KERALA STATE ELECTRICITY REGULATORY COMMISSION

THIRUVANANTHAPURAM

Application No. : OA 2/2015

In the matter of	:	Determination of ARR & ERC of M/s Kanan Devan Hills Plantations Company Limited 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 Kanan Devan Hills Plantations Company Limited, Munnar
PRESENT	**:**	**Shri. T.M.Manoharan, Chairman** **Shri K.Vikraman Nair, Member**

ORDER DATED 07.09.2015

Background

1. Kanan Devan Hill Plantations Company Private Limited(hereinafter referred to as KDHPCL or the licensee) is the distribution licensee supplying electricity in and around Munnar. KDHPCL avails electricity from KSEB Ltd for the supply to its consumers, for its own consumption and for supply to several consumers of KSEB Ltd residing in the vicinity of the area of supply of KDHPCL. The licensee vide its letter dated 07-01-2015 filed the application for approval of ARR & 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 the Tariff Regulations, 2014). The application was admitted as OA No.2/2015.

2. 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.2/2015 as early as on 07.01.2015. After scrutiny of the application, a public hearing was conducted on 19.03.2015. 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 regulations. 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 supply 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 supply 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 supply tariff is fixed based on the applications 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 orders on the application No.OA 2/2015 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.

3. The application 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.lakhs

Particulars	ARR-ERC Approved	ARR-ERC Approved	Control Period Estimates		
Financial year	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**
Income					
Revenue from Sale of Power.	1,953.75	1994.02	2271.57	2498.73	2748.60
Other Income	8.43	8.46	15.12	16.76	18.48
Total Income	**1,962.18**	**2002.48**	**2286.69**	**2515.49**	**2767.08**
Expenditure					
Purchase of Power	1,844.11	1884.10	2125.94	2344.32	2584.86
Repairs and Maintenance	21.05	23.16	16.64	17.62	18.65
Employee Cost	72.13	78.54	80.09	84.78	89.74
A& G Expenses	8.94	9.83	13.91	14.73	15.59
Depreciation	16.51	15.39	19.93**	19.93	19.93
Interest & Finance Charges	10.48	12.50	16.39	18.03	19.83
Other Debits	0.20	0.20	13.44	14.08	14.76
Return on Equity	5.00	5.00	7.60	6.86	6.27
Total Expenditure.	**1,978.42**	**2028.72**	**2293.94**	**2520.35**	**2769.63**
Net Surplus/(Deficit)	**-16.24**	**-26.24**	**-7.25**	**-4.87**	**-2.55**

***As per the form D 3.5 the depreciation claimed for the year 2015-16 is Rs.15.39 lakhs. The same was modified in their later submission.*

4. The licensee had published the abstract of the application in one English and two Malayalam daily news papers as per Regulation 20 KSERC (Terms and Conditions for Determination of Tariff) Regulation 2014 for seeking objections/comments from various stakeholders and consumers as shown below:
    - Malayala Manorama (Kottayam edition) : 27-02-2015
    - Mathrubhumi(Kottayam edition) : 27-02-2015
    - Deccan Chronicle (Kochi edition) : 28-02-2015

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A public hearing was held on 19-03-2015 at the K.D.H Club Hall, Munnar.

Public Hearing on the Matter

5. In the public hearing held on 19-03-2015, representatives of the licensee and KSEB Limited were present. Sri.P.M.Srikrishnan, Executive Director of KDHPCL presented the ARR & ERC for the control period and responded to the queries of the Commission. Shri. C.S.Sarma Kumar, Deputy Chief Engineer, TRAC presented the comments of KSEB Limited. Written copies of the comments were also served on the applicant. In their comments, KSEB Limited raised the following issues:
    a. The distribution loss claimed by the licensee for control period is 13%, which is higher than the approved level of 12% for 2014-15. T&D loss being an important performance parameter, the Commission may fix the distribution loss target below 12% for the control period.

    b. An increase of 41.51% on the A&G expenses of the licensee is very high when compared to the previous year's approved level.

    c. The projection of the licensee on the depreciation of meters and civil works were not as per the regulation and submitted that the same may be approved only as per the regulation.

    d. The claim of the licensee on the interest and finance charges was not rational and the same may be considered only after clarifications.

    e. The claim of the licensee for the ROE may be limited to the actual capital investments incurred.

    f. The additional power to be purchased to make upthe inefficiency of the licensee in reducing the T&D loss may not be approved.

    g. The Commission may approve the expenses of Rs.13.44 lakhs under the head of other debits and non tariff income only after considering all the details required for approval.

