# KERALA STATE ELECTRICITY REGULATORY COMMISSION

## THIRUVANANTHAPURAM

Application No. : **OA 6/2015**

**In the matter of :** Determination of ARR & ERC of M/s Thrissur Corporation Electricity Department, for the first control period 2015-16 to 2017-18,based on the application submitted as per the provisions of KSERC(Terms and Conditions for Determination of Tariff) Regulations 2014.

Applicant : M/s Thrissur Corporation Electricity Department, Thrissur.

**PRESENT :Shri. T.M.Manoharan, Chairman**
**Shri K.Vikraman Nair, Member**

## ORDER DATED 21.10.2015

### Introduction

1. The Thrissur Corporation Electricity Department (TCED), one of the 10 electricity distribution licensees in the State of Kerala, has an operational history of 77 years, starting from August 1937, when the generation & distribution business of Cochin State Power & Light Corporation Ltd was purchased by the then Thrissur Municipality. The current license area of the TCED corresponds to the administrative limits of the old Thrissur Municipality limits covering an area of approximately 12.65 sqkm, even though the administrative jurisdiction of the Thrissur Corporation covers an area of approximately 101.42 sqkm.

2. M/s TCED vide their letter dated 28-01-2015 filed the application for approval of the Aggregate Revenue Requirement (ARR) & Expected Revenue from Charges (ERC) for the first control period from 2015-16 to 2017-18 as per the KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2014 (hereinafter referred to as Tariff Regulations, 2014). The said application was admitted asOA No.6/15.The Tariff Regulations 2014, was notified on 14.11.2014 as per notification No.787/SEA/2011/KSERC. As per the provisions of the said regulations, the licensee should submit the application for determination of tariff on or before

31.12.2014. The licensee had filed OA No. 6/2015 as on 28.01.2015. After scrutiny of the application, public hearing was conducted on 18.03.2015 at the Government guest house, Ramanilayam, Thrissur.

3. Meanwhile, KSEB Ltd had filed Writ Petition No. 465/2015 on 06.01.2015 with the following prayers,

"

***(i)*** *Issue a writ of certiorari or any other appropriate writ, order or direction calling for the records leading to Exhibit P5 and quash the same as illegal and violative of Article 14 of the Constitution of India;*

***(ii)*** *To issue writ of mandamus or any other appropriate writ, order or direction to the respondent to revise Exhibit P5 regulations strictly as per the legal mandate provided in the Electricity Act, 2003, National Electricity Policy, National Tariff Policy and on the basis of past performance of KSEB including its audited accounts; and*

***(iii)*** *Issue such other writs, orders or directions which this Hon'ble Court may deem fit and proper to issue in the facts and circumstances of the case. "*

KSEB had also filed a petition for granting an ex-parte interim order staying the operation and implementation of Exhibit P5, pending adjudication of the writ petition. The Hon'ble High Court in its order dated 07.01.2015 issued an order to the effect that the tariff proposal if any submitted by the petitioner namely KSEB Ltd, shall not be rejected on the basis of Exhibit P5. The Exhibit P5 regulation is the Tariff Regulations, 2014. As soon as the copy of the writ petition was received by the Commission, a detailed counter affidavit was filed on 17.03.2015. Further the Commission also filed a detailed petition to get the interim order dated 07.01.2015 vacated. So far the interim order dated 07.01.2015 has not been vacated and the writ petition has not been heard by the Hon'ble High Court. The licensees other than KSEB Ltd, are purchasing electricity from KSEB Ltd for the supply among their consumers. If different retail sale tariffs are fixed for the consumers of small licensees, who supply electricity to a very small number of consumers in comparatively very small areas, it is likely to create a sense of disparity among consumers. In the case of Thrissur Municipal Corporation, the supply of electricity within the area of corporation is done by the Thrissur Corporation Electricity Department (TCED) and KSEB Ltd. Therefore the tariff for consumers under TCED and KSEB Ltd would be different if differential retail sale tariff is adopted. Therefore the Commission has been following the principle of uniform retail supply tariff (RST) for all consumers in the State and differential bulk supply tariff (BST) for different licensees depending upon their consumer mix, expected revenue from charges and various constituents of the aggregate revenue requirement. Therefore the bulk supply tariff can be fixed for a small licensee only after the retail sale tariff is fixed based on the order in the application for determination of tariff filed by KSEB Ltd. The Commission found it difficult to apply the Tariff Regulation, 2014 to the small licensees and to exempt KSEB Ltd from the application of the provisions of the said regulations. The issuance of ARR orders on the application No.OA 6/2015 filed by the applicant is delayed in view of the fact that the writ petition challenging the validity of the Tariff Regulations, 2014 is pending before the Hon'ble High Court and that the interim order of the Hon'ble High Court dated 07.01.2015 has not been modified or vacated.

4. The present application of TCED was filed in the Multi Year Tariff Framework as per the Tariff Regulations, 2014. A comparative statement of the ARR&ERC for the year 2014-15 and for 2015-16 to 2017-18, the first control period as per application is furnished below:

**Table – 1**

**Comparative Statement of ARR & ERC**

Rs.lakh

| Particulars | ARR-ERC Approved. | Control Period Estimates | | |
|---|---|---|---|---|
| Financial Year | 2014-15 | 2015-16 | 2016-17 | 2017-18 |
| **Income** | | | | |
| Revenue from Sale of Power. | 8866.26 | 10499.09 | 11549.00 | 12703.90 |
| Other Income | 572.84 | 350.36 | 385.40 | 423.94 |
| **Total Income.** | **9439.10** | **10849.45** | **11934.40** | **13127.84** |
| **Expenditure** | | | | |
| Purchase of Power | 7,320.92 | 9408.80 | 11384.65 | 13775.42 |
| Depreciation | 221.24 | 220.54 | 387.63 | 571.55 |
| Interest and finance charges | 130.18 | 267.60 | 310.01 | 351.61 |
| Employee Cost | 914.41 | 1452.52 | 1861.04 | 2382.09 |
| Repairs and Maintenance | 147.33 | 184.27 | 202.70 | 222.97 |
| Administration and General Expenses | 50.44 | 365.40 | 384.74 | 406.01 |
| Return on Equity | 10.00 | 121.78 | 237.57 | 370.40 |
| **Total Expenditure.** | **8,794.52** | **12020.91** | **14768.34** | **18080.06** |
| **Net Surplus/(Deficit)** | **644.58** | **(1171.46)** | **(2833.94)** | **(4952.22)** |

## Hearing on the Matter

5. Public hearing was held on 18.03.2015 at Government Guest House, Ramanilayam, Thrissur.In the hearing, the representatives of the licensee, and KSEB Limited were present. The applicant was represented by Sri. Jayakumar, Asst. Secy, Thrissur Municipal Corporation in charge of TCED and other officers. Sri. T.S. Jose, Electrical Engineer, TCED presented the details of the Application on ARR & ERC for the first control period.

6. Sri. Sarma Kumar C.S, Deputy Chief Engineer, KSEBL presented the objections for and on behalf of KSEBL and submitted written remarks on the application, copy of which was served on the applicant. The main remarks were as follows:

   a. The T&D loss projected by the licensee for the control period was more than that approved by the Commission for the year 2014-15, in spite of huge capital expenditure proposed.

   b. The amounts projected under the various headings of O&M expenses are way above the approved norms of Tariff Regulations, 2014and the licensee has not substantiated the claim of such huge deviations with supporting details.

   c. The licensee has not submitted any supporting documents as ordered by the Commission to allow the licensee's claims under rent and further stated that the licensee had booked Section 3 duty under A&G expenses.

   d. The claims of depreciation are not in accordance with the relevant regulations applicable and details of consumer contribution, grant and vintage of assets are not submitted for approving the depreciation allowable.

   e. A large capital investment is proposed by the applicant licensee and has claimed additional depreciation on the additions. The cost benefit analysis of the proposed capital investment is not given. Thus the proposals are not as per the Tariff Regulations, 2014.

   f. The licensee has claimed double the amount for interest and finance charges without claiming any additional loan funds.

   g. With regard to the income from sale of power it was mentioned that average per unit realisation has come down in spite of revision in retail tariff and projected per unit realization of certain categories of consumers were lower than the actual tariffs applicable for 2014-15.

h. Interest from bank balance would have been greater if they had properly utilised the cash balances held in bank.

