KERALA STATE ELECTRICITY REGULATORY COMMISSION

THIRUVANANTHAPURAM

Application No. : **OA 5/2015**

In the matter of : Determination of ARR & ERC of M/s Cochin Port Trust for the first control period from 2015-16 to 2017-18, based on the application submitted as per the provisions of KSERC (Terms and Conditions for Determination of Tariff) Regulation 2014

Applicant : M/s Cochin Port Trust

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

ORDER DATED 08.09.2015

Introduction

1. M/s Cochin Port Trust (hereinafter referred to as CPT or the licensee) is a deemed distribution licenseeunder the proviso to Section 14 of Electricity Act 2003, in accordance with the distribution license issued to the Port Trust by H.H. The Maharaja of erstwhile Cochin State for distribution of electricity in the Cochin Port Trust Area and nearby premises. The Commission, vide its order dated 18.01.2010 in exercise of the powers conferred on it by section 14 of the Electricity Act, granted permission to CPT to extend its power distribution area to the Special Economic Zones at Vallarpadam and Puthuvypeen in Ernakulam District in Kerala State.CPT is having 2 power injection points, one at Willington island area under 110KV system with contract demand of 6500 KVA and another is at Vallarpadam SEZ area under 11 KV with contract demand of 3000 KVA.

2. The KSERC (Terms and Conditions for Determination of Tariff) Regulations, 2014 (hereinafter referred to as 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. M/s CPT vide their application dated 27.01.2015 filed the

application for approval of ARR&ERC for the first control period 2015-16 to 2017-18 as per the KSERC (Terms and Conditions for Determination of Tariff) Regulation 2014 and it was admitted as OA No.5/15. Public hearing on the ARR was held on 09-04-2015 at the Conference Hall of Cochin Port Trust, Kochi.

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.

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 small licensees in the State 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 both 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 5/2015 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. The present application of CPT was filed in the Multi Year Tariff Framework as per the provisions of 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

Particulars	ARR-ERC Approved	Control Period EstimatesRs. in lakhs		
Financial year	2014-15	2015-16	2016-17	2017-18
Income				
Revenue from Sale of Power	2644.69	2802.63	2858.90	2916.56
Other Income	23.92	35.05	35.05	35.05
Total Income	**2668.61**	**2837.68**	**2893.95**	**2951.61**
Expenditure				
Purchase of Power	1963.90	2233.16	2277.83	2323.38
Repairs and Maintenance	6.05	116.53	121.61	126.95
Employee Cost	332.90	854.39	905.65	959.99
Administration and General Expenses	32.07	67.27	62.70	65.19
Depreciation	203.57	179.83	178.72	221.71
Interest & Finance Charges	-	399.84	399.84	487.09
Return on Equity	10.00	-	-	-
Total Expenditure	**2548.49**	**3851.03**	**3946.36**	**4184.32**
Net Surplus/(Deficit)	**120.12**	**(1013.35)**	**(1052.41)**	**(1232.71)**

Hearing on the Matter

6. The Public hearing on the ARR application, was held on 09-04-2015 at the Conference Hall of Cochin Port Trust, Kochi. In the hearing representatives of the licensee and KSEB Limited were present. The licensee CPT was represented by Shri.Abdul Rahim, Executive Engineer, who presented the highlights of the ARR application. Representing KSEB Limited, Shri. Sarma Kumar, Deputy Chief Engineer presented the objections and comments on the ARR application of CPT. On behalf of KSEB Ltd it was submitted that,

   a. The components of the projected O&M expenditure such as R&M expenses, employee cost and A&G expenses are very much on the higher side as against the approved norms laid down in KSERC (Terms and Conditions for Determination of Tariff) Regulation 2014.
   b. All the expenses of the licensee has increased considerably in comparison with previous years and the licensee has not provided the details of the projection.
   c. The claim of depreciation was not in accordance with the Regulations 26 & 28 of KSERC (Terms and Conditions for Determination of Tariff) Regulation 2014 and quoted relevant text from various orders of the Commission. It was further pointed out that the details of the vintage of the assets and the percentage of depreciation considered for projecting depreciation were not submitted and hence requested the Commission, that it may allow depreciation only after considering the vintage of the assets and after due consideration of the details pertaining the assets.
   d. Even though the licensee has projected the interest and finance charges of Rs. 399.84 lakhs, CPT has not so far repaid the loan availed from the Government of India and that the claim of the licensee for a fresh loan of Rs. 22 lakhs shall be accounted for, as part of the investments only if the loan is raised for the investment on licensed business. KSEBL also stated that the claim of the licensee on the interest and finance charges may not be allowed since no repayment of the loan is paid to the Government of India.
   e. The projected per unit realization for the year 2015-16 shows a downward trend for some categories of consumers, even after revision of tariff.

