# KERALA STATE ELECTRICITY REGULATORY COMMISSION THIRUVANANTHAPURAM

Application No. : OA 3/2015

In the matter of :Determination of ARR & ERC of M/s Cochin Special Economic Zone

Authority 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 Cochin Special Economic Zone Authority (CSEZA)

PRESENT: Shri. T.M.Manoharan, Chairman

Shri K.Vikraman Nair, Member

## **ORDER DATED 09.09.2015**

- 1. The Cochin Special Economic Zone Authority (hereinafter called CSEZA) is a Special Economic Zone under the Ministry of Commerce and Industry, Government of India. The Cochin Special Economic Zone Authority (CSEZA) constituted under the SEZ Act 2005 is the developer of the Zone providing infrastructure and other related services to the Zone. The Zone comprises 105 acres of land in Kakkanad, Kochi. CSEZA has been set up with the objective of promoting exports and creating employment opportunities. Exporting industries are provided with infrastructure facilities like power, water, effluent treatment facilities, communication etc. The power distribution network was revamped by the Central Government to provide uninterrupted and quality power to the consumers of CSEZA. Power Distribution License was granted to CSEZ by Government of Kerala vide G.O (Rt) No. 118/02/PD dated 20-06-02. As per the provisions of the Electricity Act 2003, CESZA has become a deemed licensee of the Commission.
- 2. The Kerala State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2014 (hereinafter referred to as 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.3/2015 only on 02.02.2015. After scrutiny of the application, a public hearing was conducted on 20.04.2015.
- 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 violates 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.
- 4. 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 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 sale 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 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 3/2015 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.

5. M/s CSEZA filed the application for approval of ARR&ERC for the first control period2015-16 to 2017-18 as per the Tariff Regulations, 2014 on 02.02.2015 and it was admitted as OA No.3/15. A comparative statement of the ARR&ERC for the year 2014-15 and for 2015-16 to 2017-18, the first control period as perapplication is furnished below.

**Table – 1**Comparative Statement of ARR & ERC Rs.lakhs

Particulars	ARR-ERC	Estimated amount		
	Approved	Estimated amount		Juiit
Financial year	2014-15	2015-16	2016-17	2017-18
	Income			
Revenue from Sale of	3118.69	3280.06	3285.67	3291.28
Power.	0110.00	0200.00	0200.07	0201.20
Other Income	129.96	148.82	163.94	175.94
Total Income	3248.65	3428.88 3449.61		3467.22
	Expenditur	е		
Purchase of Power	2851.00	3335.67	3342.80	3359.43
Repairs and Maintenance	18.15	8.00	8.47	8.97
Employee Cost	135.00	145.80	157.50	170.65
Administration and General	32.03	70.88	74.13	77.41
Expenses	32.03	70.00	74.13	/ / . <del></del> 1
Depreciation	58.38	69.71	90.66	96.55
Interest & Finance Charges	-	9.90	12.39	15.59
Return on Equity	10.00	114.03	114.03	114.03
Total Expenditure.	3104.56	3753.99	3799.98	3842.64
Net Surplus/(Deficit)	144.09	(325.11)	(350.37)	(375.42)

## **Hearing on the Matter**

- 6. Public hearing was held on 20-04-2015 at the conference hall of Cochin Special Economic Zone Authority, Kakkanad, Ernakulam. In the hearing representatives of the licensee and KSEB Limited were present.CSEZA was represented by Smt.Safeena, IAS, Development Commissioner, CSEZA and Sri.K.C.Seetharaman CSEZA. Sri.K.C.Seetharaman presented the details of the petition on ARR & ERC for the first control period.Sri. B. Pradeep, Executive Engineer, KSEB Ltd presented the comments of KSEB Ltd and submitted written remarks on the petition which are stated here under:
  - a. The licensee has projected a loss of 1.82% as against the approved level of 1% for the year 2014-15. KSEB Ltd suggested that the T&D loss may be allowed at 1% itself since the actual figures of loss after calibration of energy meters were conducted by the licensee, were not submitted.
  - b. The licensee has not proposed the O&M expenditure in tune with the Tariff Regulations, 2014 and stated that the Commission may allow the reasonable O&M expenses.
  - c. The claim of depreciation was not as per the Tariff Regulations, 2014. It was further pointed out that the Commission may allow depreciation only after considering the vintage of the assets and after due consideration of the details pertaining to the age of the assets.
  - d. KSEB Ltd stated that huge capital expenditure proposed by the licensee for the control period may be considered only after considering the cost-benefit analysis and the Commission may allow only prudent cost of the capital investments.
  - e. KSEB Ltd also raised their objection against the claim of RoE by the licensee. KSEB Ltd pointed out that the licensee has claimed RoE on the basis of debt-equity ratio of 70:30where as RoE may be allowed based on the Net Fixed Assets as per the Tariff Regulations, 2014.
  - f. The claim of the licensee on the income from the sale of power and non tariff income may be reviewed since there seems to be some anomalies with regard to the application of the tariff rates and classifications of consumers and prayed that the Commission may also note the directions given by it in the True up order of 2012-13 with regard to income from security deposits.
  - g. KSEB Ltd had prayed that Hon. Commission may allow only the prudent expenses as laid down under Tariff Regulations, 2014.