KSEB Ltd concluded, with a prayer to the Hon'ble Commission, that the applicant licensee be allowed only prudent expenses and after ensuring proper accounting of their incomes.

7. In the counter remarks submitted by the TCED to the comments made by KSEBL, the licensee clarified the following:

a. The computation of T&D loss made by TCED was not based on a scientific manner and the licensee was trying to make it scientific with the help of BEE approved agencies by conducting proper energy audit and till the procedure is standardised, T&D losses may be approved as projected.

b. The projected R&M expenses was only 4.55% more than the actual of 2013 -14 and the employee cost was projected by adding just 9.6% of its actual in 2013-14 excluding the provision for salary revision.

c. The major reason for the increase in A&G was due to an unforeseen demand of the duty under Section 4 of the Kerala Electricity Duty Act, 1963 (hereinafter referred to as Section 4 duty) amounting to Rs.752.41 lakh. It was also reported that the licensee was making sustained efforts before the rent fixing authorities for the fixation of rent as per the direction of Hon'ble Commission and positive result is expected. Till then it was requested to approve the amount claimed.

d. The depreciation is claimed in accordance with the specified regulations of KSERC. The cost benefit analysis for the proposed investment will be submitted to the commission. Since TCED was planning for a huge investment in 2015-16, the depreciation claimed is quite reasonable.

e. Interest and Finance Charges are the amounts to be paid as the interest on Security Deposit to consumer and Security deposit from consumers increased by 30% as compared to the previous year.

f. There has been a clerical error while projecting the income from sale of power and the same has been rectified.

g. TCED intends to utilise its surplus fund accumulated over the years with the approval of KSERC for the capital investment. Hence the interest on fixed deposit which constitutes a major portion of other income will considerably be reduced.

**Analysis and decision of the Commission**

8. The Commission had notified KSERC (Terms and Conditions for Determination of Tariff) Regulations 2014. The said regulations are effective from 14-11-2014, and provide for filing of ARR&ERC application in a multi-year framework. As per the said regulations, the application for approval of ARR&ERC is to be filed for a control period of three years ie., for 2015-16 to 2017-18. M/s TCED has submitted its application for approval of ARR&ERC for the said three years. The Regulation 11 of the said Regulations provides the manner in which the application is to be filed. As per this, the application for approval of aggregate revenue requirement for the control period should contain estimates for each year of the control period. Further the applicant has to provide full details of the forecast of variables used for assessing the aggregate revenue requirement during the control period. In the following sections, each of these items is dealt with separately:

**Sale of energy:**

9. As per Regulation 11 (10), the applicant/distribution licensee shall develop the forecast of expected revenue at existing tariff based on the estimates of contract demand and quantum of electricity to be supplied to the consumers and to be wheeled on behalf of the users of the distribution system for each financial of the control period. Further Regulation 73 provides as follows:

> *“73.Sales forecast. – (1) The distribution business/licensee shall submit, along with the application for approval of aggregate revenue requirement and determination of tariff, a forecast of expected demand and sale of electricity to different categories of consumers and to each consumption slab within each tariff category, in its area of supply.*
>
> *(2) Sale of electricity, if any, to electricity traders or other distribution licensees shall be separately indicated.*
>
> *(3) The Commission shall examine the forecasts for reasonableness based on the growth in number of consumers and in consumption, the*

*demand of electricity in previous financial years, anticipated growth in the next financial year and any other factor, which the Commission may consider relevant and approve forecast of sale of electricity to the consumers with such modifications as deemed fit."*

10. The Licensee M/s TCED has in their application estimated the sales for the control period as shown below:

**Table.2**

**Sales forecast for control period in MU (2015-16 to 2017-18)**

| Particulars | 2015-16 | 2016-17 | 2017-18 |
|---|---|---|---|
| **LT Category** | | | |
| LT I A | 18.67 | 20.54 | 22.59 |
| LT I C | 24.52 | 26.97 | 29.66 |
| LT IV | 4.67 | 5.14 | 5.65 |
| LT V A | 0.04 | 0.05 | 0.06 |
| LT V B | - | - | - |
| LT VI A | 2.99 | 3.28 | 3.61 |
| LT VI B | 2.86 | 3.15 | 3.46 |
| LT VI C | 5.43 | 5.98 | 6.58 |
| LT VI D | 0.06 | 0.06 | 0.07 |
| LT VI E | 0.04 | 0.04 | 0.06 |
| LT VI F | 1.57 | 1.73 | 1.90 |
| LT VII A | 41.35 | 45.48 | 50.03 |
| LT VII B | 1.06 | 1.15 | 1.27 |
| LT VII C | 0.85 | 0.94 | 1.03 |
| LT VIII | 3.82 | 4.21 | 4.63 |
| LT II | - | - | - |
| LT IX | 0.07 | 0.08 | 0.09 |
| LT X | - | - | - |
| **HT Category** | | | |
| HT | 31.18 | 34.29 | 37.72 |
| **Total** | **139.16** | **153.08** | **168.39** |

11. According to the licensee, the projections for the year 2015-16 was estimated based on past data such as the number of consumers, consumption and also considering the actual growth rates of the number of consumers and their consumption. The load forecast also takes into account the economic growth, regional characteristics of consumers, seasonal variations, changes in consumer habits etc.

12. The Commission has examined the sales projections of the licensee.The trend of sales from 2009-10 is given below:

**Table.3**

**Actual Sales for the period (2009-10 to 2013-14) in MU**

| Year | Actual Sales (MU) | Percentage growth as compared to the previous year |
|---|---|---|
| 2009-10 | 99.66 | |
| 2010-11 | 104.37 | 4.7 |
| 2011-12 | 112.02 | 7.3 |
| 2012-13 | 117.56 | 4.9 |
| 2013-14 | 116.70 | -0.7 |

13. There are some categorisations such as '*category I-C*' included in the table which are not in accordance with the categorisation approved by the Commission. As per the data submitted by the licensee, 88 HT consumers accounts for about 31% of the consumption and accounts for 36% of their revenue, while 12900 LT VII consumers consume 24.38% of the energy giving 32% of the revenue. 21091 domestic consumers consume 28% of the total energy giving 17% of the revenue. Thus, these three categories of consumers account for 83% of the consumption and 85% of the revenue. The average increase in the consumption for the last five years is around 5% on a year to year on basis. However a sudden increase in the consumption is shown in the consumption of the last year as compared with 2013-14 to the extent of 7-10% in the domestic category and HT category. However no detailed figures are available to check the authenticity of the latest figures. On an analysis of the recent past too, it is seen that TCED has been consistently forecasting the power sales on the higher side than the actuals. TCED has resorted to the same strategy for forecasting the percentage increase in the consumption for the years of the control period. Even though this is on the higher side (10% as compared to the actual trend of the last five years which is 5%), the Commission accepts to the projected figures of TCED and provisionally approves the figures as projected by the Corporation, taking into consideration the reason provided by the licensee. However the licensee is directed to submit the detailed analysis, figures and the reasoning used to forecast the power consumption to enable the Commission to approve the ARR on a firm basis.

**Distribution loss**

14. As per Regulation 74 of the Tariff Regulations, 2014, the licensee has to submit voltage level distribution loss and distribution loss trajectory for the control period. Necessary supporting data based on studies have to be submitted along with the application. The distribution licensee shall also propose the loss reduction targets for each financial year of the control period along with the distribution loss levels. The Commission has to approve the target level of losses based on the opening level of losses, the figures filed by licensee and other relevant factors.