      KSEB Ltd prayed that the Commission may allow only the prudent expenses and ensure accounting of all the genuinely expected income while approving the ARR&ERC of the petitioner.

7. M/s Cochin Port Trust vide letter dated 5th May 2015 submitted the following clarifications for the issues raised by KSEBL.

   a. The detailed clarifications on the comments of KSEBL pertaining to high O&M expenses of the licensee are detailed under the concerned heads.
   b. The claim for depreciation was solely in accordance with the KSERC (Terms and Conditions for Determination of Tariff) Regulation 2014.
   c. No asset created out of consumer contribution or grants etc are included in the determination of depreciation.
   d. The street lights and high mast tower have been excluded as per KSERC order dated 19-05-2014 and the depreciation of such assets is not claimed.
   e. With regard to the comment of KSEBL pertaining to allowing depreciation based on the vintage of assets, it was clarified that value of the asset has not reached 90% of the capital cost and hence depreciation claimed was in order.
   f. The Government of India has directed the licensee to pay the interest and penal interest forthwith and CPT has submitted proposal to the Government of India for waiver of the penal interest on the loan.
   g. The reason for downward trends in the consumption pattern of certain types of consumers may be due to the drop in consumption with the same connected load.
   h. The self-consumed energy was charged as per the relevant tariff approved by the Commission.

   The licensee requested the Commission to consider the same and kindly approve the interest and finance charges claimed by the licensee.The licensee also requested the Commission to allow return on investment at 3% of the net fixed assets. It was further suggested that the Commission may allow incentive for achieving reduction of AT & T loss over and above the target fixed by the Commission.

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 multiyear framework. As per the said regulations application for approval of ARR&ERC has to be filed for a control period of three years ie., for 2015-16 to 2017-18. M/s Cochin Port Trust 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. In the following sections, each of these items is dealt with separately:

9. **Number of Consumers and Sale of Power**: -As per Regulation 11 (10), the applicant/distribution licensee shall develop the forecast of expected revenue from charges at the 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 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."*

10. As per the ARR submitted by the licensee, the number of consumers is pegged at 1242 for all the years of the control period. From the details provided in the petition it is understood that the number of consumers are maximum in the LT I Domestic category. The number of consumers and the sale of power to the consumers are shown in the table below.

Table - 2

Consumer Strength and Sales forecast for control period (2015-16 to 2017-18)

Year	No. of consumers	Consumption in million units
2011-12 Trued up	1247	33.439
2012-13 As per submitted truing up	1407	32.569
2013-14 (Actual)	1327	31.550
2014-15 (As per approved ARR)	1234	32.412
2015-16 (Projected)	1242	33.193
2016-17 (Projected)	1242	33.823
2017-18 (Projected)	1242	34.535

The consumption pattern of the important categories of the consumers of CPT for the year 2014-15 is given below:

Table - 3

Number of consumers & consumption details for 2014-15

Category of consumers	Numbers	Consumption in MU
Domestic	686	0.68
LT Commercial	397	4.85
Self-consumption	48	5.21
HT	24	20.30
Others	87	1.51
Total	1242	32.55

The above table shows that about 55% of the connections are domestic and they account for 2% of the consumption. 24 HT connections which account for 2% of the consumer base account for 62% of the consumption. 16% of the consumption is self-consumption and 15% for LT commercial. Thus it can be seen that 93% of the total consumption is accounted for by the HT, LT VII Commercial and self-consumption.

11. **Distribution Loss& Energy Requirement:** 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 shall also be submitted

along with the application. The licensee is also required to propose the targets for loss reduction 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 data submitted by the licensee and other relevant factors.