- 7. M/s CSEZA vide their response submitted the following clarifications to the comments of KSEB Ltd.
  - a. It was pointed out that the actual distribution loss for the year 2014-15 was 1.69% and the projection of 1.82% for the control period was reasonable.
  - b. On the objection on the claim of O&M expenses, the licensee stated that the projections were based on realistic figures incurred.
  - c. On the objections raised by KSEB Ltd on the claim of depreciation and the capital expenditure proposed, the licensee submitted that depreciation shall be charged only at the appropriate rates as per the regulation. The licensee submitted that all investments made in CSEZ prior to 01-04-2009 were made directly by the Government of India and the same should be treated as capital introduced by Government of India. Consequent to the creation of the CSEZ Authority under the statutory legislation of SEZ Act, 2005, all assets and liabilities of the erstwhile licensee were transferred to the newly created Authority with the responsibility of generating its own revenue and meeting its own obligations and further pointed out that the licensee cannot approach the Government of India to finance its activities. All the future asset replacements were to be funded by CSEZA. The licensee has clarified that no assets were created out of consumer contribution.
  - d. The licensee stated that they have explained the needs and necessity as well as benefits for additional Capital investments proposed with respect to the comments of KSEB Ltd on the capital expenditure proposed by the licensee for the control period.
  - e. The licensee stated that the investment made by the Government of India was for the initial development of the Economic Zone and the same must not be considered as grant and RoE may be allowed after due consideration.
  - f. The licensee clarified on the comments of KSEB Ltd on the income from the sale of power and submitted that no duplication has occurred in the calculation of the income.
  - g. On the objection on the non tariff income, the licensee clarified that the non tariff income for the year 2015-16 was Rs.148.82 lakhs which also included the interest receivable from KSEB Ltd.

## **Analysis and decision of the Commission**

- 8. The Commission has considered the application and clarifications filed by the licensee, oral submissions during the hearing, and the observations presented by the KSEB Ltd on the application. The decision of the Commission is given in the following paragraphs.
- 9. No. of Consumers and Sale of Power: -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 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. As per the information provided by the licensee, the number of consumers during the first control period is 148. On analysing the information for the last five years, it is seen that the consumption of the licensee has been showing an upward trend till 2011-12 where it peaked at 57.21 MU and thereafter have come down and has shown signs of stagnation. Of late it is showing a marginal increase of about 2%, if the latest figures are considered. From the details provided in the petition the maximum numbers of consumers are in the LT IV Industrial category whereas 85% of the power purchased is sold to the HT consumers who constitute around 20% of the consumer base. Hence the consumption pattern is pre-dominantly driven by the consumption pattern of the HT consumers. The licensee expects the

consumer pattern to continue as in the previous years. As per the petition there are 31 HT consumers (including six deemed HT consumers) and 117 various categories of LT consumers totaling to 148. The expected sale of power for the year 2015-16 is shown as 54.48 MU which has been arrived at taking into consideration the latest trend of consumption and is extrapolated to 2016-17 and 2017-18 at an year to year increase of 2%. On an analysis of the figures presented and taking into consideration the consumer mix and the growth of consumption, the Commission approves the figures with regard to sale of electricity. The projected consumer mix and sales projection of the licensee for the control period is as follows:

Table – 2
Projections of energy sales for the control period

_	No.of consumers	Ener	gy sales (in	MU)
Consumer category		2015-16	2016-17	2017-18
LT - IV (A)	72	3.88	3.89	3.90
LT - IV (B)	27	2.22	2.23	2.23
LT - VI (A)	1	0.01	0.01	0.01
LT - VI (B)	1	0.03	0.03	0.03
LT - VI (D)	1	0.00	0.00	000
LT - VI (F)	13	0.29	0.29	0.29
LT - VII (A)	1	0.01	0.01	0.01
LT VIII B	1	0.06	0.06	0.06
HT - I (A)	22	38.57	38.65	38.73
HT - I (B)	2	6.56	6.57	6.59
HT - III (B)	1	1.62	1.62	1.63
D H T Consumers	6	1.24	1.24	1.24
Total	148	54.48	54.59	54.70