15. The licenses has submitted that TCED is giving due thrust for commercial loss reduction through (a) replacing faulty and sluggish electromechanical meters with good electronic meters (b) replacing old and damaged meter boards of Corporation's commercial buildings with new cubicle type panel boards and (c) intensifying power theft detection by the anti- power theft squads. TCED has also now approached Kerala State Productivity Council for a detailed energy auditing and considering the above facts the licensee proposed a distribution loss of 8.45% for the control period as shown below.

The actual performance of the licensee is tabulated below:

**Table.4**

**Distribution Loss and Energy Requirement**

| Particulars | 2011-12 | 2012-13 | 2013-14 | 2014-15 |
|---|---|---|---|---|
| | Actual | Actual | Actual | Approved |
| Energy sales (MU) | 112.61 | 117.56 | 116.70 | 130.11 |
| Distribution loss (MU) | 12.10 | 13.83 | 15.38 | 11.07 |
| Gross energy requirement (MU) | 124.72 | 131.39 | 132.08 | 141.18 |
| Distribution loss in % | 9.71% | 10.53% | 11.64% | 7.84% |

16. The Commission had approved a target of 7.84% in 2013-14 and this was maintained during the year 2014-15 too. However it is noticed that the actual distribution loss reported by the licensee is 8.5%. While Commission takes note of the various steps reported to have been taken by the licensee to reduce the loss, Commission is of the firm opinion, that once these measures are properly implemented the licensee should be able to attain the targets fixed by the Commission in 2013-14. The licensee has mentioned that it has taken steps to conduct the energy audit. While submitting the figures of the next year, the licensee is directed to give the detailed report of the study or in the alternative to

conduct a study of the loss levels in some representative feeders and transformers and a strategic plan to reduce the losses to attain the standards fixed by the commission. Since the target has not yet been achieved by the licensee, Commission approves the same target level as was fixed for the years 2013-14 & 2014-15 - ie 7.84%, for the control period and the approved figures are given below:

**Table.5**

**Approved Distribution Loss and Energy Requirement for the control period**

| **Particulars** | **2015-16** | | **2016-17** | | **2017-18** | |
|---|---|---|---|---|---|---|
| | Proposed | **Approved** | Proposed | **Approved** | Proposed | **Approved** |
| Gross energy requirement (MU) | 152.00 | 151.00 | 167.20 | 166.10 | 183.92 | 182.72 |
| Energy sales (MU) | 139.16 | 139.16 | 153.08 | 153.08 | 168.39 | 168.39 |
| Distribution loss (MU) | 12.84 | 11.84 | 14.12 | 13.02 | 15.53 | 14.33 |
| Distribution loss in % | 8.45% | 7.84% | 8.45% | 7.84% | 8.45% | 7.84% |

17. **AT&C Loss:** In the distribution business, distribution loss and AT&C loss are the common performance parameters employed. In the previous year, the Commission has fixed the collection efficiency as 100%. The same level is approved for this year also. Hence, approved AT&C loss for 2014-15 shall be 7.84%.

18. **Cost of Power Purchase:** The licensee has proposed an increase in the cost of power purchase for each year of the first control period. As per the application submitted by the licensee the power purchase cost is estimated to be Rs.9408.80 lakh for the year 2015-16, Rs.11,384.65lakhfor the year 2016-17 and 13,775.42lakh for the year 2017-18 respectively. Thus the power purchase cost is estimated to increase by 21% year to year as shown below.

**Table.6**

**Estimate of Cost of Power Purchase Proposed for the control period**

| | 2015-16 | 2016-17 | 2017-18 |
|---|---|---|---|
| Energy requirement (MU) | 152.00 | 167.20 | 183.92 |
| Rate of energy charges (Rs./kWh) | 6.19 | 6.81 | 7.49 |
| Total cost of Power (Rs.lakh) | 9408.80 | 11384.65 | 13775.42 |

19. The licensee has estimated the cost of power purchase after considering an increase in the energy charge which is not as per the provisions for Tariff

Regulations 2014. As per Regulation 75, the licensee has to submit a power procurement plan for the control period consistent with the sales forecast of unrestricted demand for electricity within the area of supply from each tariff category over the financial year. Tariff for estimating the cost of power purchase shall be the tariff determined by the Commission for such purchase. Hence, the power purchase cost shall be based on the forecast of sales and existing approved tariff.

20. The existing bulk supply tariff applicable for the licensee is Rs.300/kVA as demand charges and Rs. 5.40 per kWh as energy charges. The licensee has estimated the power purchase cost by assuming an increase in energy charges. Based on the past trends in demand as submitted by the licensee (which the commission has already mentioned that it is on the higher side and approval for which has been given on a provisional basis), the Commission is of the view that the contract demand may be escalated provisionally by 10% over the control period. Taking the above figures and applying the existing approved tariff, the estimates of the cost of power purchase approved by the Commission are as shown below.

**Table.7**

**Cost of Power Purchase approved for the control period**

| | 2015-16 | 2016-17 | 2017-18 |
|---|---|---|---|
| Energy requirement (MU) | 151.00 | 166.10 | 182.72 |
| Maximum demand (kVA) | 40656 | 44722 | 49194 |
| Rate of Demand charge (Rs./kVA) | 300 | 300 | 300 |
| Demand charges (Rs.lakh) | 1463.62 | 1609.99 | 1770.98 |
| Rate of energy charges (Rs./kWh) | 5.40 | 5.40 | 5.40 |
| Energy charges (Rs.lakh) | 8154.00 | 8969.40 | 9866.88 |
| **Total cost of Power (Rs.lakh)** | **9617.62** | **10579.39** | **11637.86** |

21. **Capital Expenditure:** The licensee has proposed a fairly large investment programme for the control period, the abstract of which is given below.

TCED in its application has submitted that the distribution system needs to be strengthened in tune with the strengthening of transmission network and with a view to improving consumer satisfaction the licensee is giving due importance for strengthening the distribution network to provide uninterrupted quality power to the consumers, reduce the technical and commercial losses and to improve the quality of services rendered to the consumers. TCED proposes to promote solar installation with battery backup as a possible alternate choice for meeting the power requirement. The target group is domestic consumers with monthly consumption above 200 units. TCED on its own proposes to establish solar PV installation at its buildings and is planning to generate 200KW of energy from solar plants. The estimated cost for the same as per the licensee is Rs.400 lakh. The licensee has appointed 'ANERT' as consultant for implementation of the project

22. TCED is planning to have a sophisticated meter testing laboratory on its own. The proposal and the project report have already been submitted before KSERC for approval. The estimated capital cost for the same is Rs. 85 lakh. Commission vide letter dated 07-05-2015 has intimated the licensee that proposal of the licensee is not justifying the investment proposed as there are other cost effective alternatives available and informed that the expenditure cannot be approved under the capital expenditure to be considered while determining the bulk supply tariff (BST).

23. TCED is planning to spend Rs.35 lakh for transformer fencing andRs.50 lakh to implement DTR metering. The licensee proposes to change all its defective meters during the year and the estimate cost for it is Rs.100 lakh.TCED also stated that they have shifted the store to Paravattani, and is planning to shift the Assistant Engineer (Sec 1) to Paravattani. The estimate for the entire civil works for the same is Rs.150 lakh.TCED also plans to implement HT remote meter reading and for which estimated amount is Rs.30 lakh.TCED is planning for a major change by implementing various sections wise development works of Rs.500 lakh. The tender process for various projects is underway. The estimate RMU for the year 2015-16 is Rs.652 lakh.The licensee has also stated that the tender process for has already been initiated. The licensee also plans to buy a department vehicle for official purpose at Rs.10 lakh.

24. TCED has informed that they could not implement total e-governance during the year 2014-15 as scheduled. M/s SIDCO submitted their proposal for the implementation, but the management decided to go for tender. The licensee prayed to condone the delay in implementation and stated that the same would be implemented during the year 2015-16. TCED has projected Rs.350 lakh for the period of 2014-15 and the commission has approved the same based on the project report submitted. The licensee, expecting a cost variation, has kept Rs.150 lakh as further provision.

