

* unmetered

The Commission accordingly approves revenue from revised tariffs at Rs. 619.63 crore with the sale of 1149.89 MU. This compares with the revenue of Rs. 537.80 crore at the existing tariff rates, the increase works out to Rs. 81.94 crore.

6.22.4 Revised gap for FY 2014-15

Taking into consideration of revised tariff, expected revenue from sale of power during FY 2014-15 has been arrived at Rs.619.63 crores. Therefore with this revision MePDCL is left with a surplus of Rs.0.76 crores. In the event of efficiency improvement, the licensee will be able to get more revenue. The Commission shall take a final view of adjustment of surplus/deficit in 2014-15 at the time of truing up after prudence check and efficiency improvement.

6.23 Truing up of past years ARR.

As per regulation 15 of MSERC (Terms and conditions for determination of Tariff) Regulation, 2011;

(1). The Commission shall undertake a 'Review' of the expenses and revenues approved by the Commission in the Tariff Order. While doing so, the Commission shall consider variations between approvals and revised estimates/pre-actuals of sale of electricity, income and expenditure for the relevant yea and permit necessary adjustment /

changes in case such variations are for adequate and justifiable reasons. Such as exercise shall be called 'Review'.

(2). After audited accounts of a year are made available, the Commission shall undertake similar exercise as above with reference to the final actual figures as per the audited accounts. The exercise with reference to audited accounts shall be called 'truing-UP'.

(3). The generating company or the licensee, as the case maybe, shall make an application before the Commission, for truing up of ARR of the previous year by 30th September of the following year, on the basis of audited statement of accounts and the Audit Report, thereon. The generating company or the licensee shall get their accounts audited within a specified time frame, either by the Comptroller & Auditor General of India or by a Statutory Auditor drawn from the panel of Statutory Auditors approved by the Comptroller &Auditor General of India, from time to time, to enable them to file the application for 'truing-up' within the specified date, that is 30th September of the following year.

In response to several queries raised in the matter of final truing up of 2009-10 by BIA and issues raised in the meeting held with Chief Engineer MePDCL, the licensee on 07.04.2014 has sent replies to the objections in the matter of truing up the ARR for 2009-10. It may be mentioned that for 2009-10 a provisional truing up has already been done in a remand case. To examine the matter and pass the final truing up order involves a detailed scrutiny. In fact it is a separate matter which cannot be linked with the tariff order now pending for passage for 2014-15 and it may be applied w.e.f. 01.04.2014. The replies of MePDCL as in the aforesaid letter 07.04.2014 will be taken up and scrutinize and suitable truing up order pass in due course without hampering the issue of tariff of the 2014-15 to be issued now. MePDCL has also requested in the meeting to hold a public hearing in the matter. The Commission had also required the licensee to submit audited records for subsequent years for example 2010-11 and 2011-12 so that the matter may be looked into in totality. However, the licensee failed to produce audited accounts for the year 2010-11 and 2011-12 so far and therefore true-up could not be done. Soon after the accounts are made available by the licensee truing up exercise will be done and necessary adjustment will be made in the ARR / Tariff as per regulations.

7. Tariff Principles and Design

7.1 Background

7.1.1 The Commission in determining the revenue requirement of MePDCL for the FY 2014-15 and the retail supply tariff has been guided by the provisions of the Electricity Act, 2003, the National Tariff Policy (NTP), Regulations on Terms and Conditions of Tariff issued by the Central Electricity Regulatory Commission (CERC) and Regulations on Terms and Conditions of Tariff notified by the MSERC. Section 61 of the Act lays down the broad principles, which shall guide determination of retail tariff. As per these principles the tariff should "Progressively reflect cost of supply" and also reduce cross subsidies "in the manner specified by the Commission". The Act lays special emphasis on safeguarding consumer interests and also requires that the costs should be recovered in a reasonable manner. The Act mandates that the tariff determination shall be guided by the factors, which encourage competition, efficiency, economical use of resources, good performance and optimum investment.

The NTP notified by Government of India in January, 2006 provides comprehensive guidelines for determination of tariff and also in working out the revenue requirement of power utilities. The Commission has endeavored to follow these guidelines as far as possible.

7.1.2 NTP mandates that the Multi-Year-Tariff (MYT) framework be adopted for determination of tariff from 1st April 2006. However, the Commission is not in a position to introduce MYT Regime in the State mainly because of lack of requisite and reliable data. The present MIS and regulatory reporting system of the MePDCL is very inadequate for any such exercise at this stage. There has been no study to assess voltage wise losses in the absence of metering of all feeders, and distribution transformers. Technical and commercial losses are yet to be segregated and quantified voltage wise. The Commission has issued a directive to the MePDCL in the Tariff Order for FY 2013-14 to chalk out an action plan for reduction of T&D losses.

7.1.3 The mandate of the NTP is that tariff should be within plus / minus 20% of the average cost of supply by FY 2014-15. It is not possible for the Commission to lay down the road map for reduction of cross subsidy, mainly because of lack of data regarding cost of supply at various voltage levels. In view of the prevailing situation the Commission has gone on the basis of average cost of supply for working out consumer category-wise cost of supply. However in this tariff order an element of performance target has been indicated by setting target for T&D loss reduction for the FY 2015-16 to FY 2017-18. This better performance by reduction of loss level will result in substantial reduction in average cost of supply.

7.1.4 Section 8.3 of National Tariff Policy lays down the following principles for tariff design:

(1) In accordance with the National Electricity Policy, consumers below poverty line who consume below a specified level, say 30 units per month, may receive a special support through cross subsidy. Tariffs for such designated group of consumers will be at least 50% of the average cost of supply. This provision will be re-examined later.