#### **Distribution Loss and Energy Requirement:**

- 11. As per Regulation 74, the licensee is to provide voltage level distribution loss and distribution loss trajectory for the control period. Necessary supporting studies have to be furnished 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.
- 12. The licensee has been reporting negative losses during the previous years and the Commission has directed the licensee to conduct investigation on the negative losses reported for the previous years and take necessary rectification steps. The

licensee reported that it had conducted an energy audit and had carried out some work on calibration and testing of metering system. The Commission had approved a distribution loss of 1% for the year 2014-15 as proposed by the licensee. The licensee now proposes a higher distribution loss of 1.82% for each year of the control period based on the study, after rectifying and calibrating the metering system. The distribution system has underground cabling and pre-paid meters. The distribution loss proposed by the licensee for the control period 2015-2016 to 2017-2018 is given below:

Table – 3
Distribution loss for 2014-15 and the loss proposed for the control period

Particulars	2014-15	2014-15	2015-16	2016-17	2017-18
	Projected	Approved	Projected	Projected	Projected
Energy sales (MU)	55.22	55.22	54.48	54.59	54.70
Energy Requirements (MU)	55.77	55.77	55.49	55.60	55.71
Distribution losses (%)	1%	1%	1.82%	1.82%	1.82%

13. The distribution losses reported by the licensee for the previous years are as shown below.

Table – 4
Distribution loss over the years

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Particulars	Actual	Actual	Actual	Actual	Actual	Approved
Energy sales (MU)	43.32	44.24	56.10	57.21	53.20	60.00
Energy Requirements (MU)	42.00	43.31	54.88	55.92	51.81	60.61
Distribution losses (%)	-3.14%	-2.15%	-2.22%	-2.31%	-2.68%	1%

14. The licensee in the reply submitted to the comments and objections of KSEB Ltd has shown that the actual distribution loss incurred for the year 2014-15 is 1.69%. The Commission considered the actual distribution loss for the year 1.69%, and distribution loss reduction being a criterion for improvement and taking into consideration the limited area of operation and the fact that network constitutes predominantly underground cables, the admissible distribution loss is fixed at 1.50%. The Commission also notes that due to the wrong reporting of the Distribution loss, there has been an over billing in the previous years to the extent of about 4% to 5% on an average. Since 85% of the consumption is by the HT consumers, the impact of this overbilling would have been borne by this class. The

Commission will decide on this matter later after correctly quantifying the amount involved. Thus on the basis of the approved distribution loss, the energy requirement approved for the control period is shown below.

Table-5

Approved for the Control Period						
2015-16 2016-17 2017-18						
Energy Purchased (MU)	55.30	55.42	55.53			
Energy Sold (MU)	54.48	54.59	54.70			
Distribution Loss (MU)	0.82	0.83	0.83			
Distribution Loss %	1.50%	1.50%	1.50%			

- 15. **AT&C Loss:** In the distribution business, distribution loss and AT&C loss are the common performance parameters employed. The collection efficiency reported by the licensee is nearly 100% due to pre-paid meters
- 16. Cost of power purchase: -As per Regulation 75, the licensee has to submit a power procurement plan for the control period consistent with the sales forecast of unrestricted supply 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 cost of power purchase shall be based on the forecast of sales and existing approved tariff.
- 17. As provided in the Regulation, the licensee has used the existing rate for calculating the cost of power purchase. As per the petition submitted by the licensee the power purchase cost is Rs.3335.67 lakhs for the year 2015-16, Rs.3342.80 lakhs for the year 2016-17 and Rs.3359.43 lakhs for the year 2017-18 respectively. For computing the cost of power purchase, the present rate of Rs.300/- as fixed charge per KVA and Rs.5.30 per unit have been taken into consideration.
- 18. The contract demand as per the Power Purchase Agreement executed with KSEB Ltd is 10000 kVA. The agreement is valid upto 31.03.2025. Expecting a revival in the recession strewn export segment, CSEZA had approached KSEB Ltd during January 2013 to enhance the contract demand to 15000KVA in continuance to the earlier application for enhancement of contract demand to 12,000kVA. KSEB Ltd has considered the matter and gave its in-principle approval to enhance the contract demand to 15000 kVA. The average maximum demand during the FY

2014-15 was 10740kVA. As the industrial units in the zone have not shown any considerable improvement in consumption of power, the additional load requested for was not availed. Excess demand charge has not been included in the power purchase cost.