25. In order to enhance the power sub transmission capacity and to avoid bottlenecks/congestions in power flow, TCED proposes to construct a new 110 KV substation at Kottappuram at an estimate amount of Rs.2000lakh and have included an amount of Rs.1305.27 lakh under sub-station equipments and another 260.98 lakh under civil work, in the additions to fixed asset expenditure for 2014-15.

26. The Commission has carefully examined the estimates of the licensee.Regulations 23 to 28 of the Tariff Regulations, 2014 provide for the procedure to be followed for addition of assets and the claiming of depreciation in the truing up of the year. As per Regulation 23 (3), the capital cost approved by the Commission after prudence check shall form the basis for determination of tariff. Unless the approval is obtained, it is not eligible to be part of GFA. The Commission expresses its displeasure in the manner in which the fixed asset additions has been incorporated in the fixed asset figures in the ARR of 2014-15 and licensee shall abstain from such arbitrary and misleading additions of such substantial quantity to the fixed assets in future. It is misleading since it is reliably understood that the work of upgrading the sub stations has not yet been started when the ARR was submitted and the licensee too would be sure that it would be not possible to complete a project of such size within three months of the concerned accounting year. Last year too, the commission had made it clear that the commission had not approved any capital expenditure. This year too, the licensee has not provided any detailed project estimates nor the cost benefit analysis for the proposed projects.Hence, the licensee is directed to submit to the Commission for its approval, the application as per the provisions of the Tariff Regulations, 2014,with detailed project estimate, cost benefit analysis, the necessity of the various expenditure and the likely impact on the quality of supply.

27. The licensee has claimed depreciation for all the proposed capital expenditure in each year of the control period. Admittedly, the licensee has not actually executed the work and it has not incurred any expenditure. The Commission has all along been following the principle that the assets created out of grants or consumer contribution will not be eligible for depreciation or interest and finance charges or return on equity. In the absence of such inevitable data, the proposed expenditure prior to actual incurring of the expenditure and the commissioning of the project cannot be considered for granting the depreciation, RoE and interest and finance

charges thereon. The claims for depreciation relating to the assets actually created will be duly considered after commissioning of the project as per the Tariff Regulations 2014, while the accounts of the licensee are taken up for truing up process. Hence the Commission is constrained to take the value of assets approved by the Commission in the last year for applying the appropriate rates of depreciation and RoE as provided in the Tariff Regulations, 2014.

28. **Interest and Finance Charges:** As per TCED, the actual interest and finance charges includes only interest accrued on security deposit of the consumers for the year 2013-14 which comes to Rs.130.18 lakh. Considering that security deposit will increase at an average of Rs.450 lakh yearly, TCED has projected the interest on security deposit at 9% per annum. Present rate of rebate allowed by TCED on advance payment of electricity charges by the consumers is 4% per annum. Taking the above into consideration, the amount of interest claimed on security deposit for the control period is as below:

**Table.8**

**Claim for Interest on Security Deposit& Discount for Advance Payment (Rs in lakh)**

| Particulars | 2015-16 | 2016-17 | 2017-18 |
|---|---|---|---|
| Interest on security deposit | 246.60 | 287.01 | 327.61 |
| Discount for advance payments | 21.00 | 23.00 | 24.00 |
| **Total** | 267.60 | 310.01 | 351.61 |

29. As per the Regulation 30(8) of the Tariff Regulations, 2014, interest shall be allowed on the amount held as security deposit in cash from users of the transmission system or distribution system and consumers at the bank rate as on 1$^{st}$April of the financial year in which the application is filed. The Commission has noted that the opening balance of security deposit reported is Rs.2290.01 as on 31-03-2015 and the estimated increase is about 20% of the opening balance. However it is seen that as on 1.4.2014 the security deposit reported was Rs.1839.18 lakh. The licensee has added another Rs.450 lakh to reach 2290.01, which is an increase of 25%. Quantum of security deposit depends on the consumption levels and tariff levels. There has been a high increase in the levels of security deposit in the recent years due to increase in tariff that were announced during the last three financial years. The tariff hike during 2014-15 was about10% over previous year and the demand growth was nominal. Hence the addition of Rs.450 lakh is an inflated amount. The same amount has been added during the

current period too. However this trend of increase in tariff levels cannot be assumed for the coming years, since the high increase in tariff levels was a result of absence of revision of tariffs during the period 2003 to 2010. Hence Commission provisionally approves the opening balance of Rs.2059.88 lakh for the year 2015-16, after giving an increase of 12% from the opening balance of security deposit as on 2014.Further an annual increase of 10% is allowed for the subsequent years. At the interest rate at 9%,the approved interest expenses are given below:

**Table.9**

**Approved Interest on Security Deposit & Discount for Advance Payment**

(Rs in lakh)

| Particulars | 2015-16 | 2016-17 | 2017-18 |
|---|---|---|---|
| Opening balance of SD | 2059.88 | 2265.87 | 2492.45 |
| Interest on SD | 185.39 | 203.93 | 224.32 |
| Discount for Advance Payments | 21.00 | 23.00 | 24.00 |
| **Total** | 206.39 | 226.93 | 248.32 |

30. **Depreciation:**- The depreciation approved for the year 2014-15 is Rs.221.24 lakh against the projection of Rs.360.05 lakh. The total depreciation claimed for the year 2015-16 after duly considering the assets etc. is Rs 220.54 lakh. For the next two years of the control period the licensee claims Rs.387.63 lakh and Rs.571.55 lakh respectively**.**

31. As per Regulation 28(2)(c) of Tariff Regulations, 2014, the licensee shall submit all such details and documentary evidences as may be required, to substantiate their claims for depreciation. The details of vintage of assets are required for the same. However the licensee has not provided such details which shall be submitted without fail while preferring the claims for depreciation. The licensee has claimed in addition to the existing assets, depreciation for the additional asset planned to be created in each year of the control period. As already discussed earlier, the commission cannot, at present allow the claim for depreciation for the planned assets. The claims for depreciation will be duly considered as and when the projects are commissioned and necessary data and details are submitted. As clarified earlier, Commission approves the depreciation based on the asset figures used in the opening balance of 2014-15. The details of the claim of depreciation are tabulated below:

**Table.10**

**Depreciation claimed for the control period**

| Particulars | Depreciation rate | 2015-16 Depreciation Claim (RsLakh) | 2016-17 Depreciation Claim (RsLakh) | 2016-17 Depreciation Claim (RsLakh) |
|---|---|---|---|---|
| Civil Works | 3.60% | 117.45 | 188.55 | 217.76 |
| HT Distribution System | | | | |
| Distribution Lines | 3.60% | 10.84 | 32.74 | 76.74 |
| Transformers | 3.60% | 1.80 | 17.31 | 39.36 |
| LT Distribution System | | | | |
| Distribution Lines | 3.60% | 4.50 | 14.15 | 27.71 |
| Sub Station equipment | 3.60% | 63.25 | 60.97 | 58.78 |
| Transformers | 3.60% | 3.60 | 11.57 | 25.55 |
| Meters | 6.00% | 4.50 | 20.39 | 45.85 |
| Vehicles | 18.00% | 8.73 | 8.96 | 9.60 |
| Furniture & Fixtures | 6.00% | 4.69 | 9.36 | 11.79 |
| Office Equipments | 6.00% | 5.12 | 6.31 | 8.93 |
| IT Equipment | 6.00% | 3.00 | 5.82 | 6.97 |
| Other items | 4.50% | 9.00 | 26.60 | 56.90 |
| Less Consumer Contribution | | (15.93) | (15.08) | (14.29) |
| **Total** | | **220.54** | **387.63** | **571.55** |

32. The Commission after considering the proposals and submissions in accordance with the relevant regulations has decided that the asset creation will be considered after commissioning of the project and claims for depreciation will be considered as per relevant regulation during the truing up process. Thus the depreciation approved for the control period based on the existing asset base is as shown below.