12. Energy requirement provided by the licensee for the entire control period is based on estimated distribution loss of 2.10%. The projections given by the licensee are as shown below:

Table – 4

Projected distribution loss and energy requirement of the licensee

Year	2015-16	2016-17	2017-18
	Projected	Projected	Projected
Energy sales to consumers (MU)	27.847	28.441	28.974
Self – Consumption (MU)	5.311	5.383	5.526
Total Energy sales (MU)	33.158	33.824	34.500
Total Energy Requirement(MU)	33.870	34.559	35.240
Distribution loss(MU)	0.711	0.725	0.740
Percentage of distribution loss (%)	2.10	2.10	2.10

13. The Commission has examined the energy requirements of the licensee during the years from 2011-12 to 2014-15 with a view to understanding the trend. The distribution loss approved for the year 2014-15 was 2.10% as against the proposed level of 3.35%. The details of energy requirements for the previous years are given in the table below;

Table – 5

Energy requirements of the licensee for previous years

Category	2011-12	2012-13	2013-14	2014-15	2014-15
	(Actual)	(Actual)	(Approved)	(projection)	(Approved)
Energy sales to consumers (MU)	29.822	27.971	32.097	27.628	27.628
Self - Consumption (MU) including Street lights	3.617	4.599	3.930	4.784	4.784
Total sales(MU)	33.439	32.570	36.027	32.412	32.412
Distribution Loss (MU)	0.812	0.553	0.773	1.125	0.695
Gross Requirement of energy(MU)	34.251	33.123	36.800	33.537	33.107
Percentage of distribution Loss (%)	2.37%	1.67%	2.10%	3.35%	2.10%

14. As per the projections of the licensee, the distribution loss is shown as 0.711MU ie 2.10% for the year 2015-16. The licensee has proposed the same 2.10% for the entire control period. The actual distribution loss for the year 2012-13 is only 1.67%.

15. The Commission has made a detailed analysis of the category wise consumption pattern during the last five years. The same is captured hereunder.

Table -6

Details of consumption and purchase of the last five years

(In MU)

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Domestic	1.55	1.63	1.81	1.29	0.56	0.68
LT VII A	1.13	6.31	6.49	6.31	4.49	4.85
HT	14.40	19.47	20.88	19.01	19.76	20.30
Self -Cons	4.18	2.71	3.62	4.60	5.11	5.21
Others	0.48	0.64	0.64	1.35	1.63	1.51
Total	21.74	30.76	33.44	32.56	31.55	32.55
Purchase	27.39	31.78	34.25	33.08	32.23	33.21
Consumers (numbers)	1285	1368	1247	1407	1327	1242

From the above table it can be seen that the consumption levels have been fluctuating with marginal increase or decrease during the above period. There has been a decline in the number of consumers in domestic and LT Commercial segment since 2012-13. However HT consumption and self-consumption which account for nearly 80% of the consumption are increasing at an average rate of about 3%, year to year, taking into consideration the data of the last three years. Licensee has been able to achieve a loss level of 2% on an average taking into consideration the figures of the last four years. Hence the Commission is of the view that the energy requirement of the first control period shall be based on an average growth rate of 3% and keeping the distribution loss levels at 2%. The licensee has to take necessary action for limiting the distribution loss to the approved level. In view of the discussions above the Commission hereby approves the distribution loss and energy requirements as shown in the table below.

Table –7

Distribution loss and energy requirement approved for the control period

Year	2015-16	2016-17	2017-18
	Projected	Projected	Projected
Energy sales to consumers (MU)	28.160	29.005	29.875
Self – Consumption(MU)	5.367	5.528	5.693
Total Energy sales (MU)	33.527	34.533	35.568
Total Energy Requirement(MU)	34.211	35.238	36.294
Distribution loss(MU)	0.684	0.705	0.726
Percentage of distribution loss(%)	2%	2%	2%

Based on the approved sales and approved level ofdistribution loss, the gross energy requirement would be 34.211MU for the first year of the control period.

16. **AT&C Loss:** In the distribution business, distribution and AT&C loss are the common performance parameters employed. The collection efficiency reported by the licensee is nearly 100%. Therefore, the AT&C loss target for the control period shall be same as that of the distribution loss, ie 2%.