Table-6
Estimated Cost of Power Purchase for the control period

	2015-16	2016-17	2017-18
Energy requirement (MU)	55.49	55.60	55.71
Maximum demand billed (KVA)	10740	11000	11300
Rate of demand charge (Rs./kVA)	300.00	300.00	300.00
Demand charges (Rs.lakhs)	386.64	396.00	406.80
Rate of energy charges (Rs.kWh)	5.30	5.30	5.30
Energy charges (Rs.lakhs)	2940.97	2946.80	2952.63
Other charges	8.06	1	1
Total cost of power purchase	3335.67	3342.80	3359.43

After careful consideration of the details submitted by the licensee, the costs of power purchase approved for the control period areas given in the table below.

Table-7
Approved Cost of Power Purchase for the control period

	2015-16	2016-17	2017-18
Energy requirement (MU)	55.30	55.42	55.53
Maximum demand billed (KVA)	10740	11000	11300
Rate of demand charge (Rs./kVA)	300.00	300.00	300.00
Demand charges (Rs.lakhs)	386.64	396.00	406.80
Rate of energy charges (Rs.kWh)	5.30	5.30	5.30
Energy charges (Rs.lakhs)	2930.90	2937.26	2943.09
Total cost of power purchase	3317.54	3333.26	3349.89

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

Capital investment for 2015-16 = Rs.512.86 lakhs

Capital investment for 2016-17 = Rs.113.85 lakhs

Capital investment for 2017-18 = Rs.137.85 lakhs

Total = Rs.764.56 lakhs

20. The details of the proposed capital expenditure are tabulated below:

Table-8
Details of capital expenditure for 2015-16

Proposal	Expenditure	Expected date
		of completion
200 kWp Grid interactive Solar power plant	Rs.313 lakhs	21-11-2015
Replacement of KSEB 110 kV metering CTs	Rs.15.9 lakhs	21-09-2015
and PTs at 110 kV substation		
ABT Meters	Rs.9.6 lakhs	21-09-2015
Replacement of existing RMU with latest	Rs.59.4 lakhs	21-11-2015
outdoor type RMU (First Phase)		
RCC Cable Duct (First Phase)	Rs.68.5 lakhs	21-10-2015
Procurement of testing meters & equipment	Rs.45.46 lakhs	21-10-2015
Computers and peripherals	Rs.1 lakh	01-07-2015
Total	Rs.512.86 lakhs	

Table-9
Details of capital expenditure for 2016-17

Proposal	Expenditure	Expected date
		of completion
Replacement of existing RMU with latest	Rs.36.9 lakhs	15-10-2016
outdoor type RMU (Second Phase)		
RCC Cable Duct (Second Phase)	Rs.36.6 lakhs	15-09-2016
Spare for 110kV isolators for substation yard	Rs.9.35 lakhs	15-09-2016
Computers and peripherals	Rs.1 lakh	01-07-2016
Air conditioning of substation building	Rs.15 lakh	01-10-2016
Total	Rs.113.85 lakhs	

Table-10

Details of capital expenditure for 2017-18

Proposal	Expenditure	Expected date
		of Completion
Replacement of existing RMU with latest	Rs.80.70 lakhs	15-10-2017
outdoor type RMU (Third Phase)		
Replacement of HT Panel in SDF Building 16	Rs.31.9 lakhs	15-10-2017
Replacement of LT Panel in SDF Building 16	Rs.16 lakhs	15-10-2017
Energy Meters	Rs.1.75 lakhs	01-10-2017
Computers and peripherals	Rs.3.50 lakhs	01-07-2017
Heavy duty photocopying machine	Rs.4 lakhs	
Total	Rs.137.85 lakhs	

21. The licensee has submitted the source of funding for the capital expenditure proposals. The licensee proposes to source the fund from the Depreciation Reserve Fund (DRF) and the remaining amount as external loan.

Table-11

Source of Fund	2015-16	2016-17	2017-18
Depreciation Reserve Fund	435.24	69.91	90.56
Loan	77.62	44.24	47.29
Total	512.86	113.85	137.85

22. On the proposal No.60/SEA/CSEZA/Solar/2014for the installation of 200 kWpgrid interactive solar power plant at a cost of Rs. 313 lakhs, the Commission, vide its order dated 18-06-2015 had ordered as follows.