**Table.11**

**Depreciation approved for the control period (Amount in Rs. Lakh)**

| **Particulars** | **Balance at the beginning of the year (Rs.lakh)** | **Depreciation rate (%)** | **Depreciation (Rs. Lakh)** |
|---|---|---|---|
| Substation – Machinery | 1,854.85 | 5.28% | 97.94 |
| Distribution area –Plant and Machinery | 2,290.82 | 5.28% | 120.96 |

| | | | |
|---|---|---|---|
| Furniture & Fixtures | 9.35 | 6.33% | 0.59 |
| Computer & Accessories | 98.25 | 15.00% | 14.74 |
| Departmental vehicles | 46.45 | 5.28% | 2.94 |
| Tools & testing equipments | 12.64 | 6.33% | 0.80 |
| Photostat machine & Duplicator | 1.86 | 6.33% | 0.12 |
| | 4,314.22 | | 238.09 |
| Less Depreciation on assets created out of Consumer contribution | 318.43 | 5.28% | 16.81 |
| Depreciation admissible | | | 221.28 |

**O&M expenses**

33. As per the Regulations, O&M expenses consist of employee costs, repair and maintenance expenses and administration and general expenses.

34. **Employee cost**: As per the application submitted by TCED for the approval of ARR, it is mentioned that, employee cost of TCED includes salary, DA and other benefits to serving employees and terminal benefits etc to the retired employees and that hitherto TCED has been providing salary and other benefits including earned leave surrender etc, the DA is provided as and when the same released by the State Government to its employees, pension and other benefits as approved by the State Government and also as per the statutory rules and directions under court of law.The comparison between the actual employee cost for the period 2013-14 and the projected employee cost for the period 2015-16 is listed below:

**Table.12**

**Employee cost Projected by the Licensee(Rs in lakh)**

| Particulars | 2014-15 (Approved) | 2015-16 (Projected) | 2016-17 (Projected) | 2017-18 (Projected) |
|---|---|---|---|---|
| Salaries | 914.41 | 1025.11 | 1332.64 | 1732.43 |
| Stipend & Wages | | | | |
| Pension Contribution | | 197.30 | 266.53 | 346.49 |
| Other Allowances | | 5.27 | 6.85 | 8.91 |
| EarnedLeave Encashment | | 88.62 | 115.21 | 149.77 |
| Bonus/ Festival Allowance | | | | |
| Medical Exp | | 10.00 | 13.00 | 16.90 |
| Staff Welfare Exp | | 2.00 | 2.60 | 3.38 |
| Salary Arrears | | | | |
| Others | | 124.22 | 124.22 | 124.22 |
| **Total** | | **1452.52** | **1861.04** | **2382.09** |

35. The licensee however has not provided the detailed break up for the other two years of the control period and they have just projected the total employee cost for 2016-17 and 2017-18 at Rs.1861.04 lakh and Rs.2382.09 lakh. It was also mentioned that the pay revision proposal submitted to the government is in its final stage and the order is expected any time.

36. The Commission has examined the submission of the licensee and it is noted that the employee cost projection of the employee is made based on an average increase of about 25% on a year to year basis during the control period. As per the submission in the application for approval of ARR, the employee expenses constitute on an average of 13% of the total expenses projected during the control period and it is showing an increasing trend. The licensee should take steps to bring down the employee cost as a percentage of its total operation cost by resorting to process of re-engineering and improved productivity. Commission while approving the previous year's ARR had made some observations about the licensee's employee cost stating that the projections of employee cost are not substantiated by proof. The licensee has not provided the details of the employees deployed or the basis of apportioning the employee expenses to the power distribution business. The Commission has, from the data submitted by the licensee in Table 2 and Table 12 , worked out the average employee cost per unit as claimed by the licensee, the details of which are given below.

**Table.13**

**Average employee cost per unit as claimed by the licensee**

| Particulars | 2015-16 | 2016-17 | 2017-18 |
|---|---:|---:|---:|
| Sale of energy (MU) | 139 | 153 | 168 |
| Revenue (Rs. in lakh) | 10499 | 11549 | 12703 |
| Average revenue (Rs. per unit) | 7.55 | 7.55 | 7.55 |
| Employee cost claimed (Rs. in lakh) | 1452 | 1861 | 2382 |
| Employee cost per unit (Rs per unit) | 1.05 | 1.22 | 1.42 |

It can easily be seen that such employee cost as claimed by the licensee is exorbitantly high, considering the fact that it is only distributing electricity purchased from KSEB Ltd at the periphery of its distribution area extending only over 12.65 sq km. More over the licensee has projected the employee costs, not in line with the KSERC (Terms and Conditions for Determination of Tariff) Regulation 2014. The amounts of employee cost approved by the Commission for the financial years 2012-13, 2013-14 and 2014-15 are Rs.882.37 lakh (trued up figure), Rs.831.28 lakh (ARR figure) and Rs.914.41 lakh (ARR figure) respectively. At the most, the Commission can approve only the amounts as provided for by the existing regulations. As per Regulation 81 (8) of Tariff Regulations, 2014, the allowable employee costs for the control period are as shown below:

**Table.14**

**Employee costs allowable for the control period**

| | Projected | Approved |
|---|---|---|
| | (Rs.lakh) | (Rs.lakh) |
| 2015-16 | 1452.52 | 889.37 |
| 2016-17 | 1861.04 | 941.40 |
| 2017-18 | 2382.09 | 996.47 |

Repair and Maintenance Charges: As per the ARR submission of the licensee, the assets of TCED include machinery, lines, cable networks, office equipment etc.The actual R & M expenses for the year 2013-14 are Rs. 176.25 Lakh. In the year 2014-15 ARR Commission has approved Rs.147.33 Lakh. Therefore TCED has projected just 10% over the actual figure which comes to Rs.184.27.The amounts approved by the Commission towards R&M expenses for the financial years 2012-13, 2013-14 and 2014-15 are Rs.50.69 lakh (trued up figure), Rs.133.94 lakh (ARR figure) and Rs.147.33 lakh (ARR figure) respectively. The maximum R&M expenses that can be approved for the control period as per Regulation 81(8) of KSERC (Terms and Conditions for Determination of Tariff) Regulation 2014 are clearly laid down in Table.5 of Annexure IX of the Regulation. The allowable R&M expenses are as shown below:

**Table.15**

**Approved R&M expenses for the control period(Rs.lakh)**

| | Projected | Approved |
|---|---|---|
| 2015-16 | 184.27 | 51.59 |
| 2016-17 | 202.70 | 54.61 |
| 2017-18 | 222.97 | 57.81 |

37. The projected R&M expenses of the licensee is very high compared to the norms approved by the commission and is about 3.5 times higher than the approved

norms during the control period. Moreover the year to year increase is projected @ 10% as compared to the Commission approved norms of 5.5%. The licensee shall carry out a detailed analysis of the amount spent on repairs and take corrective steps to bring down the cost of repairs.

38. **Administration and General Expenses:**As per the submission of the licensee, Administration & General (A&G) expenses include various items such as rent, rates and taxes, insurance, telephone charges, internet and related charges, legal charges, audit fees, consultancy charges, printing and stationary, advertisement charges, DSM expenses, statutory fee including payments to SERC etc. TCED has been estimating likely A&G expenses for the ensuing year after taking into consideration factors such as trends of past actual, business growth, inflation etc. The Commission has considered the A&G expense as a controllable item.