17. **Cost of Power Purchase**: -CPT is having 2 power injection points, one at Wellingdon Island area under 110KV system with contract demand of 6500 KVA and another is at Vallarpadam SEZ area under 11 KV with contract demand of 3000 KVA. The licensee proposes a hike in power purchase cost to the tune of 2 %year after year, for the control period. As per the petition submitted by the licensee the power purchase cost is estimated at Rs.2233.16 lakh for the year 2015-16, Rs. 2277.83 lakh for the year 2016-17 and 2323.38 lakh for the year 2017-18 respectively. The licensee has estimated the cost of power purchase based on the energy requirement at the level of 2.10% distribution loss, the details of which are given in the tables below.

Table -8

2014-15 (Estimate) (Amount in Rs. lakhs)

	Demand Charges			Energy Charges			Total
	KVA	Rate	Amount	MU	Rs. / kWh	Amount	
W/Island	66324	300	198.97	26.391	5.75	1517.30	1716.28
Vallarpadam	27000	300	81.00	6.849	5.75	392.10	473.10
Total	93324	300	279.97	33.240		1909.40	2189.40

Table -9

2015-16 (Projected) (Amount in Rslakhs)

	Demand Charges			Energy Charges			Total
	KVA	Rate	Amount	MU	Rs. / kWh	Amount	
W/Island	67650	300	202.95	26.915	5.75	1547.65	1750.60
Vallarpadam	27540	300	82.62	6.955	5.75	399.90	482.52
Total	95190	300	285.57	33.870		1947.55	2233.16

2016-17 (Projected) **Table -10** (Amount in Rslakhs)

	Demand Charges			Energy Charges			Total
	KVA	Rate	Amount	MU	Rs. / kWh	Amount	
W/Island	69003	300	207.01	27.453	5.75	1578.60	1785.61
Vallarpadam	28090	300	84.27	7.094	5.75	407.90	492.17
Total	97093	300	291.28	34.548		1986.50	2277.80

2017-18 (Projected) **Table -11** (Amount in Rs. lakhs)

	Demand Charges			Energy Charges			Total
	KVA	Rate	Amount	MU	Rs. / kWh	Amount	
W/Island	70383	300	211.15	28.003	5.75	1610.18	1821.33
Vallarpadam	28653	300	85.96	7.236	5.75	416.10	502.06
Total	99036	300	297.11	35.239		2026.28	2323.38

18. The Commission has examined the details 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 of 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. The existing bulk supply tariff applicable for the licensee is Rs.300/ KVA as demand charges and Rs.5.75 per KWh as energy charges. The licensee has estimated the fixed charges based on an increase on billing demand at about 2% increase on a yearly basis. Based on the admissible distribution loss of 2% and energy requirement as estimated above (at 3%), and the billing demand as estimated by the licensee, the cost of power purchase approved for the control period is shown below.

Table -12
Cost of power purchase approved for the control period

Particulars	2015-16	2016-17	2017-18
Billing Demand (KVA)	95190	97093	99036
Fixed charge Rate (Rs./kVA)	300	300	300
Total Fixed charge (Rs.lakh)	285.57	291.28	297.11
Energy Purchase (MU)	34.211	35.238	36.294
Energy charge (Rs./Unit)	5.75	5.75	5.75
Total energy charges (Rs.lakh)	1967.13	2026.19	2086.91
Total charges (Rs.lakh)	**2252.70**	**2317.47**	**2384.02**

19. **Interest and Finance Charges**: - The Commission had not allowed any interest and finance charge proposed by the licensee for the year 2014-15 stating that the licensee has not paid the interest to Government of India and the claim may be allowed only when the interest is paid to the Government. The licensee proposes Rs. 399.84 lakhs for the year 2015-16, Rs.399.84 lakhs for the year 2016-17 and Rs.487.09 lakhs for the year 2017-18.The interest charges proposed for the loans can be allowed only if it is likely to be incurred. The licensee has stated that the Government of India has demanded repayment of the loans advanced to Cochin Port Trust with penal interest. However the Commission is in the dark with regard to the terms and conditions under which the loan was availed. The licensee has calculated the interest on loan outstanding at 10.5%.The licensee also stated that they have submitted proposal to the Government of India for waiver of the penal interest on the loan.
20. The Balance Sheet of the licensee has been drawn up in such a manner that the entire fixed assets have been funded by the Government loan. Even though it has been mentioned that the scheme of restructuring of loan has been before the Government for the last two years, no concrete decisions have been taken so far and the licensee has also not given any specific repayment schedule. The Commission, in the previous truing up orders, had not allowed the interest charges for the licensee mainly on the reason that the interest was never paid to the Government of India. The licensee is allowed depreciation every year, which can be utilized for the repayment of loan for a particular year and there is no sizable capital expenditure planned in the near future. From this year onwards based on the Regulation the licensee will also be allowed a return on equity based on the net fixed assets. Hence these funds should be sufficient for the repayment of the loan

in case it has to be paid during the current year. However the Commission makes it clear that, no penal interest paid, if any, can be recovered through the ARR. On the basis of above reasoning, Commission is not inclined to allow any interest on the accumulated loan now. However as and when the interest is actually paid, the Commission shall have a re-look into the matter.