(2) For achieving the objective that the tariff progressively reflects the cost of supply of electricity, the MSERC would notify the roadmap, within six months with a target that latest by the end of the FY 2014-15 tariffs are within ± 20% of the average cost of supply. The road map would have intermediate milestones, based on the approach of a gradual reduction in cross subsidy.

For example, if the average cost of supply is Rs.3 per unit, at the end of FY 2011-12 the tariff for the cross subsidized categories excluding those referred to in para-1 above should not be lower than Rs 2.40 per unit and that for any of the cross subsidizing categories should not go beyond Rs 3.60 per unit.

(3) While fixing tariff for agricultural use, the imperatives of the need of using ground water resources in a sustainable manner would also need to be kept in mind in addition to the average cost of supply. The tariff for agricultural use may be set at different levels for different parts of the State depending on the condition of the ground water Table to prevent excessive depletion of ground water.

7.1.5 The provisions of the Electricity Act, 2003, National Tariff Policy and the MSERC Tariff Regulations require that there should be a gradual movement towards reduction of cross subsidy. The Tariff aims at bringing down cross subsidy to ± 20% of the average cost of supply by the FY 2014-15.

Regulation 16 of MSERC (Terms and Conditions for Determination of Tariff) Regulations, 2011 specifies –

Cross subsidy as:

1) Cross subsidy for a consumer category in the first phase (as defined in sub regulation 2 below) means the difference between the average realization per unit from that category and the combined average cost of supply per unit expressed in percentage terms as a proportion of the combined average cost of supply. In the second phase (as defined in sub-regulation 2 below) means the difference between the average realization per unit from that category and the combined per unit cost of supply for that category expressed in percentage terms as a proportion of the combined cost of supply of that category as detailed in table below:-

Table 7.1: Comparison of Average Cost of Supply v/s Average Realisation

Sl	Category	Average realization (Rs/kwh)	Average cost o f supply (Rs/kwh)	(+)/(-) 20% average cost of supply
A	LT Supply			
	Domestic (DLT)	4.04	5.38	4.30 (-) 20%

	Commercial (CLT)	6.34	5.38	6.45 (+) 20%
	Public lighting	5.66	5.38	6.45 (+) 20%
	Water Supply	6.01	5.38	6.45 (+) 20%
	General Purpose	6.08	5.38	6.45 (+) 20%
	Agriculture/BPL	2.98/3.0	5.38	4.30 (-) 20%
B	HT Supply			
	Domestic	6.27	5.38	6.45 (+) 20%
	Commercial	6.42	5.38	6.45 (+) 20%
	Industrial	6.18	5.38	6.45 (+) 20%
	Water Supply	5.65	5.38	6.45 (+) 20%
	Bulk Supply	5.96	5.38	6.45 (+) 20%
C	EHT			
14	Industrial	5.81	5.38	6.45 (+) 20%

2) The Commission shall determine the tariff to progressively reflect the cost of supply of electricity and also reduce cross subsidies within a reasonable period. For this purpose, in the first phase the Commission shall determine tariff so that it progressively reflects combined average unit cost of supply in accordance with National Tariff Policy. In the second phase, the Commission shall consider moving towards the category-wise cost of supply as a basis for determination of tariff.

7.2 Tariffs proposed by MePDCL and approved by the Commission

7.2.1 The MePDCL in its tariff petition for FY 2014-15 has proposed revision of existing retail tariffs to various categories of consumers to earn additional revenue to meet the expenses to some extent.

MePDCL has proposed the following changes in billing structure**.**

1. Merging the MeECL officers and employees category with LT Domestic category (DLT) as per the decision of Board of Directors.

2. Reduction of slabs as detailed below:-

Existing slab	Proposed slab
Domestic (LT) First 100 units Next 100 units Above 200 units **Commercial (CLT)** First 100 unit Above 100 units	**Domestic (LT)** First 100 units Above 100 units **Commercial (CLT)** All units

3. KVAH billing to HT Domestic, HT Commercial and HT Bulk supply.

7.2.2 The category wise tariffs proposed by the MePDCL are indicated in Table below:

Table 7.2: Category-Wise Tariffs existing and proposed by MePDCL for FY 2014-15

Sl. No.	Category	Existing		Proposed	
		Fixed Charges (Rs. conn/kW)	Energy Charges (Ps./kWh)	Fixed Charges (Rs. conn)	Energy Charges (Ps./kWh)
1	Kutir Jyoti	80		200	
2	Domestic (DLT)	35		210	
	First 100 Units		260		413
	Next 100 Units		300		519
	Above 200 Units		375		519
3	Commercial (CLT)	70		250	
	First 100 units		450		608
	Above 100 units		490		608
4	Industrial (ILT)	70	420	230	521
5	Low tension public service LT (PSLT)				
6	Public Lighting (PL)	70	475	250	760
7	Public Lighting				
	Fixed charges for Public lighting (Unmetered)				
	Types of lamps				
	Incandascent lamp				
	40 w	85			
	60 w	135			
	100 w	215			
(i)	Fluracent Lamp				
	Upto 40 w	135		242	
(ii)	Mercury Vapour Lamp				
(a)	80 W	185		331	
(b)	125 W	280		501	
(c)	250 W	585		1047	
(d)	500 W	1090		1951	
(iii)	Sodium vapour lamp				
(a)	150 W	625		761	
(b)	250 W	660		1181	
(c)	400 W	1100		1969	
(iv)	CFL Fittings				
(a)	Upto 45 W	135		424	
(b)	> 45 Upto 85 W	215		385	
(v)	LED Fittings (120 W)	415		743	
(vi)	Metal Helide (150W)	500		895	
8	Public Water supply/ sewage treatment plant (WSLT)	70	475	250	665