M/s CSEZA may install the imported solar plants as proposed by them following their rules relating to the procurement of materials and award of works subject to the following conditions,-

- (i) The cost of solar plants provisionally approved by the Commission shall only be Rs.121.17 lakh which is the proportionate cost of solar plants at the rate approved by CERC.
- (ii) The parameters such as cost of solar plants, debt equity ratio, useful life of the plant, rate of interest on debt, depreciation, O&M cost, return

- on equity, discount rate, etc., will be adopted as per the CERC norms as on the date of commencement of commercial operation of the project.
- (iii) The CSEZA shall avail financial assistance such as capital subsidy and accelerated depreciation, if any, granted by Government.
- 23. 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. 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.
- 24. The licensee has claimed depreciation for all the proposed capital expenditure in each year of the control period depending upon the anticipated date of completion of the project as indicated by the licensee. The Commission had, while approving the proposal of the licensee to install solar photo voltaic cells in its area of distribution as per its order No.60/SEA/CSEZA/Solar/2014 dated 18.6.2015, directed the licensee to restrict the expenditure to the approved level of Rs.121.17 lakh as against the proposed amount of Rs.313 lakh. It was also directed that the licensee shall avail financial assistance from Government such as capital subsidy and accelerated depreciation. 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 actual created will be duly considered after commissioning of the project as per the Tariff Regulation 2014, while the accounts of the licensee are taken up for truing up process.

- 25. Interest and Finance Charges: The Govt. of India had met the entire investment on infrastructure for power distribution in CSEZ. The licensee had not claimed any interest and finance charge for the year 2014-15. The licensee now claims Rs.9.90 lakhs for the year 2015-16, Rs.12.39 lakhs for the year 2016-17 and Rs.15.59 lakhs for the year 2017-18. The claim of the licensee is the interest at 12.75% for the amount that they propose to take as loan.
- 26. The licensee proposes to execute the capital investment projected for the first control period is planned phased manner by sourcing the funds initially from the Depreciation Reserve Fund (DRF) created in the Power Distribution Accounts. The Commission in the truing up petition for the year 2012-13 had directed that the funds in the accumulated depreciation amounts can be utilized for additional capital expenditure/replacement of assets. The licensee proposes that the funds from the DRF shall be utilized at the beginning. The balance fund required for the capital addition shall be met by taking long term loans. As per the present projected proposal, the loan amount can be completely paid by 2021-22. Interest on loan has been taken as 12.75% per annum.
- 27. Since there is no actual loan outstanding as of now and the detailed PE and financing plans are not attached the Commission is not able to assess the correct requirement and hence not inclined to allow the amount requested for under this head.
- 28. **Depreciation**: The Licensee claims that the depreciation expenditure for the first control period from FY 2015-16 to FY 2017-18 is in accordance with Regulation 28 of the Tariff Regulations, 2014 and also considering the asset-class wise depreciation rates as provided under the said Regulations. As per Regulation 28(2)(c), the licensee shall submit all such details and documentary evidence as may be required, to substantiate their claims of 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.
- 29. The depreciation approved for the year 2014-15 is Rs.58.38 lakhs against the claims of Rs.62.24 lakhs. The licensee claims Rs.69.71 lakhs for the year 2015-16. For the subsequent years of the control period the claim is Rs.90.66 lakhs and

Rs.96.55 lakhs. 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 project is commissioned and necessary data and details are submitted.

30. The details of the claim of depreciation are tabulated below:

Table-12

Depreciation proposed for the control period

Pariculars		2015-16	2016-17	2016-17
	Depreciation	Depreciation	Depreciation	Depreciation
	rate	Claim	Claim	Claim
		(Rs Lakhs)	(Rs Lakhs)	(Rs Lakhs)
Cable Duct	5.28%	1.71	4.66	5.55
	HT Distr	ibution System		
Distribution Lines	5.28%	22.49	22.49	22.49
Transformers	5.28%	0.18	0.18	0.18
Switch gear	5.28%	1.83	5.06	8.50
	LT Distr	ibution System		
Transformers	5.28%	0.82	0.82	0.82
Switch gear	5.28%	21.93	21.93	22.25
Communication	6.33%	4.13	4.13	4.13
equipment Meters	5.28%	9.82	12.01	12.06
		9.02		
Vehicles	5.28%		0.46	0.79
Furniture & Fixtures	6.33%	0.06	0.06	0.06
Office Equipments	6.33%	0.09	0.09	0.28
IT Equipments	15.00%	0.11	0.26	0.69
Other Civil works	3.34%		0.25	0.50
Solar power plant	5.83%	6.53	18.25	18.25
Total		69.71	90.66	96.55