21. **Depreciation**: - The depreciation approved for the year 2014-15 is Rs.203.57 lakhs. The licensee claims the Rs.179.83 lakhs for the year 2015-16. For the year 2016-17 the licensee proposes an amount of Rs. 178.72 and for the year 2017-18 an amount ofRs.221.71 lakhs towards depreciation. Details of the claims for depreciation are given in the table below.

Table – 13

Depreciation proposed for the control period

Asset group	Rate of depreciation	GFA (Rs lakh)	Depreciation (Rs.lakh)	GFA (Rs lakh)	Depreciation (Rs.lakh)	GFA (Rs lakh)	Depreciation (Rs.lakh)
Financial year		2015-16		2016-17		2017-18	
Civil works	3.34%	13.75	0.46	13.75	0.46	13.75	0.46
Distribution lines	5.28%	37.30	1.55	37.30	1.55	37.30	1.40
Sub-station equipment	5.28%	3402.15	166.20	3402.15	165.09	4233.15	208.97
Transformers	5.28%	334.50	10.40	334.50	10.40	334.50	9.78
Meters	5.28%	5.67	0.30	5.67	0.30	5.67	0.18
I T Equipment	15.00%	14.61	0.92	14.61	0.92	14.61	0.92
Total		3807.98	179.83	3807.98	178.72	4638.98	221.71

The licensee has proposed some capital expenditure for the year 2015-16 and 2017-18 as follows which is added to the Gross Fixed Assets.

22. **Capital Expenditure**: The licensee has not submitted any capital expenditure plan in the application for the approval of ARR & ERC for the control period. In the subsequent write up on the application submitted, the licensee proposes the following:

   a. To meet the increasing requirement of electricity, reduce distribution losses and to improve the quality of power, the distribution infrastructure needs to be strengthened. It is expected that about 15 new service connections both in HT and LT will be effected during the 2015-16. About 12 km new HT UG cable, 25 km LT lines and 4 Nos distribution transformers will also be installed during this period. Accordingly a proposal amounting to Rs 9 Crore was initiated for the approval of competent authority and will be implemented during the FY2015-16 & 2016-17. It is expected that the HT: LT ratio will improve from the existing figure of 1:3.1 by the end of the year 2015-16.

b. Cochin Port Trust has already proposed the work of “Improvement of power distribution network at Willingdon Island – Phase IV” amounting to Rs 2 Crores.
c. CoPT has been targeting to promote solar installation on line without battery backup as a possible alternate choice for meeting the power requirement. The target group is some of the commercial consumers having monthly consumption above 5000 units.
d. Further, Cochin Port Trust on its own proposes to establish Solar PV installation at its premises. The licensee is planning to generate 150 KWP of energy from Solar Plants. The estimated cost for the same is Rs.150 lakh. The implementation of solar project shall be carried out with in house technical competency and no outside consultancy service is proposed to be engaged.
e. Accordingly the overall outlay for the improvement of power system network at CoPT’s distribution area will come to Rs.12.50 crore.

The details of the asset additions for which depreciation has been claimed by the licensee are given below:

Table -14

Asset additions for which depreciation has been claimed in the control period

Year	Particulars	Asset addition in Rs.lakhs
2015-16	Spares for 110 KV Substation	8.00
2015-16	Purchase of 1 nos. 500 kVA 11 kv / 433 volts transformer	10.00
2015-16	Providing new LT Cable to Q8 from E/Wharf	4.00
2017-18	Standardization of electrical power supply distribution network at Willingdon Island	831.00

23. The licensee has clarified that no asset created out of consumer contribution or grants was included in for the determination of depreciation. The licensee has also stated that street lights and high mast tower have not been considered for the claim for depreciation in view of the KSERC order dated 19-05-2014. The increase in the GFA of the control period is in tune with the asset addition proposed by the licensee.