Sl. No.	Category	Existing		Proposed	
		Fixed Charges (Rs. conn/kW)	Energy Charges (Ps./kWh)	Fixed Charges (Rs. conn)	Energy Charges (Ps./kWh)
9	General Purpose (GP)	70	475	250	676
10	Agriculture (AP)	40	165	140	198
11	Crematorium	5200 (Conn)	300	18200 Conn)	540
12	Employees		340		
13	High Tension				
(a)	Domestic (DHT)	125	440	450	444
(b)	Commercial (CHT)	125	455	450	473
(c)	Industrial (IHT)	125	454	450	588
(d)	Public Service (PSHT)				
(e)	Public Water Supply	125	440	450	590
(f)	General Purpose/ Bulk Supply (BS)	125	440	450	589
(g)	Industrial EHT	125	439 (KVAH)	450	553 (KVAH)
(h)	Temp. Supply (LT & HT)				

Source: Table 4.1 of ARR

Commission Analysis

1. The Commission considers merging the MeECL officers and employees category with LT Domestic (DLT) as proposed by the MePDCL.
2. The MePDCL proposal of reduction of slabs under LT Domestic (DLT) and abolision of slabs in LT Commercial (CLT) are not agreed to.

   The present system of 3 slabs under LT Domestic (DLT) and 2 slabs under LT Commercial (CLT) are being continued.
3. KVAH billing to HT Domestic (DHT) and HT Bulk Supply (BS) are not considered.

   However, the Commission considers KVAH billing to HT Commercial (CHT) category.

With the above approvals and based on the approved Aggregate Revenue Requirement (ARR) the approved Tariffs for supply of Energy in respect of different categories of consumers for FY 2014-15 are as per Table below:

Table 7.3: Category of Consumer wise tariffs approved by the Commission

Sl. No.	Category	Approved	
		Fixed Charges (Rs. conn/kW)	Energy Charges (Ps./kWh)
1	Kutir Jyoti	90	2.25
2	Domestic (DLT)		
	First 100 Units	40	2.90

	Next 100 Units	40	3.40
	Above 200 Units	40	4.40
3	Commercial (CLT)		
	First 100 units	80	5.00
	Above 100 units	80	5.80
4	Industrial (ILT)	80	4.75
5	Low tension public service LT (PSLT)	80	5.40
6	Public Lighting (PL)	80	5.40
7	Fixed charges for Public Lighting (Unmetered)		
	Types of Lamps		
	Incandascent lamp		
	40 w	98	
	60 w	155	
	100 w	247	
(i)	Fluracent Lamp		
	Upto 40 w	155	
(ii)	Mercury Vapour Lamp		
(a)	80 W	213	
(b)	125 W	322	
(c)	250 W	673	
(d)	500 W	1254	
(iii)	Sodium vapour lamp		
(a)	150 W	489	
(b)	250 W	759	
(c)	400 W	1265	
(iv)	CFL Fittings		
(a)	Upto 45 W	155	
(b)	> 45 Upto 85 W	247	
(v)	LED Fittings (120 W)	477	
(vi)	Metal Helide (150W)	575	
8	Public Water supply/ sewage treatment plant (WSLT)	80	5.40
9	General Purpose (GP)	80	5.40
10	Agriculture (AP)	50	2.00
11	Crematorium	5800	3.35
12	High Tension		
(a)	Domestic (DHT)	150	5.10
(b)	Commercial (CHT)	150	5.25/KVAH
(c)	Industrial (IHT)	150	5.24/KVAH
(e)	Public Water Supply (WS)	150	5.10/KVAH
(f)	General Purpose/ Bulk Supply (BS)	150	5.10/kWH
(g)	Industrial EHT	150	5.10/KVAH

7.2.3 Tariffs for various categories of consumers are given in tariff schedule annexed.

7.3 Cross Subsidy

The Commission would like to discuss about the provisions of MSERC (Terms and Conditions for Determination of Tariff) Regulations 2011 about the cross subsidy. The Regulation prescribes that cross subsidy for the consumer means the difference between the average realisation per unit from that category and the combined average cost of supply per unit. It has also mentioned that in the first phase the Commission shall determine the Tariff so that it progressively reflects combined average unit cost of supply in accordance with the National Tariff Policy. The Commission has tried to adhere with the Regulations of the Commission while determining the Tariff. The tariff has been set in accordance with the Act and Regulations keeping in view the ground realties in the State.

The level of cross subsidy in 2014-15 has been given in the table below:

Cross subsidy in Meghalaya (%) in 2014-15

		2013-14	2014-15
Sl. No.	Category	Existing Cross Subsidy	Approved Cross Subsidy
1	Domestic	24%	24%
2	Non Domestic (Commercial)	-18%	-18%
4	Agriculture	52%	45%
5	Public Lighting	-7%	-5%
6	Water Supply	-13%	-12%
7	General purpose	-14%	-13%
8	Kutir Jyoti	44%	44%
9	Domestic	-15%	-15%
10	Water supply	-7%	-5%
11	General purpose including bulk supply	-9%	-8%
12	Commercial	-18%	-17%
13	Industrial	-17%	-15%
14	Industrial	-10%	-8%

8. Compliance of Directives

8.1 Compliance of earlier Directives

The Commission in Tariff Order for FY 2012-13 has given certain directives to MePDCL which has submitted the compliance report, which does not fully comply with directives given.

The Commission has issued fresh directives in the Tariff Order for FY 2013-14. The status of compliance of the directives given is discussed below:

8.2 Directives issued in FY 2012-13

Directive – 1

The Commission directs the licensee to send action taken report along with the status of compliance to each directive issued in the last Tariff Order. This report should reach the Commission by 30th April, 2013.

Compliance

The Petitioner has submitted that the compliance on the directives issued by the Commission in FY 2012-13 had been submitted to the Commission vide Letter No DD/T/-440/2013-14/25 dated 30th April,2013.