31. The Commission after considering the proposals and submissions has decided that the asset creation will be considered after commissioning 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-13
Depreciation approved for the control period
(Amount inRs. Lakhs)

Pariculars	GFA at the beginning of the year	Depreciation rate	Approved depreciation for the control period
HT Di	istribution Sys	l stem	penou
Distribution Lines	426.03	5.28%	22.49
Transformers	3.50	5.28%	0.19
Switch gear	13.35	5.28%	0.71
LT Di	stribution Sys	stem	
Transformers	15.55	5.28%	0.82
Switch gear	415.42	5.28%	21.93
Communication equipment	65.25	6.33%	4.13
Meters	156.52	5.28%	8.26
Furniture & Fixtures	0.89	6.33%	0.06
Office Equipments	1.38	6.33%	0.09
Total	1097.89		58.68

# **O&M** expenses

- 32. As per the Regulations, O&M expenses consists of employee costs, repair and maintenance expenses and administration and general expenses.
- 33. Employee cost: -Commission had approved a total employee cost of Rs.135.00 lakhs for the year 2014-15. As per the application filed by the licensee under the MYT framework, the licensee proposes the employee cost for the control period as per the table below. As per the split up of the employee cost submitted for the control period, major claim is for the charges of the O&M agency of the licensee. Including the O&M agency charges under the head employee cost is not proper and is not in line with the accepted accounting principles. It would be better to show this expense under the head Repairs and Maintenance. However, since the Tariff Regulations 2014 have fixed the norms of employee cost, the Commission allows the expenditure for the time being to be captured under the existing head.

Table-14

Year	2015-16	2016-17	2017-18
Net Employee Cost	16.20	17.50	19.00
O&M Charges payable to KITCO	129.60	140.00	151.65
Total Employee Cost	145.80	157.50	170.65

34. It is observed that the licensee has not provided the details of the employees actually on its rolls. The licensee shall submit hereafter, the details of the posts created exclusively for the distribution business and the number of employees on its rolls and the salary structure. However the licensee has proposed an employee cost which is below the approved level for the first two years of the control period as per the Tariff Regulations, 2014. The regulation 81(2) of the Tariff Regulations, 2014, states as follows:

"The distribution business of Cochin Special Economic Zone (CSEZ) shall be allowed to recover operation and maintenance expenses as per the norms specified in Annexure-IX to these Regulations for each financial year of the control period."

35. The employee cost as per the Tariff Regulations, 2014 is as given in the table below:

Table-15

Financial Year	2015-16	2016-17	2017-18
Employee expenses(Rs in lakh)	152.31	161.22	170.65

36. The employee expenses claimed by the licensee and approved by the Commission are given in the table below:

Table-16
Employee costs approved for the control period

	Projected	Approved
	(Rs.lakhs)	(Rs.lakhs)
2015-16	145.80	152.31
2016-17	157.50	161.22
2017-18	170.65	170.65

37. Repair and Maintenance Charges: - The Commission had allowed an R&M expense of Rs.18.15 Lakhs against the proposal of Rs. 24.00 lakhs for the year2014-15. Licensee has not submitted any detailed split up for the proposed R&M expense for the control period 2015-16 to 2017-18. The licensee has stated that only reasonable amounts have been allocated for the ensuing years. The amount proposed by the licensee is given below:

Table-17
R&M expenses proposed for the control period(Rs in lakhs)

	Approved	Proposed	Proposed	Proposed
Year	2014-15	2015-16	2016-17	2017-18
Repairs and Maintenance	18.15	8.00	8.47	8.97

38. The R&M expenses are slightly escalated in view of the relevant provisions in Tariff Regulations, 2014. Commission approves the admissible R&M expenses as per the Regulation 81(2) of Tariff Regulations, 2014, which are shown below.