24. 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, the fixed asset is not eligible to be accounted for as part of gross fixed asset. Hence the licensee is directed to submit necessary details to the Commission as per the provisions of the Tariff Regulations, 2014 for the approval of Capital expenditure proposed. The asset creation can be duly considered for allowing depreciation after the commissioning of the project while the accounts of the relevant years are taken up for truing up. The licensee is directed to submit necessary and sufficient details in support of its claims.

25. As per Regulation 28, depreciation has to be allowed as per the rates specified in Annexure -I of the regulations for the first 12 years of the date of commercial operation and remaining depreciable value shall be spread over the balance useful life of the assets. The Commission in the previous orders had pointed out that assets which have completed its useful life shall not be eligible for depreciation. Though the licensee has stated that such assets are not available, the evidences to substantiate the said statement have not been submitted. Accordingly Commission has not considered assets worth Rs.76 lakhs in the year 2014-15 for the purpose of allowing depreciation. Since the licensee has not provided the details of the vintage of assets and the number of years for which depreciation has been claimed etc., the Commission is forced to take the original stand. Thus the depreciation that can be approved for the each year of the control period as per straight line method on the gross fixed asset is as shown below:

Table -15
Depreciation approved for the control period

Asset group	Rate of depreciation	For the entire control period	
		GFA (Rs.lakh)	Depreciation (Rs.lakh)
Civil works	3.34%	13.75	0.46
Distribution Lines	5.28%	33.30	1.76
Sub-station equipment	**5.28%**	**3394.15**	**179.21**
Transformers	5.28%	324.50	17.13
Meters	5.28%	5.67	0.30
I T Equipment	15.00%	14.61	2.19
Total		3785.98	201.05
Less Assets that exceed useful life	5.28%	76.53	4.04
Admissible depreciation			**197.01**

26. **Employee cost**: The Commission had approved Rs 332.90 lakhs only during 2014-15 against the proposal of Rs.784.74 lakhs as employee costs. For the control period the licensee has claimed employee costs at Rs.854.39 lakhs for 2015-16, Rs.905.65 lakhs for 2016-17 and Rs.959.99 lakhs for 2017-18 as shown below;

Table 16
Employee costs proposed for the control period

Particulars	2013-14 (Rs.lakhs) (Actual)	2014-15 (Rs.lakhs) (Actual)	2015-16 (Rs.lakhs) (projected)	2016-17 (Rs.lakhs) (projected)	2017-18 (Rs.lakhs) (projected)
Net Employee costs	714.66	793.93	769.72	815.9	864.86
Terminal benefits	78.61	87.33	84.67	89.75	95.13
Total employee costs	793.27	881.26	854.39	905.65	959.99

27. According to the licensee, the hike in employee cost to Rs 854.39 Lakhs is mainly due to revision of wages applicable to Class: III and Class: IV employees with effect from 01.01.2013 even though the strength of employees engaged for distribution activities has been reduced. The licensee has stated that the employee cost has increased by about 100% from the approved figure of 2011-12. The main increase in salary is due to increase in the variable dearness allowance for each quarter

28. The Commission in the previous ARR&ERC orders had discussed the increase in employee costs charged on to the distribution business. The issues regarding the apportionment of employee costs on the distribution business and transfer of employees to the distribution business proposed by the licensee had not been accepted by the Commission. The number of technical and non-technical employees deployed for distribution business is very high considering the limited area of operation and number of consumers. The details of the number of posts created and its actual deployment along with the salary scales may be submitted to the commission for a detailed scrutiny.

29. However, after coming into force of KSERC (Terms and Conditions for Determination of Tariff) Regulation 2014, allowable employee costs are governed by the provisions of the regulation. The licensee has not projected the employee cost as per the provisions of the said Regulations. As per Regulation 81 (7), the approved employee costs for the control period are as shown below:

Table 17

Employee costs approved for the control period

	Projected	Approved
	(Rs.lakhs)	(Rs.lakhs)
2015-16	854.39	313.23
2016-17	905.65	331.55
2017-18	959.99	350.95

Repair and Maintenance Charges

30. The R&M expenses proposed by the licensee for the control period are as shown below:

Table 18

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	6.05	116.53	121.61	126.95

31. The Commission had approved an R&M expense of Rs.6.05 lakhs against the proposal of Rs. 33.05 lakhs for the year. According to the licensee, the main

components attributable under R&M expenses were overhauling/replacement of defective EHT equipment at 110KV sub-station of the licensee. The sub-station which was commissioned during the year 2008 requires comprehensive health check and subsequent replacement/repair. The licensee has stated that during 2011-12, the R&M expenses of Cochin Port Trust was negligible since the 110 KV sub-station was under guarantee obligation.