8.3 Directives issued in the Tariff Order FY 2013-14

The Commission had issued the fresh directives in the Tariff Order for FY 2013-14 stating that the performance of MeECL has not been satisfactory as the T&D losses continue to be high. The Commission in the Tariff Order of FY 2011-12 and FY 2012-13 has provided a trajectory for reduction of losses in next four years. In order to improve the commercial losses and efficiency improvement of 1.5% is again targeted for FY 2013-14. This will thus enable the licensee to get additional revenue of about Rs. 10 Crore in FY 2013-14. Accordingly, the Commission directs the MeECL to follow the directives given in this regard.

Compliance

MePDCL has submitted that a report on the compliance of fresh directives have been submitted to the Commission vide letter no. DD/T-440/2013-14/41 dated 28th June 2013 and letter no. DD/T-440/2013-14/10 dated 31st October 2013. The abstract of these reports is submitted against each directive.

The fresh directives issued in Tariff Order for FY 2013-14 and the compliance are dealt below:

a) **Directive-1**

To submit the Commission a concrete action plan to be undertaken by it in reducing the T&D loss and the AT&C loss in each circle. The action plan should cover time bound targets in reducing the commercial losses as per the trajectory for FY 2013-14. MePDCL should nominate a nodal officer in each circle to send report on actual losses, revenue billed and revenue collected each month to the Commission. List of nomination of each circle should be send by 1.5.2013.

Compliance:

For the reduction of T & D loss and AT & C Loss, action is being taken with respect to energy audit, billing, testing & replacement of defective meters and vigilance activities.

The Chief Executive Officers are the nodal officers in each Distribution Circle, and are responsible for monitoring and reporting the monthly revenue billed, revenue collected and actual loss to the higher authorities. The reports are being screened by the higher authorities for further improvement.

Commission's comments:

Compliance is noted. The current of the energy audit and the results, replacement of defective meters shall be submitted by September, 2014.

b) **Directive-2**

Reduction of losses can be done by using measures of change of defective meters, improvement in billing and collection and measures to check pilferages or thefts, conducting vigilances and inspection, changing from electro mechanical meters to electronic meters etc. This action plan should cover the targets fixed for each and every division or circle of MeECL for collecting additional about Rs. 0.66 Crore per month over and above the normal sales target. This action plan should reach to the Commission by 01.05.2013.

Compliance:

The process for replacing defective meters is a continuous process. In the case of LT consumers, the meters are either procured by the office or by the consumer for replacement of the same. However, in the case of HT & EHT consumers, the meters are procured by the Corporation. The replacement of meters is carried out departmentally. Replacement of electro mechanical meters with static meters is also under process. It is targeted to change 20,000 meters by March 2014.

Commission's observation

The action taken is noted. The MePDCL is directed to submit quality report on the subject.

c) Directive-3

MePDCL shall start monitoring the performance of all six circles in distribution by getting information on sale, revenue and AT&C losses every month. MePDCL shall forward a monthly review report of all the circles to the Commission by 15th of every month.

Compliance:

Monthly reports were not submitted.

Commission's comment

The compliance of the above shall be reported by September, 2014.

d) Directive-4

MePDCL shall send an action plan for improvement in metering and billing for FY 2013-14. MePDCL shall forward a monthly report on target fixed for each circle for replacement of defective meters and compliance thereof. This report should reach the Commission every quarter.

Compliance:

Monthly reports are not being submitted regularly.

Commission's comment

The MePDCL is directed to submit monthly report regularly as directed.

e) **Directive-5**

MePDCL shall also forward a report to the Commission every quarter on the number of cases in each circle where meters are not read, or consumers are billed on nominative basis without meter reading and number of unmetered consumers. MePDCL shall also fixed target for monitoring such cases.

Compliance:

Monthly reports are not being submitted regularly.

Commission's comment

The report shall be reported every quarter as directed.

f) **Directive-6**

MePDCL shall forward within one month a report on the pilot study being done in Police Bazar on energy audit by metering distribution transformers. The Commission has already directed MePDCL to start this work w.e.f. 01.09.2012.

Compliance:

Compliance is being done. It is being monitored by the Commission's officer.

Commission's comment

The progress report on the pilot study to be submitted by September, 2014.

g) **Directive-7**

The Commission directs MePDCL to make serious efforts on the metering and energy audit of industries in the State so as to know the correct level of consumption and revenue from this category. A report on this exercise should be made available to the Commission within three months of this order.

Compliance:

Compliance report has not been submitted.

Commission's comment

This is an important item to assess the correct level of consumption of industrial consumers and corresponding revenue. The report shall be submitted by September, 2014.

h) Directive-8

Time of Day Tariff

MePDCL is directed to prepare time of day provisions in their existing meters for consumers of HT industrial load and furnish data of the same to the Commission for Implementation of time of day tariff from the date of issue of next tariff order. The Commission also directs the licensee to make a proposal to the Commission with regard to peak hours and off peak hours during winter and summer so that the new tariff shall be worked out.

Compliance:

The billing software for ToD billing is yet to be developed to the proposal for ToD tariff will be submitted after the billing software is developed.

Commission's comment:

The development of required software shall be expedited.

i) Directive-9

Computerised billing

The Commission directs MePDCL to introduce computerised data base of consumers so that the consumer can deposit their bills at any collection centre. A status report on this project may be submitted within one month time.

Compliance:

The computerized data base of consumers under R-APDRP in the nine towns, namely Shillong, Jowai, Nongpoh, Nongstoin, Cherrapunji, Mairang, Willaimnagar, Tura and Resubelpara are under preparation. Trial run of computerized billing at Nongpoh town had been taken up in October 2013.