39. The parameters of business growth of the utility includes number of consumers, consumption and revenue from sale of power etc. It is seen that one of the major expense items booked under A&G expense is the duty under sub-section (1) of Section 3 of the Kerala Electricity Duty Act, 1963 (hereinafter referred to as Section 3 (1) duty) payable by TCED to the Government. The proposed Section 3 (1) duty is Rs.100.00 lakh for the year 2015-16. For the years 2016-17 and 2017-18 the amounts of Section 3(1) duty proposed by the licensee is Rs.110.00 lakh and Rs.121.00 lakh respectively. The Section 3(1) duty is a statutory levy.Section 3 of the said Act is quoted hereunder,-

> *"3. Levy of electricity duty on sales of energy by licensees.- (1) Save as otherwise provided in sub-section (2); every licensee in the State of Kerala shall pay every month to the Government in the prescribed manner, a duty calculated at 6 nayepaise per unit of energy sold or a price more than 12 nayepaise per unit;*
>
> *Provided that no duty under this sub-section shall be payable by the Kerala State Electricity Board on the energy sold by it to another licensee.*
>
> *(2) Where a licensee holds more than one licence, duty shall be calculated and levied under this section separately in respect of each licence.*
>
> *(3) The duty under this Section on the sales of energy should be borne by the licensee and shall not be passed on to the consumer."*

From the above statutory provision it can be found that,

(i) the electricity duty under Section 3 (1) of the Kerala Electricity Duty Act, 1963, is payable by the licensee to the Government

(ii) the duty shall be calculated at the rate of 6 paise per unit of energy which is sold at a price of more than 12 paise per unit.

(iii) duty shall be calculated only on the energy sold.

(iv) the duty paid by the licensee under Section 3 (1) cannot be passed on the consumer and therefore it cannot be claimed as an expenditure in the ARR.

The loss of energy in the distribution system is not energy sold to the consumer. Therefore the licensee cannot claim any expenditure for the distribution loss.The claim for duty on the line losses is not in order and therefore not admissible. The amount of electricity duty under Section 3 (1) of the Kerala Electricity Duty Act,1963, cannot be admitted as an item of expenditure in the ARR in view of the above statutory provisions. The Commission has, in its previous orders also, taken this consistent stand on the issue relating to electricity duty payable by the licensee under Section 3 (1) of the Kerala Electricity Duty Act.

40. While approving the Truing Up of accounts of TCED and also while approving the orders on ARR since the year 2007-08, the Commission has not been admitting section 3(1) duty as a revenue expenditure quoting the above provisions in the "Kerala Electricity Duty Act, 1963. It is informed that the Thrissur Municipal Corporation council has passed a resolution that being a Local Self Government Institution, engaged in the electricity distribution business on no profit no loss basis, TCED may either be exempted from remitting Section 3(1) duty or may be permitted to collect it from the consumers and that a representation to this effect has been submitted to the Department of Power, Government of Kerala, for which TCED expects a favourable order. TCED may submit the Commission, a copy of Government order on its representation, as and when received so that the Commission can issue appropriate consequential orders.

41. Accordingly the details of the A&G expenses claimed by the licensee are listed below:

**Table.16**

**A & G expenses projected by the licensee (Rs in lakh)**

| Particulars | 2014-15 (Approved) | 2015-16 (Projections) | 2016-17 (Projections) | 2017-18 (Projections) |
|---|---|---|---|---|
| Rent rates Taxes | 17.20 | 172.00 | 172.00 | 172.00 |
| Insurances | 3.30 | 3.63 | 3.99 | 4.39 |
| Telephone | 2.00 | 2.20 | 2.42 | 2.66 |
| Legal Charge | 1.10 | 1.59 | 1.75 | 1.92 |
| Internet | 0.55 | 0.61 | 0.67 | 0.73 |
| Audit Fee to CA | - | 2.00 | 2.20 | 2.42 |
| Consultancy Charges | 11.00 | 30.00 | 33.00 | 36.30 |
| Technical Charge | 0.33 | 4.50 | 4.95 | 5.45 |
| Conveyance Charge | - | 0.50 | 0.55 | 0.61 |
| Professional Charge | 2.20 | 8.00 | 8.80 | 9.68 |
| Other charges | 0.28 | 8.00 | 8.80 | 9.68 |
| Sec 4 Duty DD | - | - | | |
| Sec 3 Duty DD | - | 100.00 | 110 | 121.00 |
| Books & Periodicals | 0.06 | 0.07 | 0.07 | 0.08 |
| Printing & Stationery | 5.00 | 7.00 | 7.70 | 8.47 |
| Advertisement | 5.00 | 15.00 | 16.50 | 18.15 |
| Miscellaneous Exp | 2.42 | 10.00 | 11.00 | 12.10 |
| Others | | 0.31 | 0.34 | 0.37 |
| **TOTAL** | **50.44** | **365.40** | **384.74** | **406.01** |

42. The total projected A&G expenditure for the periods 2016-17 and 2017-18 are Rs.384.74 lakh and Rs.406.01 lakh.Commission has examined the details provided and observes that the major two components included under this head arethe Rent, Rates and Taxes and Section 3 (1) Duty constituting 47% and 27% respectively of the total A&G expenses projected.

43. The Commission had given a detailed analysis and its decision with regard to the expenditure booked under Rent and Rates in theorder dated 19-05-2014 relating to the ARR for the year 2014-15. The relevant portion from the order dated 19-05-2014 is extracted and given below,-

> “The Commission has in its ARR&ERC order for 2013-14 had clearly mentioned that the rent towards the building is not a reciprocal arrangement for charging street lighting. The licensee can pay reasonable rent towards the building and land; however it shall not be at

unreasonable rates. Accordingly, the Commission in the ARR&ERC order for 2013-14 had directed as below:

> *"The authority to fix rent for buildings is the Executive Engineer PWD having jurisdiction over the area and the authority to fix lease rent for the land and property is the Tahsildar having jurisdiction over the area. Therefore the amounts claimed by the Corporation towards rent for office space and store as well as the lease rent for the land area occupied by substations can be allowed only on production of certificates from the above authorities fixing standard rent/ lease rent. The licensee may also look for office space and store with lesser rent.*

The licensee has not complied with the above direction, instead stated that they have approached concerned department for assessing the rent. As has been held many occasions, the A&G expense is a controllable item of expenditure and hence in the case of rent, the Commission is not in a position to agree on the proposal of the licensee. In the absence of any sufficient materials given by the licensee for estimation of rent, the Commission is forced to relay on the materials produced during its earlier proceedings for determining reasonable rent. In the petition forreview of BST applicable to Thrissur Corporation and ARR&ERC of Thrissur Corporation for 2013-14 filed by KSEB (RP No.5/2013), rent prevailing in Thrissur Corporation area has been produced by the Board. As per the information filed by the Board, the monthly rent payable in Thrissur as per the PWD Technical circular No. B1/59974/90 dated 25-05-2011 is Rs.51.71 per sq.meter or Rs.4.67 per sq.ft per month. Thrissur Corporation did not objected to the above data furnished by the Board in the said proceedings, but maintained that the Corporation is empowered to fix the rates for its assets. It can be seen that the alternate rent administered by Government agency is about 10% of the rent proposed by the petitioner. On the same parlance, the rent for land can also be considered as 10% of the proposed rates of the petitioner. Accordingly, the rates now arrived at is provisionally used for approving the ARR till the licensee has furnished the information as directed or any alternate decision on rent is fixed by the Commission. The rent allowable for the year 2014-15 for the purpose of ARR will be Rs.17.2 lakh."

In fact Commission had also given a direction on the same matter in its order dated 15-05-2013 on the ARR&ERC for 2013-14.

However no tangible action is seen taken by the licensee in this regard. It should be also considered that many Panchayats are giving rent free space to accommodate section offices of KSEB Ltd. When TCED claims that it is functioning on a no profit-no loss basis, the amounts claimed by the licensee towards rent for its offices appears to be exorbitantly high.TCED has, in its application for approval of ARR for the current year, stated that*"The rent we have claimed is as per the council resolution, at the same time efforts have already been initiated for fixing the rent as per the direction of Hon'ble Commission for which results are awaited."*But the Commission has to necessarily conduct a prudence check on any item of expenditure claimed by the licensee. The Commission is now following the principle of uniform retail supply tariff (RST) for all licensees in the State and differential bulk supply tariff (BST) for each licensee which purchases electricity from KSEB Ltd for supply within its area of licence. The bulk supply tariff is determined by the Commission considering the expected revenue from charges (ERC) and the aggregate revenue requirement (ARR) except the power purchase cost. Any exorbitant claim towards any item of expenditure in the ARR will have an adverse impact on the BST, if such item of expenditure is approved by the Commission without prudence check. Finally all such expenses will fall on the consumers as tariff. Therefore the Commission is bound to conduct a prudence check on such claim by TCED.