    KSEBL prayed that the Commission may approve only the prudent expenses of the licensee

6. The licensee vide letter dated 27-03-2015 has furnished reply on the comments of KSEB limited.
    a. The licensee has stated that it is diligently working to reduce the line loss and has replaced 3000 existing meters with electronic meters for more accurate metering of consumption especially in respect of high consumption commercial consumers.

b. The licensee submitted that the rates claimed for depreciation will be scrutinized and revision if any will be incorporated in the truing up of accounts.

c. The licensee clarified that the interest on security deposit has been computed at the rate of 9% on the estimated deposit.

d. On the claim of ROE, the licensee stated that the Commission may allow the same after the approval of the capital expenditure proposed by the licensee.

e. The licensee submitted the split up details of their claim under the head of other debits and clarified the projection on the non tariff income of the licensee.

Analysis and decision of the Commission

7. 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 multiyear framework. As per the said regulations 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 KDHPCL 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 control period. Further the applicant has to provide full details of the forecast of variables used for the aggregate revenue requirement during the control period. Each of these items is dealt with separately in the following sub-heads:

<u>Sale of energy:</u>

8. As per Regulation 11 (10), the applicant/distribution licensee shall develop the forecast of expected revenue from existing charges 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 year 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."

9. The Licensee M/s KDHPCL projected the total sales for the first control period from 2015-16 to 2017-18 as 36.90 MU for all the three years. As per the application, the licensee expects the sales of power for the control period to remain constant. The details provided by the licensee are as shown below:

Table - 2
Sales forecast for control period (2015-16 to 2017-18)

Consumer category	2015-16	2016-17	2017-18
	(MU)	(MU)	(MU)
HT IA Industrial	22.95	22.95	22.95
HT II (Non Ind/Comr)	0.43	0.43	0.43
HT III Agriculture	0.24	0.24	0.24
HT IV Commercial	1.53	1.53	1.53
LT I Domestic	6.91	6.91	6.91
LT II Colonies	0.31	0.31	0.31
LT III Temporary	0	0	0
LT IV Industries	0.62	0.62	0.62
LT V Agriculture	0.02	0.02	0.02
LT VI A Non-Domestic	1.15	1.15	1.15
LT VII A Commercial	2.41	2.41	2.41
LT VIII Public lighting	0.32	0.32	0.32
Total	**36.9**	**36.9**	**36.9**

10. The major share of sale is to HT IA Industrial category. The projected sale of electricity for HT IA Industrial category is 22.95 MU for the next three years. The Commission has examined the sales projections of the licensee. As per the provisions of the regulation, the sales growth is to be estimated based on the previous year sales. However, the licensee has taken a position that there may not be any growth in sales for the next three years. Such assumption is not tenable. As per the information available, the sale growth in the past three years is positive

though moderate. There is some difficulty in the estimation of growth of sale of power as there has been changes in the consumer categories and consistent sales data for some of the categories are not available. The major consumer categories as far as the licensee is concerned is HT industrial, domestic, Commercial LT & HT. Other categories are not significant. The following table shows the sales growth in the past three years.

Table -3
Growth rate of sales (2011-12 to 2013-14) In MU

Categories	2011-12	2012-13	2014-15	Compounded growth rate
	Actual	Actual	Actual	
HT I Industrial	22.93	22.63	23.64	1.5%
HT III Agriculture			0.27	
HT IV Commercial	1.77	1.80	2.16	10.5%
LT I Domestic	5.68	6.75	6.92	10.4%
LT II Colonies	1.34	0.30	0.07	-77.1%
LT IV Industries	0.59	0.59	0.59	0.3%
LT V Agriculture	0.05	0.02	0.01	-55.3%
LT VI Non-Domestic	0.84	0.77	0.75	-5.5%
LT VII Commercial	2.50	2.65	2.73	4.5%
Street Light	0.27	0.31	0.31	7.2%
Total	**35.96**	**35.83**	**37.46**	**2.1%**

11. The Compounded annual overall growth rate is about 2%. The licensee in the previous years had adopted a method of assuming 3% overall growth in sales. It can be seen that in the case of HT industrial (1.5%), HT commercial (10.5%) and LT domestic (10.4%) and LT commercial (4.5%), there is consistent growth. Since the major share is from HT industrial for which growth is below average, the overall average tends to be low. Hence the Commission is of the view that as provided in the regulations, past sales record is to be considered for the projections for the control period for the categories showing positive growth. In the case of categories such as LT colonies, LT V agriculture, and LT VI non-domestic, sales as recorded in 2013-14 can be considered. It is also to be noted that in the case of domestic category, the increase in sales in 2012-13, is on account of conversion of LT II colonies to LT domestic. Hence the rate of growth at a rate of 2.5**%**from 2012-13 to 2013-14 would be reasonable. Accordingly, the sales projections approved for the purpose of approval of ARR&ERC are as shown below:

Table -4
Approved energy sales for the control period(In MU)

Categories	2013-14 Actual	2014-15 (Projected)	2015-16 (Projected)	2016-17 (Projected)	2017-18 (Projected)	Growth (%)
HT I Industrial	23.64	24.00	24.37	24.75	25.13	1.5%
HT III Agriculture	0.27	0.27	0.27	0.27	0.27	
HT IV Commercial	2.16	2.22	2.28	2.35	2.41	2.8%
LT I Domestic	6.92	7.10	7.27	7.46	7.64	2.5%
LT II Colonies	0.07	0.07	0.07	0.07	0.07	
LT IV Industries	0.59	0.59	0.60	0.60	0.60	0.3%
LT V Agriculture	0.01	0.01	0.01	0.01	0.01	
LT VI Non-Domestic	0.75	0.71	0.67	0.63	0.60	
LT VII Commercial	2.73	2.85	2.98	3.12	3.26	4.5%
Street Light	0.31	0.31	0.31	0.31	0.31	7.2%
Total	**37.46**	**38.14**	**38.84**	**39.55**	**40.29**	**1.8%**

Distribution Loss and Energy Requirement:

12. As per Regulation 74, the licensee has to provide voltage level distribution loss and distribution loss trajectory for the control period. The results of necessary supporting studies have to be furnished along with the application. The Commission has to approve the target level of losses based on the opening level of losses, the data submitted by the licensee and other relevant factors.

13. The licensee has proposed higher level of distribution loss for the control period when compared to the distribution loss level approved by the Commission for the year 2014-15.The distribution loss target fixed for the year 2014-15was 12%whereas the licensee has estimated the distribution loss at 13% for the Control Period.

Table -5
Distribution loss proposed for the control period

Year	2015-16 Projected	2016-17 Projected	2017-18 Projected
Total Energy sales (MU)	36.90	36.90	36.90
Feed Back(MU)	7.80	7.80	7.80
Distribution loss(MU)	6.68	6.68	6.68
Billed Energy (MU)	44.70	44.70	44.70
Total Energy Requirement (MU)	51.38	51.38	51.38
Distribution loss(%)	13.00%	13.00%	13.00%

14. The energy loss reported for the year 2011-12 is 13.74% as against the approved level of 13%. For 2012-13, the target for distribution loss fixed by the Commission was 12% and the actual loss was 14%. In 2013-14also, the Commission has approved a distribution loss of 12%.

Table -6
Approved distribution loss for 2014-15

	2012-13	2013-14	2014-15	
	Actual	Approved	Projected	Approved
Total Energy sales (MU)	35.83	37.04	36.90	36.90
Feedback (MU)	7.23	6.88	7.45	7.45
Distribution loss(MU)	7.02	5.99	6.63	6.05
Billed Energy (MU)	43.26	43.03	43.53	44.35
Total Energy Requirement (MU)	50.08	49.91	50.98	50.40
Distribution loss(%)	14.02%	12.00%	13.00%	12.00%

15. The Commission is of the view that it is not proper to approve a distribution loss target higher than the level approved for the previous year, since the licensee has not been successful in attaining the same and hence an opportunity should be provided to the licensee to attain the target with some additional reasonable effort. Hence, the distribution loss for the control period is fixed at the same level as that of 2014-15 ie.,12% and the total energy requirement for the control period is calculated based on the compounded annual growth rate of the licensee. The licensee has to take necessary action for limiting the distribution loss to the approved level.

Table -7
Approved levels of distribution loss for the control period (2015-16 to 2017-18)

	2013-14	2014-15	2015-16	2016-17	2017-18
	Approved	Approved	Approved	Approved	Approved
Total Energy sales (MU)	37.04	36.9	38.84	39.55	40.29
Feedback (MU)	6.88	7.45	7.45	7.45	7.45
Distribution loss(MU)	5.99	6.05	6.31	6.41	6.51
Billed Energy (MU)	43.03	44.35	45.15	45.96	46.80
Total Energy Requirement (MU)	49.91	50.40	52.60	53.41	54.25
Distribution loss(%)	12.00%	12.00%	12.00%	12.00%	12.00%

16. Based on the approved sales and approved distribution loss level, the gross energy requirement would be 52.60MU for the first year of control period. After considering the feedback energy of 7.45 MU, the net billed energy would be 45.15MU.