Computerized billing data base in respect of the remaining 8 towns is expected to be completed by March 2014. It is further submitted that MePDCL is also replacing BRADMA billing system (manual) with D-BASE billing system (Computerized billing), the circle wise status of the same is mentioned below:

The status of computerized billing with the existing system circle- wise is as follows:

Sl. No.	Circle	Percentage Computerization
1	Eastern	100%
2	Shillong	100%
3	Central	51%
4	Western	59%
5	East Garo Hills	51%
6	West Garo Hills	67%

Commission's comments

Action taken is noted and the present status of implementation shall be reported by August, 2014.

j) Directive-10

Energy Audit

The Commission directs the management to look into this manner and take action on priority to start energy audit in at least those areas where consumption and revenue are highest. The action plan should be submitted to the Commission by 30th June 2013.

A report on metering status in all 33KV substations should be prepared to the Commission with plan for making them functional and reading of such meters are done on regular basis.

Compliance:

The energy audit in some parts of Shillong and Byrnihat area is being done. Similarly, the energy audit in other areas has also been initiated. Normally the billing is being done as per the billing schedule. In addition to conducting Energy

Audit internally, currently MePDCL is also assessing cost-benefit of conducting energy audit by third party.

Commission's comments:

The results of the energy audit in the areas whereas it is conducted shall be reported by September, 2014.

k) Directive-11

Revenue Audit

Commission directs MePDCL to get revenue audit of billing in each circle immediately from independent CAG approved auditors within three months of issue of this order. The auditor should check all industries and other revenue yielding consumers, domestic and commercial consumers in Shillong that they are being billed correctly on the basis of applied/allowed tariff and give their report to the Commission by 30th June 2013.

Compliance:

Revenue Audit is being carried out internally by the Internal Audit team of the Corporation. Similarly, the transaction audit which includes revenue audit is being done by the Comptroller Auditor General (CAG).

Commission's comments:

The results/observation of the revenue audit shall be reported by September, 2014.

l) Directive-12

Improvement in Supply

The Commission directs MePDCL to supply electricity to all parts of the State without discrimination as the first priority and in case of no existing demand or additional demand in the State this surplus energy should be sold outside either on bilateral or competitive basis. Monthly report on availability of energy, supply hours in all circles should be made available to the Commission starting from 1st June, 2013.

Compliance:

At present there is no power regulation by MePDCL.

Commission's comments:

The MePDCL is directed to submit monthly report as directed.

New Directives

m) Directive-13

The audited financial statement has not been furnished by MePDCL for the financial year 2012-13 which is mandatory under MSERC (Terms and conditions for determination of tariff) Regulations 2011. It may be mentioned that as per section 210 of the Companies Act, 1956 read with section 166, a company has to place the audited accounts within six months of the end of the financial year or such extended time granted by Registrar of Companies in the AGM for adoption. Thus MePDCL should have adopted the audited financial statement for the financial year 2012-13 by 30.09.2013. MePDCL has also not submitted unaudited financial statement for 2012-13 approved by the Board of Directors.

The MePDCL is directed to submit all the previous years audited accounts upto FY 2012-13 by 30.06.2014.

n) Directive- 14

MePDCL is directed to forward monthly report on energy purchase, energy sold, revenue bills and revenue collected to the Commission.

o) Directive-15

MePDCL should expedite the settlement of power purchase dues of the prior period by setting up a committee so as to restore the power regulation in the interest of the consumers. The State Government should also look into the matter and settle the previous liabilities towards power purchase payables pending prior to restructuring.

p) Directive-16

MePDCL is directed to implement the Energy conservation and Demand Side Management (DSM) as under:

- To initiate action to implement TOD measure at the earliest.

- To encourage use of CFL under Kutir Jyoti and RGGVY under Energy Conservation Plan/Assistance.
- To open “Awareness Cell” at headquarter level for implementing DSM plans/initiatives.
- Energy Audit at Power Intensive Industries should be implemented in association with Bureau of Energy Efficiency.

  The compliance report on the above shall be submitted by 30th September, 2014.

Commission's Order

Having considered the Petition of MePDCL for approval of Aggregate Revenue Requirement (ARR) and determination of retail tariff for supply of energy for FY 2014-15, in exercise of power conferred by Section 62 of the Electricity Act, 2003, the Commission approves the aggregate revenue requirement (ARR) as detailed below:

(Rs. crore)

Sl. No.	Item of expenditure	Approved by the Commission
1	Cost of Power Purchase	554.50
2	Inter-State Transmission Charge	61.82
3	MePTCL Transmission Charge	72.79
4	Employee Costs	111
5	R&M Expenses	8.41
6	A&G Expenses	7.62
7	Depreciation	4.37
8	Interest on Loan Capital	12.40
9	Interest on Working capital	23.03
10	Return on equity	9.43
11	Income Tax	-
12	Provision for bad and doubtful debt	0.15
13	Cost of RPO obligation	3.86
14	**Total Revenue Requirement**	**869.38**
	Less: Sale of Surplus Power	184.74
15	Less: Non-Tariff Income	40.00
16	Less: Cross subsidy surcharge	5.77
17	Less: RE Subsidy	20.00
18	**Net Revenue Requirement**	**618.87**
19	Revenue from Revised Tariff	619.63
20	Net Revenue Surplus (Gap)	0.76

1. MePDCL shall be entitled to charge the tariff from consumers in its licensed area of supply in Meghalaya as approved in this tariff order.
2. The approved retail tariff for supply of energy shall be in accordance with the tariff schedule annexed.
3. The revised tariff shall come into effect from the 1st day of April 2014 and shall remain effective till 31st day of March 2015 or orders.
4. FPPPA determined under MSERC Order dated 02.12.2013 shall not be charged with the revised tariff for 2014-15.