44. In view of the observations made by the Commission in its order dated 19.05.2014, the amount approved by the Commission towards A&G expenses for the financial year 2014-15 was Rs.50.44 lakh. The maximum amounts of A&G expenses that can be approved for the control period are only those as per Regulation 81(8) and Annexure IX of KSERC (Terms and Conditions for Determination of Tariff) Regulation 2014. Therefore the amounts as shown in the table below are provisionally approved in view of the facts and regulations explained above.

**Table.17**

**Approved A&G expenses for the control period(Rs.lakh)**

| | Projected | **Approved** |
|---|---|---|
| 2015-16 | 365.40 | 243.03 |
| 2016-17 | 384.74 | 257.24 |
| 2017-18 | 406.01 | 272.29 |

The licensee is directed to make a special note of the fact that the amounts as approved above are only provisional which will be subjected to further scrutiny and prudence check during the truing up process. The Commission reiterates its directives on this issue which were given in its order dated 19.05.2014. The rents claimed for the offices of TCED will be approved only if the directives given by the Commission in this regard are complied with and reports submitted.

45. **Return on Equity**:- The licensee has calculated ROE at 3% on the net fixed assets at the beginning of the period. The fixed assets at the beginning of the period come to Rs.4059.35 Lakh which is as per the ARR for the period 2015-16.The ROE claimed is Rs.121.78 lakh which is 3% of Rs.4059.35 Lakh. The licensee proposes increase in ROE on the net fixed assets at the beginning of the period for each year of the control period.

**Table.18**

**ROE projected for the control period**

| Year | 2014-15 | 2015-16 | 2016-17 | 2017-18 |
|---|---|---|---|---|
| Return on Equity(Rs. lakh) | 10.00 | 121.78 | 237.57 | 370.40 |

As the contribution of equity is not clearly identifiable the returns can be allowed only based on Regulation 29(2) of the Tariff Regulations, 2014. As per the said Regulation, it is stated that if the equity invested in the regulated business of the licensee is not clearly identifiable, return at the rate of three per cent shall be allowed on the net fixed assets at the beginning of the financial year and the net fixed assets shall be exclusive of the assets created out of the consumer contributions. The Commission's stand has been clearly stated at the time analysing the capital expenditure of the licensee. capital investments, the net fixed assets taken for allowing the return on equity is the one approved by the

Commission in the last ARR. Accordingly the net fixed assets that qualify for the calculation of return on equity is as shown below.

**Table - 19**

**Return on equity approved for the control period (Rs. Lakh)**

| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 |
|---|---|---|---|---|
| Gross fixed assets at the beginning of the year | **4,314.22** | **4,314.22** | **4,314.22** | **4,314.22** |
| Less Consumer contribution | 318.43 | 318.43 | 318.43 | 318.43 |
| Assets eligible for depreciation at the beginning of the year | 3995.79 | 3995.79 | 3995.79 | 3995.79 |
| Cumulative depreciation at the beginning of the year | 1644.22 | 1865.46 | 2086.74 | 2308.02 |
| Depreciation allowed for the control period | 221.24 | 221.28 | 221.28 | 221.28 |
| Cumulative depreciation at the end of the year | 1865.46 | 2086.74 | 2308.02 | 2529.30 |
| Net Fixed Assets at the beginning of the year | | **2130.33** | **1909.05** | **1687.77** |
| Return on Net Fixed Assets | | **3%** | **3%** | **3%** |
| Admissible Return | | **63.91** | **57.27** | **50.63** |

46. **Aggregate Revenue Requirement:** The Aggregate Revenue Requirements approved for the control period are summarised as given below.

**Table 20**

**Aggregate Revenue Requirement approved for the control period (Rs in lakh)**

| Particulars | Projected | **Approved** | Projected | **Approved** | Projected | **Approved** |
|---|---|---|---|---|---|---|
| Financial Year | 2015-16 | **2015-16** | 2016-17 | **2016-17** | 2017-18 | **2017-18** |
| Expenditure | | | | | | |
| Purchase of Power | 9408.80 | **9617.62** | 11384.65 | **10579.39** | 13775.42 | **11637.86** |
| Depreciation | 220.54 | **221.28** | 387.63 | **221.28** | 571.55 | **221.28** |
| Interest & Finance Charges | 267.60 | **206.39** | 310.01 | **226.93** | 351.61 | **248.32** |
| Employee Cost | 1452.52 | **889.37** | 1861.04 | **941.40** | 2382.09 | **996.47** |
| Repairs and Maintenance | 184.27 | **51.59** | 202.70 | **54.61** | 222.97 | **57.81** |
| Administration and General Expenses | 365.40 | **243.03** | 384.74 | **257.24** | 406.01 | **272.29** |
| Return on Equity | 121.78 | **63.91** | 237.57 | **57.27** | 370.40 | **50.63** |
| Total Expenditure | 12020.91 | **11293.19** | 14768.34 | **12338.12** | 18080.06 | **13484.66** |

47. **Revenue from Tariff**: - The licensee has projected a revenue of Rs.10499.09 lakh for the year 2015-16. For the subsequent years of the control period, the licensee has projected a revenue of Rs. 11549.00 lakh for 2016-17 and Rs.12703.90 lakhfor the year 2017-18. The details of the revenue from sale of power for the control period as projected by the licensee are shown below. The Commission's view on the projected figures have already been detailed while discussing the power requirement of the licensee. Hence Commission provisionally approves the following figures which have been submitted by the licensee, though the Commission does not approve the consumer categories which are not approved as per the tariff notification dated 14.08.2014.

**Table.21**

**Sale and revenue from the categories of consumers**

| **Categories** | **2015-16** | | **2016-17** | | **2017-18** | |
|---|---|---|---|---|---|---|
| **LT Category** | | | | | | |
| | Sale MU | Revenue in Rs. lakh | Sale MU | Revenue in Rs. lakh | Sale MU | Revenue in Rs. lakh |
| LT I A | 18.67 | 783.71 | 20.54 | 862.08 | 22.59 | 948.29 |
| LT I C | 24.52 | 1297.75 | 26.97 | 1427.52 | 29.66 | 1570.27 |
| LT IV | 4.67 | 273.48 | 5.14 | 300.83 | 5.65 | 330.91 |
| LT V A | 0.04 | 1.34 | 0.05 | 1.48 | 0.06 | 1.62 |
| LT V B | - | - | - | - | - | - |
| LT VI A | 2.99 | 194.10 | 3.28 | 213.51 | 3.61 | 234.86 |
| LT VI B | 2.86 | 212.91 | 3.15 | 234.20 | 3.46 | 257.62 |
| LT VI C | 5.43 | 523.30 | 5.98 | 575.63 | 6.58 | 633.19 |
| LT VI D | 0.06 | 1.05 | 0.06 | 1.16 | 0.07 | 1.27 |
| LT VI E | 0.04 | 2.02 | 0.04 | 2.22 | 0.06 | 2.44 |
| LT VI F | 1.57 | 156.33 | 1.73 | 171.96 | 1.90 | 189.16 |
| LT VII A | 41.35 | 4001.37 | 45.48 | 4401.51 | 50.03 | 4841.66 |
| LT VII B | 1.06 | 60.76 | 1.15 | 66.84 | 1.27 | 73.52 |
| LT VII C | 0.85 | 65.41 | 0.94 | 71.95 | 1.03 | 79.14 |
| LT VIII | 3.82 | 138.36 | 4.21 | 152.19 | 4.63 | 167.41 |
| LT II | - | - | - | - | - | - |
| LT IX | 0.07 | 10.90 | 0.08 | 11.99 | 0.09 | 13.19 |
| LT X | - | - | - | - | - | - |
| **HT Category** | | | | | | |
| HT | 31.18 | 2776.30 | 34.29 | 3053.93 | 37.72 | 3359.33 |
| **Total** | **139.16** | **10499.09** | **153.08** | **11549.00** | **168.39** | **12703.90** |

48. **Non-Tariff Income:**The licensee has projectedRs.350.36lakh as non-tariff incomefor the year 2015-16. The licensee has included meter rent, interest from deposits, income from the sale of scrap etc under this head. The licensee has also included charges such as testing fee, recovery consequent to detection of theft of power, meter box charges, pole rental chargesetc under non-tariff income. The projected non-tariff income for the year 2016-17 is Rs. 385.40 lakh and for the year 2017-18 is Rs.423.94 lakh respectively. The details of the projected non- tariff income for the control period are given below.