Table-18

R&M expenses approved for the control period

Financial Year	Projected	Approved
	(Rs.in lakh)	(Rs. in lakh)
2015-16	8.00	7.80
2016-17	8.47	8.26
2017-18	8.97	8.74

39. Administration and General Expenses: - The A&G expense approved for the year 2014-15 was Rs.32.03 lakhs as proposed by the licensee for the year. A&G expenses constitute a controllable item. As per the petition, the licensee has not projected the A&G expenses for the control period in line with Regulation 81(2) of the Tariff Regulations, 2014. The split up details of the expenses proposed by the licensee for the control period is shown below:

Table-19
Administration and General Expenses proposed for the control period (Rs in lakhs)

Particulars in	2015-16	2016-17	2017-18
Rent Rates & Taxes	9.13	9.13	9.13
Insurance	6.00	7.00	8.00
Telephone & Postage, etc	0.52	0.55	0.57
Vehicle expenses		0.35	0.60
Electricity charges	2.75	3.00	3.30
Fees& Subscription	2.00	2.00	2.00
Advertisements, exhibition publicity	2.00	2.00	2.00
Bank Charges	0.20	0.25	0.30
Outsourcing of Metering and Billing System	7.50	8.25	9.00
Internet and related charges	6.00	6.60	7.30
Others	1.60	1.70	1.80
Travelling Expense	0.50	0.55	0.60
Ele. Duty u/s 3(I), KED Act	32.68	32.75	32.81
A&G Expenses	70.88	74.13	77.41

- 40. The major expense items booked under A&G expense is the duty payable by the licensee to the Government under Section 3(1) of the Kerala Electricity Duty Act 1963. The proposed duty is Rs.32.68 lakhs for the year 2015-16. For the years 2016-17 and 2017-18 the amounts of duty payable by the licensee to the Government are Rs.32.75 lakh and Rs.32.82 lakh. 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. CSEZA was exempted from payment of Section 3 duty for a period of 10 years till August 2014. The licensee has stated that request has been submitted to Government of Kerala for extending the exemption from payment of electricity duty. However the licensee has not yet received any positive response for their request, from the Government. The licensee has therefore 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 naye paise per unit of energy sold or a price more than 12 naye paise 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."
- 41. From the above statutory provision it can be concluded 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.
- 42. 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. The licensee is hence directed to limit the administrative and general expenses as per provisions of the Tariff Regulations, 2014.
- 43. Accordingly the A&G expenses approved by the Commission as per the regulation are given below.

**Table-20**A&G expenses approved for the control period

Financial Year	Projected	Approved
	(Rs. in lakh)	(Rs. in lakh)
2015-16	70.88	25.43
2016-17	74.13	26.92
2017-18	77.41	28.90

44. **Return on Equity:-**The Commission had allowed a provisional return of Rs.10 lakh against the claim of Rs.99.77 lakhs for the year 2014-15. The licensee has claimed return on equity on the basis of debt equity ratio of 70:30. CSEZA is claiming the ROE for the first control period taking into account the proposed capital expenditure plan. The licensee projects Rs.114.03 lakhs as the RoE for each year of the control

period. The distribution infrastructure of CSEZA has been funded by a proprietary grant and it was used for the development of the entire Zone and there are no documentary proof to prove that the same has been exclusively given for the setting up of distribution business of the licensee. As per Regulation 29 (2), if the equity invested in a regulated business is not clearly identifiable, return at the rate of 3% shall be allowed on the net fixed assets at the beginning of the financial year for such regulated business. Hence, RoE allowable can be assessed and approved based only on the net fixed assets at the rate of 3% of NFA.

Table - 21
Return on Equity approved for the control period (Rs. Lakhs)

	2015-16	2016-17	2017-18
Gross Assets	1097.89	1097.89	1097.89
Opening Cumulative	278.20	336.88	395.56
Depreciation	270.20	330.00	393.30
Depreciation approved	58.68	58.68	58.68
Cumulative Depreciation	336.88	395.56	454.24
Net Fixed Assets as on	819.69	761.01	702.33
beginning of FY	019.09	701.01	702.55
Rate of Return	3%	3%	3%
Eligible Return	24.59	22.83	21.07

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

Table 22
Aggregate Revenue Requirement approved for the control period (Rs in lakhs)

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	3335.67	3317.54	3342.80	3333.26	3359.43	3349.89		
Depreciation	69.71	58.68	90.66	58.68	96.55	58.68		
Interest & Finance	9.90		12.39	_	15.59			
Charges	9.90	-	12.39	-	15.59	_		
Employee Cost	145.80	152.31	157.50	161.22	170.65	170.65		
Repairs and	8.00	7.80	8.47	8.26	8.97	8.74		
Maintenance	8.00	7.00	0.47	0.20	0.97	0.74		
Administration and	70.88	25.43	74.13	26.92	77.41	28.90		
General Expenses	70.00	25.45	74.13	20.92	77.41	20.90		
Return on Equity	114.03	24.59	114.03	22.83	114.03	21.07		
Total Expenditure	3753.99	3586.35	3799.98	3611.17	3842.64	3637.93		

46. Revenue from Tariff: The licensee has projected the revenue from sale of power for the control period at the prevailing RST for the control period. The projection for the control period is tabulated here under. The Commission has already made a detailed analysis of the power requirement and its trend while dealing with energy requirement. Thus taking into consideration the approved T&D loss of 1.5% and the approved energy requirement the Commission approves the following Revenue Projections for the control period as given by the licensee.