AT&C Loss:

17. The collection efficiency reported by the licenseefor the year is almost 100%.According to the licensee, except for some government offices, the collection is almost same as demand. Therefore, the AT&C loss target for the control period shall be same as that of the distribution loss.

Cost of Power Purchase:

18. In the application for approval of ARR, the licensee has projected the cost of power purchase for the control period as shown below:

Table -8

Cost of Power Purchase Projected for Control period

	Projections
Total Projected Consumption [MU]	51.38
Less: Feed Back Units [MU}	7.80
Billed Units (MU)	**43.58**
Contract Demand billed [KVA]	7000
Excess Demand [KVA]	-
Total Projected Demand [KVA]	**7,000**
Energy Charges (@ Rs.4.30/kWh) (Rs.lakhs)	1873.94
Demand Charges (@Rs.300/kVA) (Rs.lakhs)	252.00
Total Cost of Power purchase (Rs.lakhs)	**2125.94**

19. The licensee in its ARR has mentioned that it, *"has estimated the power purchase cost as per the existing BST tariff for the year 2015-16 and for the subsequent two years of the control period enhanced by the amount of projected additional income from enhanced RST reduced only by any increase in costs other than the power purchase costs."*

20. However the method followed by the licensee is not as per the guidelines laid down by the Tariff Regulations, 2014. The power purchase cost is to be estimated based on the existing BST for the projected energy requirement. Accordingly the power purchase cost for the control period is estimated as shown below;

Table -9

Power purchase cost approved for the control period

	2015-16	2016-17	2017-18
Total Projected Consumption [MU]	52.60	53.41	54.25
Less: Feed Back to KSEB(Units in MU)	7.45	7.45	7.45
Billed Units (MU)	**45.15**	**45.96**	**46.80**
Contract Demand billed [KVA]	7,000	7,000	7,000
Excess Demand [KVA]	-		
Total Projected Demand [KVA]	**7,000**	**7,000**	7000
Demand Charges (@Rs.300/kVA) (Rs.lakhs)	252	252	252
Energy Charges (@ Rs.4.30/kWh) (Rs.lakhs)	1,941.32	1,976.44	2,012.54
Total Power purchase cost(Rs.lakhs)	**2,193.32**	**2,228.44**	**2,264.54**

Interest and Financing Charges:

21. The licensee has not claimed any interest charges for the control period. The licensee has not shown any long term loans in the balance sheet. However, the licensee has claimed interest on security deposits under interest on working capital. As per the regulations, the licensee is eligible for the interest on working capital as per norms. Since the licensee has not claimed interest on long term loan or interest on working capital, the same are not allowed.

22. The licensee has claimed interest on security deposits of Rs.16.39 lakhs for the year 2015-16, Rs.18.03 lakhs for the year 2016-17 and Rs.19.83 lakhs for the year 2017-18. The interest claimed is based on the estimated security deposits from consumers for the control period. As per the provisions of Kerala Electricity Supply Code, interest on security deposits is based on the bank rate applicable for the beginning of the year or the security deposits held at the beginning of the previous year. The bank rate existing as on 1-4-2015 is 8.75%. It is assumed that the same will be continued for the control period. Accordingly, the licensee is eligible for interest on security deposit as shown below:

Table -10

Interest on security deposit

	2015-16	2016-17	2017-18
Security deposit at the beginning of the previous financial year (Rs.lakhs)	140.98	143.80	146.68
Rate of Interest (%)	8.75%	8.75%	8.75%
Interest on Security Deposits (Rs.lakhs)	12.34	12.58	12.83

Depreciation:

23. The depreciation approved for the year 2014-15 is Rs.15.39 lakhs. In the split up details submitted by the licensee in the application, KDHPCL claims the same rate of depreciation for the year 2015-16 also. For the subsequent years of the control period the licensee claims Rs.19.93 lakhs for each the year. The claim of the licensee is shown below:

Table -11
Depreciation proposed for by the Control Period

	Claim for 2015-16			Claim for 2016-17 and 2017-18		
	GFA (Rs.lakh)	Depreciation claimed	Depreciation (Rs.lakh)	GFA (Rs.lakh)	Depreciation claimed	Depreciation (Rs.lakh
11 kV Works	198.48	5.28%	10.48	278.48	5.28%	14.70
LT Lines, Service connections	40.16	5.28%	2.12	40.16	5.28%	2.12
Metering equipment	34.30	6.33%	2.17	34.30	6.33%	2.17
Others	22.25	6.33%	0.62	22.25	6.33%	0.62
Spot billing system				5.00	6.33%	0.32
Grand Total:	**295.19**		**15.39**	380.19		**19.93**
(Less) Consumer contribution	14.96			14.96		
Total	280.23			365.23		

24. The increase in the GFA for the second and third year of the control period is in tune with the asset addition amounting to a total of Rs.85 lakhs proposed by the licensee. The investment is for 2Nos of 11 KV feeders from Chithirapuram to Pallivasal switching station which amounts to Rs.80 lakhs and Rs.5 lakhs on the investment on spot billing system. The asset creation can be considered after commissioning and depreciation will be allowed in the truing up of the accounts of the relevant years.

25. The Commission has examined the details furnished by the licensee. The licensee has claimed depreciation at the rate of 6.33% for the metering equipment and in respect to “other assets”. As per Annexure I of KSERC (Terms and Conditions for determination of Tariff) Regulation 2014, the rate of depreciation for meters is 5.28% and the assets which are not given in the schedule are also to be depreciated at the rate of 5.28%. Hence the depreciation that can be approved for the control period is as shown below:

Table -12

Depreciation approved for the control period

Asset group	Rate of depreciation	For the entire control period	
		Average GFA (Rs.lakh)	Depreciation (Rs.lakh)
Transformers	5.28%	198.48	10.48
Distribution lines	5.28%	40.16	2.12
Others	5.28%	22.25	1.17
Meters	5.28%	34.30	1.81
Total		295.19	15.58
(Less) Consumer contribution	5.28%	14.96	0.79
Net Assets and depreciation		**280.23**	**14.80**

<u>Employee Cost</u>:

26. The employee cost approved for the year 2014-15 by the Commission wasRs.78.54 lakhs as against the proposal of Rs.120.30 lakhs. The licensee has proposed the employee cost for the control period as per the KSERC (Terms and Conditions for determination of Tariff) Regulations 2014 itself. As per Regulation 81 (6)read with Table -6 of annexure – 9 of the Tariff Regulations, 2014, the employee cost that can be approved for the control period is as shown below:

Table -13

Employee Cost approved for the Control Period

Year	**Employee Cost (Rs. Lakhs)**
2015-16	80.09
2016-17	84.78
2017-18	89.74

<u>Repair and Maintenance Expenses:</u>

27. The Commission had allowed an R&M expense of Rs.23.16 lakhs for the year 2014-15 against the proposal of Rs.25.96 lakhs. The licensee has been maintaining 174 km of 11kV overhead lines and 184 km of 3 phase line with 116 number of distribution transformers having different capacities. The licensee has proposed the R&M expense for the control period as per the KSERC (Terms and Conditions for determination of Tariff) Regulations 2014.

28. As in the case of employee expenses, the R&M expenses allowable for the licensee for the control period is as per Regulation 81(6)read with Table -6 of annexure – 9 of the KSERC (Terms and Conditions for Determination of Tariff) Regulation, 2014. The allowable R&M expense is as shown below:

Table -14

Approved R&M Expenses for the Control period

Year	R&M expenses (Rs. Lakhs)
2015-16	16.64
2016-17	17.62
2017-18	18.65

Administration and General Expenses:

29. The A&G expense approved for the year 2014-15 was Rs.9.83 lakhs. As per the application, the licensee claims Rs.13.91 lakhs as the A&G expense for the year 2015-16. The proposed A&G expense for the year 2016-17 and 2017-18 are Rs.14.73 lakhs and Rs.15.59 lakhs respectively.

30. As in the case of employee expenses, the A&G expenses that can be allowed to the licensee for the control period is as per Regulation 81(6) of KSERC (Terms and Conditions for Determination of Tariff) Regulation 2014. Since the projections of A&G expenses are as per the regulation, the Commission approves the A&G expenses as proposed by the licensee.