5. The Petitioner shall forward a report on compliance of directions given in this order within prescribed time.
6. The Petitioner shall forward monthly report on energy purchased, energy sold, revenue billed and revenue collected to the Commission.

Date:12.04.2014. (Anand Kumar)
Shillong (Meghalaya) Chairman

APPROVED TARIFF FOR 2014-15.

A. LOW TENSION TARIFF:

(1) Domestic (Low Tension).

This category shall be applicable to domestic consumption, which includes consumption-

a. For lighting, heating, cooling, fans and other household appliances in a private dwelling house;
b. In temples, churches, mosques, gurudwaras and other places of religious worship;
c. In hospitals, dispensaries, health centres run by Government or by charitable, religious or social organizations on a no-profit or non-commercial basis.
d. In schools, colleges, hostels boarding houses for students run by Government or by charitable, religious or social organizations on a no-profit or non commercial basis; and
e. In ashrams, dharamsalas, community halls and institutions run by recognized welfare organizations.
f. MeECL officers and its employee's residences.

(1.1) Kutir Jyoti/BPL.

Kutir Jyoti connections have been covered under Domestic category with metered and unmetered sub categories.

(1.1.1) Unmetered Kutir Jyoti

The existing Tariff for this category of consumers is Rs.80 per connection per month. The MeECL has proposed a rate of Rs.200 per connection per month for this category. The Commission has approved Rs.90 per connection per month for all existing unmetered consumers.

Tariff for BPL (unmetered) for 2014-15			
Category	Existing Tariff (Rs/connection/ month)	Proposed Tariff (Rs/connection/ month)	Approved Tariff (Rs/connection/ month)
Kutir Jyoti (KJ-U)/ BPL U	80	200	90

This Tariff is applicable for existing unmetered consumer under Kutir Jyoti unmetered category until they are metered. No new connection should be given without meter.

(1.1.2) Metered Kutir Jyoti

The MeECL has proposed tariff of metered Kutir Jyoti consumers at Rs.3.00 per unit for monthly consumption within 0-30 units. They have also proposed that if the monthly consumption in any month exceeds the limits of 30 units then their excess consumption over and above 30 units shall be done on the Tariff as prescribed for normal domestic consumers. The Commission has allowed Rs.2.25 per unit for BPL metered category up to a consumption of 30 units. In case, they consumes more than 30 Units then the billing of excess unit shall be done on the Tariff prescribed for normal domestic consumers for appropriate slab rates.

Tariff for BPL (metered) for 2014-15			
Category	Existing Tariff (Rs/KWH)	Proposed Tariff (Rs/KWH)	Approved Tariff* (Rs/KWH)
Kutir Jyoti (KJ-M)/ BPL M	2.00	3.00	2.25

** This rate is applicable if the consumers consumes up to 30 Units in a month. If he consumes more than 30 Units then this rate shall be applied up to 30 Units and over and above 30 Units the rates shall be charged on the appropriate slab level as approved for other domestic consumers.*

For example if BPL consumer consumes 30 KWH in a month he will be charged at the rate of Rs.2.25 per unit i.e. 2.25 x 30 =Rs. 67.50.

If he consumes more than 30 units, for example 100 units then his bill shall be determined as follows:

Rs.2.25 x 30 units = Rs.67.50

+ Rs.2.90 x 70 units = Rs.203.00.

The total bill shall be Rs.270.50.

(1.1) Domestic Consumers

The existing Tariff is 2 part Tariff. The fixed charge is levied on the basis of KW load per month and energy charges are applicable in 3 slabs with different rates for each slab. The Commission has not made any changes in the structure and approved the same. However, the Commission has revised rates for each slab and fixed charges per KW which are given below in the Tariff. MeECL officers and employees hither to under a different category are now brought under this category.

Fixed Charges

Fixed charges for Domestic consumer for 2014-15			
Category	Existing Tariff (Rs/KW/Month)	Proposed Tariff (Rs/KW/Month)	Approved Tariff (Rs/KW/Month)
Domestic (DLT)	35	210	40

Energy Charges

Energy charges for Domestic consumer for 2014-15				
Category	Slabs	Existing Tariff (Rs/KWH)	Proposed Tariff (Rs/KWH)	Approved Tariff (Rs/KWH)
Domestic (DLT)	First 100 units	2.60	4.16	2.90
	Next 100 units	3.00	5.19	3.40
	Above 200 units	3.75	5.19	4.40

(2) Non-Domestic (Low Tension)

The existing Tariff has a structure of 2 part Tariff. The fixed charges are levied on the basis of KW load per month and energy charges are applicable for two slabs with different rates for each slab. The Commission has not made any changes in the structure and approved the same. However, the Commission has approved different rate for each slab and fixed charges per KW which are given below in the Tariff.

Fixed charges

Fixed charges for Non domestic consumer for 2014-15			
Category	Existing Tariff (Rs/KW/Month)	Proposed Tariff (Rs/KW/Month)	Approved Tariff (Rs/KW/Month)
Non Domestic (CLT)	70	250	80

Energy charges

Energy charges for Non domestic consumer for 2014-15					
Category	Slabs	Existing Tariff (Rs/KWH)	Proposed Tariff (Rs/KWH)	Slabs	Approved Tariff (Rs/KWH)
Non Domestic (CLT)	First 100 Units	4.50	6.08	First 100 Units	5.00
	Above 100 Units	4.90	6.08	Above 100 Units	5.80

(3) Industrial Low Tension

This category is applicable for small and medium industrial consumer who is given supply on low tension wires. The Commission has approved the following two parts without changing the structure of the current tariff keeping in view the present cross subsidy adjustment.