32. The claim for R&M expenditure for the control period is substantially and unreasonably high compared to the projections in the previous years. The statement of the licensee that overhauling/replacement of the sub-station as the reason for higher estimate of R&M expenses has not been properly substantiated with facts and figures. Further, the licensee has projected high R&M expenses for all the years in the control period, showing that the overhauling/repair should continue for all the future years. The Commission is of the view that the explanation given by the licensee for higher allocation of R&M expenses is not convincing. At present, the R&M expenses for the control period is to be allowed only as per the regulation 81(5) of the KSERC (Terms and Conditions for Determination of Tariff) Regulation 2014. Any increase in terms of uncontrolled factors can be allowed only during the truing up process as per the provisions of the said regulations. The details of the repairs and maintenance intended to be done and its detailed estimate along with age analysis of the assets may be submitted to the Commission. Accordingly, the approved R&M expenses are as shown below:

Table 19
Approved R&M expenses for the Control period

(Rs in lakhs)

	Projected	Approved
2015-16	116.53	9.42
2016-17	121.61	9.97
2017-18	126.95	10.55

Administration and General Expenses

33. The A&G expenses projected for the control period by the licensee are Rs.67.27 lakhs for 2015-16, Rs.62.70 lakhs for 2016-17 and Rs.65.19 lakhs for 2017-18. The A&G expense approved for the year 2014-15 was Rs.32.07 lakhs.

Table 20
A&G expenses proposed for the control period

Particulars	2013-14 Rs. Lakhs (Actual)	2014-15 Rs. Lakhs (Approved)	2015-16 Rs. Lakhs (projected)	2016-17 Rs. Lakhs (projected)	2017-18 Rs. Lakhs (projected)
Rent Rates & Taxes	4.87	32.07	5.21	5.32	5.44
Telephone & Postage, etc.	0.39		0.54	0.00	0.00
Legal charges	3.04		0.84	0.00	0.00
Audit Fees	0.33		0.39	0.00	0.00
Conveyance	0.33		0.54	0.00	0.00
Vehicle Hiring Expenses	0.34		0.91	0.00	0.00
Electricity charges	9.21		9.59	9.79	9.98
Water charges	0.93		1.46	0.00	0.00
Entertainment	0.08		0.33	0.00	0.00
Fees & subscription	0.03		0.04	0.00	0.00
Printing & Stationery	0.13		0.17	0.00	0.00
Advertisements, exhibition publicity	0.25		0.66	0.00	0.00
Contribution/Donations	0.00		0.00	0.00	0.00
Miscellaneous Expenses	0.72		0.77	0.00	0.00
License Fee and other related fee	1.73				
V-sat, Internet and related charges	0.20		0.27	0.00	0.00
Security arrangements	25.80		28.99	30.73	32.58
Books & periodicals	0.01		0.01	0.00	0.00
Computer Stationery	0.02		0.03	0.00	0.00
Gross A&G Expenses	**48.40**		**50.70**	**45.80**	**48.00**
Ele. Duty u/s 3(I), KED Act	**15.73**		**16.52**	**16.85**	**17.19**
Net A&G Expenses	**64.13**	32.07	**67.27**	**62.70**	**65.19**

34. The major items of expenditure booked under the head A&G expense are the duty payable by the licensee to the Government under section 3(1) of the Kerala Electricity Duty Act, 1963, the expenses for security arrangements and the electricity charges. The proposed amount of electricity duty payable under section 3 (1) of the said Act is Rs.16.52 lakh and the expenditure for security arrangements is Rs.28.99 lakhs for the year 2015-16.Section 3 of the Kerala Electricity Duty Act, 1963 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."

35. 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.

36. 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 admissible. In view of the provisions in Section 3 (1) of the Kerala Electricity Duty Act,1963, the amount of electricity duty 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.