Table – 15

Administrative and General expenses (Rs in lakhs)

Financial year	A& G expense proposed	A& G expense approved
2015-16	13.91	13.91
2016-17	14.73	14.73
2017-18	15.59	15.59

Other Items:

31. The details of the amounts claimed under the head Other Items are as follows.

Table -16
Other expenses proposed for the control period

Rs.Lakhs

Particulars	2014-15 Approved	2015-16	2016-17	2017-18
Electricity Duty u/s Sec 3 (1)	_	12.54	13.16	13.82
Duty on line loss	_	0.48	0.48	0.48
Inspection Charges	0.20	0.42	0.44	0.46
Total	**0.20**	**13.44**	**14.08**	**14.76**

The licensee has claimed the amount of electricity duty payable by it under sub-section (1) of Section 3 of the Kerala Electricity Duty Act, 1963. 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 easily been 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 licensee has included duty on the line losses, which is not in order and therefore not admissible. The amount of electricity duty under Section 3 (1) of the Kerala Electricity Duty Act, 1963, also cannot be admitted as an item of expenditure in the ARR**.** 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. Hence, the Commission can approve only the inspection charges under other debits for the control period. The approved amounts for the control period under other debits are as follows:

Table- 17

Other expenses approved for the control period

Particulars	**Rs. lakhs**
2015-16	0.42
2016-17	0.44
2017-18	0.46

Return on Equity:

32. The licensee has projected a return on capital for the year as per the KSERC (Terms and Conditions for determination of Tariff) Regulations 2014. As per the regulation 29(2),if the equity invested in the regulated business of the generating business/company or transmission business/licensee or distribution business/ licensee or state load dispatch centre is not clearly identifiable, return at the rate of three percent shall be allowed on the net fixed assets at the beginning of the financial year for such regulated business. Based on the above provision, licensee claimed return as is shown below.

Table – 18

Return on equity (Rs in lakhs)

Year	2015-16	2016-17	2017-18
Net Fixed assets	253.29	228.82	208.89
Return on Equity (3% of NFA)	7.60	6.86	6.27

33. The licensee proposes a capital expenditure plan of Rs.85 lakhs for the year 2015-16. The investment is for 2 Nos. of 11 KV feeder from Chithirapuram to Pallivasal switching station which amounts to Rs.80 lakhs and Rs.5 lakhs on the investment on spot billing system. The licensee has added the capital expenditure in the fixed assets for the year 2015-16.

34. The Commission has examined the proposal of the licensee. As per Regulation 29(2), if the equity is not clearly identifiable, return may be allowed based on net fixed assets less assets created out of consumer contribution and grants. As per regulation 23 (1), in the case of existing projects, the capital cost approved by the Commission prior to the first day of April 2015 including additional capitalization and the expenditure projected for the respective financial year of the control period shall form the basis for the determination of tariff. The licensee has proposed capital expenditure to the tune of Rs.85 lakhs for strengthening the distribution system and for spot billing system in the first year of control period. No other capital expenditure is projected for the rest of the control period. The proposal for strengthening the distribution system has been pending even after the repeated directions of the Commission as can be seen from the directives of the Commission contained in the order dated 03.05.2011 in OP No. 40/2010 and in the notice No. 789/C. Ex/KSERC/2011/664 dated 03.08.2011 and in the order dated 14.08.2012 in OP No.33/2011. Even now the technical proposals in this regard have not been finalised. Unless the works are completed, the capital cost for such works cannot be considered for estimating the return on equity. Therefore the provision of Rs. 85 lakh proposed for capital expenditure cannot be considered now for estimating the return on equity**.**

35. It can be seen that as per the accounts of the licensee, the contribution of equity is not clearly identifiable. Accordingly, the returns can be allowed only based on Regulation 29(2). Accordingly the net fixed assets qualify for return is as shown below:

Table - 19

Approved return for the control period (Rs. Lakhs)

	2015-16	2016-17	2017-18
Gross Assets	295.19	295.19	295.19
Less Consumer contribution	14.96	14.96	14.96
Gross Assets	280.23	280.23	280.23
Cumulative Depreciation	97.34	112.14	126.94
Net Fixed Assets	182.89	168.09	153.29
Rate of Return	3%	3%	3%
Eligible Return	5.49	5.04	4.60

Aggregate Revenue Requirements:

36. Based on the above, the Aggregate Revenue Requirements approved for Control period is as given below:

Table -20
Approved ARR of KDHPCL for the control period

	2015-16		2016-17		2017-18	
	Projection	Approved	Projection	Approved	Projection	Approved
	(Rs.lakhs)	(Rs.lakhs)	(Rs.lakhs)	(Rs.lakhs)	(Rs.lakhs)	(Rs.lakhs)
Purchase of Power	2,125.94	2,193.32	2,344.32	2,228.44	2,584.86	2,264.54
Repairs and Maintenance	16.64	16.64	17.62	17.62	18.65	18.65
Employee Cost	80.09	80.09	84.78	84.78	89.74	89.74
A & G Expenses	13.91	13.91	14.73	14.73	15.59	15.59
Depreciation	19.93	14.80	19.93	14.80	19.93	14.80
Interest & Finance Charges	16.39	12.34	18.03	12.58	19.83	12.83
Other Debits	13.44	0.42	14.08	0.44	14.76	0.46
Return on Equity	7.60	5.49	6.86	5.04	6.27	4.60
Aggregate Revenue Requirements	2,293.94	2337.01	2,520.35	2378.43	2,769.63	2421.21

Revenue from Tariff :

37. The licensee has projected the revenue from tariff as shown below:

Table -21
Estimate of Revenue projected by the licensee for the control period

Consumer category-wise	Energy Sales (lakh units)	Revenue (Rs.lakh)	Average Tariff (Rs./unit)
HT I Industrial	22.95	1443.43	6.29
HT II (Non Ind/Comr)	0.43	34.97	8.06
HT III Agriculture	0.24	9.71	3.98
HT IV Commercial	1.53	123.56	8.05
LT I Domestic	6.91	259.37	3.76
LT II Colonies	0.31	20.42	6.67
LT III Temporary	0.00	0.56	14.00
LT IV Industries	0.62	36.69	5.92
LT V Agriculture	0.02	0.50	2.17
LT VI A Non-Domestic	1.15	96.29	8.37
LT VII A Commercial	2.41	231.46	9.62
LT VIII Public lighting	0.32	8.11	2.52
Other income		6.50	
Total	**36.90**	**2265.07**	**6.14**

In addition to the revenue from sale of power, miscellaneous recoveries such as delayed payment surcharge, reconnection fee, etc., are shown as Rs.6.5 lakh. The total revenue from tariffs is Rs.2271.57 lakh for the year 2015-16 of the control period. The licensee has stated that the Income from Sale of Electricity for the year 2015-16 has been estimated keeping the sales volume at the same level as in the estimate for 2014-15 and using the tariff as is in force today. For the year 2016-17 and 2017-18 of the Control Period the sales volume has been kept the same but the overall tariff rates have been increased by 10% over the previous period.

38. The Commission has examined the revenue projections of the licensee. The revenue from sale of power is estimated based on the average realization for 2015-16 and the same is assumed to increase by 10% for the rest of the control period. However, as per the provisions of the Regulations, the revenue from sale of power is to be estimated based on the existing tariffs only. Accordingly the Commission has projected the revenue from sale of power as shown below, taking into consideration the compounded annual growth rate of 2% on the number of units as reflected in the past trend. However the tariff rates have been kept constant.

Table - 23
Approved Revenue from sale of power for the control period

		2015-16		2016-17		2017-18	
Categories	Average Tariff (Rs./kWh)	Approved Sales	Revenue from Tariffs	Approved Sales	Revenue from Tariffs	Approved Sales	Revenue from Tariffs
		(MU)	(Rs.lakhs)	(MU)	(Rs.lakhs)	(MU)	(Rs.lakhs)
HT I Industrial	6.29	24.37	1,533.00	24.75	1,556.55	25.13	1,580.47
HT III Agriculture	3.98	0.27	10.75	0.27	10.75	0.27	10.75
HT IV Commercial	8.05	2.28	183.70	2.35	188.82	2.41	194.08
LT I Domestic	3.76	7.27	273.52	7.46	280.36	7.64	287.37
LT II Colonies	6.67	0.07	4.67	0.07	4.67	0.07	4.67
LT IV Industries	5.92	0.60	35.28	0.60	35.37	0.60	35.46
LT V Agriculture	2.17	0.01	0.22	0.01	0.22	0.01	0.22
LT VI Non-Domestic	8.37	0.67	56.05	0.63	52.96	0.60	50.04
LT VII Commercial	9.62	2.98	286.79	3.12	299.69	3.26	313.17
Street Light	2.52	0.31	7.81	0.31	7.81	0.31	7.81
Total		**38.84**	**2,391.79**	**39.55**	**2,437.20**	**40.29**	**2,484.04**
Delayed payment charges			1.50		1.50		1.50
Other receipts			5.00		5.00		5.00
Total Revenue from tariffs			2,398.29		2,443.70		2,490.54

Non-Tariff Income:

39. The licensee has estimated Rs.15.12 lakh as the revenue from non-tariff, which is interest on deposit with KSEB for the first year of the control period. The projected non-tariff income for the subsequent years of the control period is Rs.16.76 lakh and 18.48 lakh.