Table-23
Revenue Projections for the control period

Tariff category	No of consumers	2015-16 Total charges (Rs.lakh)	Units Sold MU	2016-17 Total charges (Rs.lakh)	Units Sold MU	2017-18 Total charges (Rs.lakh)	Units Sold MU
LT.VI (A) Industry	72	231.05	3.88	231.44	3.89	231.85	3.90
LT.VI (B) IT	27	143.89	2.22	144.15	2.23	144.40	2.23
LT.VI General (A)	1	0.33	0.01	0.33	0.01	0.33	0.01
LT.VI General (B)	1	1.78	0.03	1.78	0.03	1.79	0.03
LT.VI General (D)	1	0.00	0.00	0.00	0.00	0.00	000
LT.VI General (F)	13	28.68	0.29	28.73	0.29	28.78	0.29
LT.VII (A)	1	0.77	0.01	0.77	0.01	0.78	0.01
LT.VIII B Metered Street Light	1	1.97	0.06	1.97	0.06	1.97	0.06
HT.I-Industrial (A)	22	2320.14	38.57	2324.10	38.65	2328.06	38.73
HT.I-Industrial (B)	2	402.07	6.56	402.79	6.57	403.51	6.59
HT-III (B) Agricultural	1	52.91	1.62	53.00	1.62	53.09	1.63
DHT Industrial (A)	6	96.46	1.24	96.59	1.24	96.72	1.24
Total	148	3280.06	54.48	3285.67	54.59	3291.28	54.70

47. **Non-Tariff Income:** The projection for the year 2015-16 is Rs.148.82 lakhs. As per the details in the petition, non-tariff income for the first control period includes interest on the investments, deposits, interest on advances, commission for collection of electricity duty and meter rent. The licensee expects a non-tariff income of Rs.163.94 lakhs and Rs.175.94 lakhs for the succeeding years of the control period. The Commission approves the same.

Table-24
Non-Tariff Income projected by the licensee(Rs in lakhs)

Particulars	2015-16	2016-17	2017-18
Interest on Bank Fixed Deposits	125.00	135.00	147.00
Interest on advances to suppliers	12.16	17.28	17.28
commission for collection of electricity duty	1.00	1.00	1.00
Meter/service line rentals	10.66	10.66	10.66
Total	148.82	163.94	175.94

48. **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 -25
Revenue Gap, Projected by the licensee and Approved by the Commission for the control period (Amount in Rs. lakhs)

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.	3280.06	3280.06	3285.67	3285.67	3291.28	3291.28	
Other Income	148.82	148.82	163.94	163.94	175.94	175.94	
Total Income	3428.88	3428.88	3449.61	3449.61	3467.22	3467.22	
Expenditure							
Purchase of Power	3335.67	3317.54	3342.80	3333.26	3359.43	3349.89	
Depreciation	69.71	58.68	90.66	58.68	96.55	58.68	
Interest & Finance Charges	9.90	-	12.39	-	15.59	-	
Employee Cost	145.80	152.31	157.50	161.22	170.65	170.65	
Repairs and Maintenance	8.00	7.80	8.47	8.26	8.97	8.74	
Administration and General Expenses	70.88	25.43	74.13	26.92	77.41	28.90	
Return on Equity	114.03	24.59	114.03	22.83	114.03	21.07	
Total Expenditure	3753.99	3586.35	3799.98	3611.17	3842.64	3637.93	
Net Surplus/(Deficit)	(325.11)	(157.47)	(350.37)	(161.56)	(375.42)	(170.71)	

#### **Directives of the Commission**

- 49. 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 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, and
  - (v) Submit the capital investment plan to the Commission and obtain the approval of the Commission.

#### Orders of the Commission

50.(1) 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	ARR	ERC	Surplus /	
	(Rs. in lakh)	(Rs. in lakh)	(Revenue Gap)	
2015-16	3428.88	3586.35	(157.47)	
2016-17	3449.61	3611.17	(161.56)	
2017-18	3467.22	3637.93	(170.71)	

- (2) The licensee shall limit the expenditure to the levels approved by the Commission.
- (3) The existing RST and BST shall continue until further orders.

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