Fixed charges

Fixed charges for Industrial (LT) consumer for 2014-15			
Category	Existing Tariff (Rs/KW/Month)	Proposed Tariff (Rs/KW/Month)	Approved Tariff (Rs/KW/Month)
Industrial (ILT)	70	230	80

Energy charges

Energy charges for Industrial (LT) consumer for 2014-15			
Category	Existing Tariff (Rs/KWH)	Proposed Tariff (Rs/KWH)	Approved Tariff (Rs/KWH)
Industrial (ILT)	4.20	5.21	4.75

(4) Public Service Low Tension

This category comes under Public Service connections given supply through LT lines. The public lamps are generally unmetered and their Tariff is based on the fixed charges per KW per month. However, since no connection under the Act can be given without meters, the Licensee is required to install meters on all new connections and progressively shall place meters on the existing connections. The approved Tariff for metered connections and unmetered connections is decided in a way to encourage metering at public lamps. The rates are given below:

(5) Public Lighting (Metered)

Fixed charges

Fixed charges for Public Lighting (metered) for 2014-15			
Category	Existing Tariff (Rs/KW/Month)	Proposed Tariff (Rs/KW/Month)	Approved Tariff (Rs/KW/Month)
Public Lighting (PL)	70	250	80

Energy Charges

Energy charges for Public Lighting (metered) for 2014-15			
Category	Existing Tariff (Rs/KWH)	Proposed Tariff (Rs/KWH)	Approved Tariff (Rs/KWH)
Public Lighting (PL)	4.75	7.60	5.40

(6) Public Lighting (Unmetered)

Fixed charges for Public Lighting (unmetered) for 2014-15			
Type of lamp	Existing Tariff (Rs/Lamp/Point/Month)	Proposed Tariff (Rs/Lamp/Point/Month)	Approved Tariff (Rs/Lamp/Point/Month)
Incandescent lamps • 40 Watts • 60 Watts • 100 Watts	 85.00 13500 215.00		 98.00 155.00 247.00
Florescent lamps • Up to 40 Watts	 135.00	 242.00	 155.00

Mercury vapour lamp • 80 Watts • 125 Watts • 250 Watts • 500 Watts	185.00 280.00 585.00 1090.00	331.00 501.00 1047.00 1951.00	213.00 322.00 673.00 1254.00
Sodium vapour lamp • Up to 150 Watts • 250 Watts • 400 watts	425.00 660.00 1100.00	761.00 1181.00 1969.00	489.00 759.00 1265.00
CFL fittings • Up to 45 Watts • Above 45 Watts & Up to 85 Watts	135.00 215.00	242.00 385.00	155.00 247.00
LED fittings	415.00	743.00	477.00
Metal halide	500.00	895.00	575.00

(7) Public Water Supply /Sewage Treatment Plants

This category is related to Public Water Supply and Sewage Treatment plants and comes under public consumption. The following rates are approved for water supply and sewage treatment plants. These rates are decided keeping their nature of use and cross subsidy level,

Fixed charges

Fixed charges for Public Water Supply for 2014-15			
Category	Existing Tariff (Rs/KW/ Month)	Proposed Tariff (Rs/KW/Month)	Approved Tariff (Rs/KW/Month)
Public Water Supply (WSLT)/Sewage Treatment Plants	70	250	80

Energy Charges

Energy charges for Public Water Supply for 2014-15			
Category	Existing Tariff (Rs/KWH)	Proposed Tariff (Rs/KWH)	Approved Tariff (Rs/KWH)
Public Water Supply (WSLT)/Sewage Treatment Plants	4.75	6.65	5.40

(8) General Purpose

This Tariff is made for Government connections which are not covered under any other category of Public connections. The approved Tariff for this category is as follows:

Fixed charges

Fixed charges for General purpose for 2014-15			
Category	Existing Tariff (Rs/KW/Month)	Proposed Tariff (Rs/KW/Month)	Approved Tariff (Rs/KW/Month)
General purpose (GP)	70	250	80

Energy Charges

Energy charges for Public Water Supply for 2014-15			
Category	Existing Tariff (Rs/KWH)	Proposed Tariff (Rs/KWH)	Approved Tariff (Rs/KWH)
General Purpose (GP)	4.75	6.76	5.40

(9) Agriculture

There are only 34 consumers in the State and annual consumption in this category is only 0.17MU.

Fixed charges

Fixed charges for Agriculture for 2014-15			
Category	Existing Tariff (Rs/KW/Month)	Proposed Tariff (Rs/KW/Month)	Approved Tariff (Rs/KW/Month)
Agriculture (AP)	40	140	45

Energy Charges

Energy charges for Agriculture for 2014-15			
Category	Existing Tariff (Rs/KWH)	Proposed Tariff (Rs/KWH)	Approved Tariff (Rs/KWH)
Agriculture (AP)	1.65	1.98	2.00

(10) Crematorium

This category is meant for crematorium using electricity for their day to day operation. As per the proposal there is only one consumer in this category. In the last Tariff Order the Commission has considered the nature and purpose of this crematorium which is meant for service to the society and operating on no profit no loss basis. The commission has held that on the basis of their nature of job their rates are considered equivalent to domestic consumers. The similar treatment has been given this year to this category with fixed charges on per connection basis and energy charges on metered consumption.

Fixed charges

Fixed charges for Crematorium for 2014-15			
Category	Existing Tariff (Rs/Connection/ Month)	Proposed Tariff (Rs/KW/Month)	Approved Tariff (Rs/Conne ction/Mon th)
Crematorium (CRM)	5200	18200	5800

Energy Charges

Energy charges for Crematorium for 2014-15			
Category	Existing Tariff (Rs/KWH)	Proposed Tariff (Rs/KWH)	Approved Tariff (Rs/KWH)
Crematorium (CRM)	3.00	5.40	3.35

B High Tension Supply

As per the supply code this category is meant for those consumers who get supply from HT wires. The billing of this type of consumers is being done on the basis of provision of supply code.