Revenue Surplus/Gap:

40. 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
Approved ARR&ERC for control period

Income	2015-16 Projection	2015-16 Approved	2016-17 Projection	2016-17 Approved	2017-18 Projection	2017-18 Approved
Revenue from Sale of Power.	2271.57	2,398.29	2498.73	2,443.70	2748.6	2,490.54
Other Income	15.12	15.12	16.76	16.76	18.48	18.48
Total Income	2286.69	**2413.409**	2515.49	**2460.461**	2767.08	**2509.02**
Expenditure						
Purchase of Power	2,125.94	2,193.32	2,344.32	2,228.44	2,584.86	2,264.54
Repairs and Maintenance	16.64	16.64	17.62	17.62	18.65	18.65
Employee Cost	80.09	80.09	84.78	84.78	89.74	89.74
A & G Expenses	13.91	13.91	14.73	14.73	15.59	15.59
Depreciation	19.93	14.80	19.93	14.80	19.93	14.80
Interest & Finance Charges	16.39	12.34	18.03	12.58	19.83	12.83
Other Debits	13.44	0.42	14.08	0.44	14.76	0.46
Return on Equity	7.60	5.49	6.86	5.04	6.27	4.60
Total Expenditure.	2,293.94	**2337.01**	2,520.35	**2378.43**	2,769.63	**2421.21**
Net Surplus/(Deficit)	**(7.25)**	**76.40**	**(4.86)**	**82.03**	**(2.55)**	**87.81**

Directives of the Commission

41. The Commission in its order dated 07.05.2014 had directed that the licensee shall submit detailed proposal for extending EHT supply to the licensed area along with implementation plan, proposal for cost sharing with KSEB Ltd etc. before 31.05.2014. Frequent interruptions and voltage drops have been vexing problems for the consumers of the licensee for last several years. The present contract demand of the applicant is only 7000 kVA as against the present actual demand of about 12000 kVA. At present power is availed by the applicant through two 11 kV

feeders. Therefore the applicant has to take immediate action to increase the contract demand and to construct suitable EHT line. The applicant is directed to discuss the techno-economic aspects of the issues and to workout solutions for improving the supply to the consumers. The Commission had already given direction on these issues, in its order dated 14.08.2012 in OP No. 33/2011. The Commission conveys its displeasure over the fact that such details have not been submitted so far. The applicant is directed to submit on or before 16-11-2015 a detailed action plan for resolving the issues relating to frequent interruptions and voltage drops in Munnar area.

42. The licensee shall also submit in time the reports as specified in KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2014. The licensee shall also submit for the prudence check and approval by the Commission the capital expenditure plan for each year of the control period. The licensee shall also maintain the fixed assets register properly, showing clearly the details of each asset and its vintage. The licensee shall maintain proper sets of separate accounts relating to distribution of power and the basis of allocating common expenditure to the power distributing segment. All the above directions relating to maintenance of accounts and records and submission of reports shall be complied with immediately and compliance reports submitted to the Commission.

Orders of the Commission

43. (1) After careful examination of the claims of the applicant, the facts and data presented in the application for the approval of ARR & ERC, the views expressed during public hearing and the clarifications submitted by the applicant, the Commission hereby approves provisionally the ARR & ERC for the control period from 2015-16 to 2017-18 as stated in the table below.

Table 25

Approved the ARR & ERC for the control period from 2015-16 to 2017-18

Particulars	2015-16 Approved	2016-17 Approved	2017-18 Approved
Total Income	2413.409	2460.461	2509.02
Total Expenditure.	2337.01	2378.43	2421.21
Net Surplus/(Deficit)	76.40	82.03	87.81

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

(3) The BST and RST as determined by the Commission in its order dated 25-09-2014 in OP No. 09/2014 will continue until further orders.

(4) The consumers shall be credited with interest at the rate of 8.75% per annum on their security deposits as on 31.03.2014 and compliance report submitted on or before 31.10.2015.

(5) The licensee shall prepare and maintain the accounts relating to the distribution of electricity separately in view of the directions issued by the Commission.

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 view of the fact that the impact if any on 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 petition is disposed of and ordered accordingly

Sd/-	Sd/-
K.Vikraman Nair	**T.M. Manoharan**
Member	**Chairman**

Approved for issue

Sd/-

Santhosh Kumar.K.B
Secretary