**Table.22**
**Projected Non-tariff income for the control period**

| Particulars in Rs. Lakh | 2015-16 | 2016-17 | 2017-18 |
|---|---|---|---|
| Meter Rent/Service Line Rental | 72.60 | 79.86 | 87.85 |
| Miscellaneous Charges. Reasonable cost for providing supply, Testing fee, Reconnection fee, Penal charges etc | 137.50 | 151.25 | 166.38 |
| Interest from SD and FD | 76.10 | 83.71 | 92.08 |
| Commission for collection electricity duty | 8.80 | 9.68 | 10.65 |
| Income from sale of scrap etc. | 2.20 | 2.42 | 2.66 |
| Interest on advances to Suppliers | 53.16 | 58.48 | 64.33 |
| **Grand Total** | **350.36** | **385.40** | **423.94** |

49. In 2014-15, the Commission had approved Rs.572.84 lakh as non-tariff income against the proposal of Rs.248.50 lakh stating that the arguments of the licensee were not sustainable. The view expressed by the Commission was that the licensee had understated the interest from security deposit and fixed deposit and Commission approved an amount of Rs.388.63 lakh in the place of Rs.47.50 lakh projected by the licensee. As per the balance sheet provided by the licensee there is bank balance to the extent of Rs.70.12 crores. However the break-up of these are not provided. The cash flow statements shown for the year 2013-14 do not show substantial outflow for capital projects and interest received is accounted as Rs.5.58 crores. Thus the same situation which was present in the last year is continuing during the current year too and the licensee has not provided any sufficient details to clear the points raised by the Commission during the previous period. Hence the Commission is constrained to approve the figures approved for the last year as Interest.

**Table.23**
**Approved Non-tariff income for the control period**

| Particulars in Rs. Lakh | 2015-16 | 2016-17 | 2017-18 |
|---|---|---|---|
| Meter Rent/Service Line Rental | 72.60 | 79.86 | 87.85 |
| Miscellaneous Charges. Reasonable cost for providing supply, Testing fee, Reconnection fee, Penal charges etc | 137.50 | 151.25 | 166.38 |
| Interest from SD and FD | 388.63 | 388.63 | 388.63 |
| Commission for collection electricity duty | 8.80 | 9.68 | 10.65 |
| Income from sale of scrap etc. | 2.20 | 2.42 | 2.66 |
| Interest on advances to Suppliers | 53.16 | 58.48 | 64.33 |
| **Grand Total** | **662.89** | **690.32** | **720.50** |

50. **Revenue Surplus/Gap:** Based on the above, the revenue surplus/gap for the control period estimated by the licensee and that approved by the Commission are as follows

**Table -24**
**Revenue Gap, Projected by the licensee and Approved by the Commission for the control period (Amount in Rs. lakh)**

| Particulars | Projected | **Approved** | Projected | **Approved** | Projected | **Approved** |
|---|---|---|---|---|---|---|
| Financial Year | 2015-16 | **2015-16** | 2016-17 | **2016-17** | 2017-18 | **2017-18** |
| **Income** | | | | | | |
| Revenue from Sale of Power. | 10499.09 | 10499.09 | 11549.00 | 11549.00 | 12703.90 | 12703.90 |
| Other Income | 350.36 | 662.89 | 385.40 | 690.32 | 423.94 | 720.50 |
| **Total Income** | **10849.45** | **11161.98** | **11934.40** | **12239.32** | **13127.84** | **13424.40** |
| **Expenditure** | | | | | | |
| Purchase of Power | 9408.80 | **9617.62** | 11384.65 | **10579.39** | 13775.42 | **11637.86** |
| Depreciation | 220.54 | **221.28** | 387.63 | **221.28** | 571.55 | **221.28** |
| Interest & Finance Charges | 267.60 | **206.39** | 310.01 | **226.93** | 351.61 | **248.32** |
| Employee Cost | 1452.52 | **889.37** | 1861.04 | **941.40** | 2382.09 | **996.47** |
| Repairs and Maintenance | 184.27 | **51.59** | 202.70 | **54.61** | 222.97 | **57.81** |
| Administration and General Expenses | 365.40 | **243.03** | 384.74 | **257.24** | 406.01 | **272.29** |
| Return on Equity | 121.78 | **63.91** | 237.57 | **57.27** | 370.40 | **50.63** |
| **Total Expenditure** | 12020.91 | **11293.19** | 14768.34 | **12338.12** | 18080.06 | **13484.66** |
| **Net Surplus/(Deficit)** | **(1171.46)** | **(131.21)** | **(2833.94)** | **(98.80)** | **(4952.22)** | **(60.26)** |

**Directives of the Commission**

51. In view of the facts and reasons explained in earlier paragraphs, the Commission gives the following directives. The licensee shall,

(i) Promote demand side management and energy efficiency measures within its area of licence.

(ii) Promote renewable energy either by generation or by purchase of renewable energy or by purchase of renewable energy certificates.

(iii) Bring down the distribution loss to the approved level.

(iv) Submit necessary details of the existing assets and their vintage and the details of projects commissioned during the control period for proper assessment of depreciation, interest and finance charges and return on equity. In case if these details are not provided by 31.12.2015, the Commission will be forced to make "best judgement assessments" and calculate the depreciation accordingly. The Commission is not satisfied with the way the details have been provided and the manner in which calculations have been made.

(v) Submit details of security deposits and status of payment of interest on security deposits by 31.12.2015

(vi) Submit the capital investment plan to the Commission and obtain the approval of the Commission.

(vii) Submit the details of consumption and analysis to substantiate the power requirements forecasted.

(viii) Implement the directives given in earlier orders.

The Commission will review the progress in implementation of the directives.

**Orders of the Commission**

52. After carefully considering the claims of the applicant and the views expressed by M/s KSEB Ltd and in view of the pendency of Writ Petition No. 465/2015 filed by M/s KSEB Ltd before the Hon'ble High Court of Kerala, the Commission hereby approves provisionally the ARR and ERC for the licensee for the first control period as stated below,-

| Financial Year | **2015-16** | **2016-17** | **2017-18** |
|---|---|---|---|
| Total Income | 11161.98 | 12239.32 | 13424.40 |
| Total Expenditure | 11293.19 | 12338.12 | 13484.66 |
| **Net Surplus/(Deficit)** | **(131.21)** | **(98.80)** | **(60.26)** |

(1) The licensee shall limit the expenditure to the levels approved by the Commission.

(2) The existing RST and BST shall continue until further orders.

53. These orders are issued subject to the result of the judgment of the Hon'ble High Court in Writ Petition No. 465/2015 filed by KSEB Ltd, in the view of the fact that impact, if any, on the ARR and ERC of KSEB Ltd may have consequential impact on the ARR and ERC of the licensee, since the Commission is following the principles of uniform retail supply tariff (RST) and differential bulk supply tariff (BST).

The application is disposed of and it is ordered accordingly.

**Sd/-**
K.Vikraman Nair
Member

**Sd/-**
T.M. Manoharan
Chairman

Approved for issue

Sd/-

Santhosh Kumar K.B
Secretary