In the last tariff order, the Commission has directed the licensee to give data on time of day tariff for HT category of consumer so that it is applied from 2014-15 onwards. The National Electricity Policy and National Tariff Policy have also mandated the Commission to introduce time of day Tariff in large consumers. Since proposals of the licensee do not contain time of day tariff for any category and no public consultation has been made so far on the subject, the Commission has decided to defer this tariff up to the next filing. In the meantime licensee is directed to prepare time of day provisions in their existing meters for consumers of HT industrial load and furnish data of the same to the Commission for implementation of time of day tariff from the date of issue of next tariff order. The Commission also directs the licensee to make a proposal to the Commission with regard to peak hours and off peak hours during winter and summer so that the new tariff shall be worked out. MePDCL has proposed KVAH tariff for all remaining consumers in HT category other than industry and water works. The Commission has accepted the proposal of MePDCL to implement KVAH billing for HT Commercial category only.

(11) Domestic High Tension

This tariff is applicable to domestic consumer having supply from HT system of the licensee. Their tariff is approved as follows.

Fixed charges

Fixed charges for Domestic (HT) for 2014-15			
Category	Existing Tariff (Rs/KVA/Month)	Proposed Tariff (Rs/KVA/Month)	Approved Tariff (Rs/KVA/Month)
Domestic HT (DHT)	125	450	150

Energy Charges

Energy charges for Domestic (HT) for 2014-15			
Category	Existing Tariff (Rs/KWH)	Proposed Tariff (Rs/KVAH)	Approved Tariff (Rs/KWH)
Domestic HT (DHT)	4.40	4.44	5.10

(12) Non Domestic High Tension

This tariff is applicable to Commercial consumer having supply from HT system of the licensee. Their tariff is revised keeping in view of their present level of cross subsidy and its suitable correction. The Commission has approved their tariff as follows

Fixed charges

Fixed charges for Non Domestic (HT) for 2014-15			
Category	Existing Tariff (Rs/KVA/Month)	Proposed Tariff (Rs/KVA/Month)	Approved Tariff (Rs/KVA/Month)
Non Domestic HT (CHT)	125	450	150

Energy Charges

Energy charges for Non Domestic (HT) for 2014-15			
Category	Existing Tariff (Rs/KWH)	Proposed Tariff (Rs/KVAH)	Approved Tariff (Rs/KVAH)
Non Domestic HT (CHT)	4.55	4.73	5.25

(13) Industrial High Tension

These are industrial consumers taking supply on HT. These consumers are charged on KvAh basis. This tariff was introduced so as to improve the power factor in the system. This tariff cares for the power factor of the industries and reward those performs efficiently. However in case of leading power factor suitable correction should be made. This matter shall be dealt with separately after a proper hearing. The tariff is revised as follows.

Fixed charges

Fixed charges for Industrial (HT) for 2014-15			
Category	Existing Tariff (Rs/KVA/Month)	Proposed Tariff (Rs/KVA/Month)	Approved Tariff (Rs/KVA/Month)
Industrial High Tension (IHT)	125	450	150

Energy Charges

Energy charges for Industrial (HT) for 2014-15			
Category	Existing Tariff (Rs/KVAH)	Proposed Tariff (Rs/KVAH)	Approved Tariff (Rs/KVAH)
Industrial High Tension (IHT)	4.54	5.88	5.24

(14) General Purpose Bulk Supply (BS)

Fixed charges

Fixed charges for General Purpose Bulk (HT) for 2014-15			
Category	Existing Tariff (Rs/KVA/Month)	Proposed Tariff (Rs/KVA/Month)	Approved Tariff (Rs/KVA/Month)
General Purpose Bulk Suply (BS)	125	450	150

Energy Charges

Energy charges for General Purpose Bulk (HT) for 2014-15			
Category	Existing Tariff (Rs/KWH)	Proposed Tariff (Rs/KVAH)	Approved Tariff (Rs/KWH)
General Purpose Bulk Supply (BS)	4.40	5.90	5.10

(15) Public Water Supply/Sewage Treatment Plant

Fixed charges

Fixed charges for Public Water Supply (HT) for 2014-15			
Category	Existing Tariff (Rs/KVA/Month)	Proposed Tariff (Rs/KVA/Month)	Approved Tariff (Rs/KVA/Month)
Public Water Supply (WSHT)	125	450	150

Energy Charges

Energy charges for Public Water Supply (HT) for 2014-15			
Category	Existing Tariff (Rs/KVAH)	Proposed Tariff (Rs/KVAH)	Approved Tariff (Rs/KVAH)
Public Water Supply (WSHT)	4.40	5.90	5.10

C **Extra High Tension Supply**

(16) **Industrial Extra High Tension**

Fixed charges

Fixed charges for Industrial (EHT) for 2014-15			
Category	Existing Tariff (Rs/KVA/Month)	Proposed Tariff (Rs/KVA/Month)	Approved Tariff (Rs/KVA/Month)
Industrial (IEHT)	125	450	150

Energy Charges

Energy charges for Industrial (EHT) for 2014-15			
Category	Existing Tariff (Rs/KVAH)	Proposed Tariff (Rs/KVAH)	Approved Tariff (Rs/KVAH)
Industrial (IEHT)	4.39	5.53	5.10

D **Others.**

(17) **Temporary supply (HT & LT)**

MeECL has proposed to continue their existing arrangement where the fixed and energy charges shall continue to be double of the normal applicable rates for all categories. The Commission has agreed to their proposal. Remaining terms and conditions of the tariff rate schedule shall be same as approved last year.