37. The Commission in its order on truing up of accounts of the licensee, has taken a position that the cost of security arrangements booked by the licensee is substantial considering the distribution operations of the licensee. The Commission had also stated that the projections under various other heads are not substantial. The licensee has also provided the method of estimation of rent, electricity charges and security expenses, based on apportionment basis.

38. The licensee shall submit the details of the contract entered into with the security agency and shall also state whether the security expenses is exclusively incurred for the distribution business or not. The details of rent and taxes shall also be submitted and state whether these expenditure is solely incurred for power distribution business or whether it has been allocation to this segment. If the security and rent and rates are apportioned to electricity distribution segment, the basis used for apportioning shall also be submitted**.**

39. As in the case of employee expenses, the A&G expense for the licensee for the control period shall only be as per Regulation 81(7) of the KSERC (Terms and Conditions for Determination of Tariff) Regulation 2014. Accordingly the allowable A&G expenses for the control period are as shown below\

Table 21

A&G expenses approved for the control period

(Rs in lakhs)

A&G expenses	Projected	Approved
2015-16	67.27	35.10
2016-17	62.70	37.15
2017-18	65.19	39.33

Hence, the licensee is directed to limit the administrative and general expenses as per the KSERC (Terms and Conditions for Determination of Tariff) Regulation 2014.

40. **Return on Equity:-** The Commission allowed a provisional return of Rs.10 lakh since the licensee had not claimed any return on equity for the year 2014-15.The licensee has not claimed any return on equity for the control period as per the application submitted. Vide clarifications to the comments of KSEB Ltd the licensee proposes 3% of net fixed assets as return on equity. As per Regulation 29(2), if the equity is not clearly identifiable, return may be allowed based on net fixed assets less the assets created out of consumer contribution and grants. As per the application submitted, no assets are created out of consumer contribution and grants. As the contribution of equity is not clearly identifiable the returns can be allowed only based on Regulation 29(2). Accordingly the net fixed assets qualify for return is as shown below

Table - 22

Return on equity approved for the control period

(Rs. Lakhs)

Particulars	2014-15	2015-16	2016-17	2017-18
Gross fixed assets at the beginning of the year	3,785.98	3,785.98	3,785.98	3,785.98
Cumulative depreciation at the beginning of the year		1,109.72	1,306.73	1,503.74
Depreciation allowed for the **control period**		197.01	197.01	197.01
Cumulative depreciation at the end of the year	1,109.72	1,306.73	1,503.74	1,700.75
Net Fixed Assets at the end of the year	2,676.26	2,479.25	2,282.24	2,085.23
Return on Net Fixed Assets		3%	3%	3%
Admissible Return		80.29	74.38	68.47

41. **Aggregate Revenue Requirement:** The Aggregate Revenue Requirements approved for the control period are summarised in the table below:

Table 23

Aggregate Revenue Requirements approved for the control period 2015-2018

(Rs in lakhs)

Particulars	Projected	Approved	Projected	Approved	Projected	Approved
Expenditure	2015-16	2015-16	2016-17	2016-17	2017-18	2017-18
Purchase of Power	2233.16	2252.70	2277.83	2317.14	2323.38	2384.02
Repairs and Maintenance	116.53	9.42	121.61	9.97	126.95	10.55
Employee Cost	854.39	313.23	905.65	331.55	959.99	350.95
Administration and General Expenses	67.27	35.10	62.70	37.15	65.19	39.33
Depreciation	179.83	197.01	178.72	197.01	221.71	197.01
Interest & Finance Charges	399.84	-	399.84	-	487.09	-
Return on Equity	-	80.29	-	74.38	-	68.47
Total Expenditure	**3851.03**	**2887.75**	**3946.36**	**2967.20**	**4184.32**	**3050.33**

42. **Revenue from Tariff:** The licensee has projected the revenue from sale of power for the control period as tabulated here under.

Table –24

Revenue Projections for the control period

Tariff category	No of consumers	2015-16 Total charges (Rs.lakh)	2016-17 Total charges (Rs.lakh)	2017-18 Total charges (Rs.lakh)	Average realisation (Rs./unit) for the contol period
LT I	686	31.15	31.77	32.67	4.51
LT II	4	24.14	24.62	23.11	6.81
LT IV	2	0.17	0.17	0.18	13.04
LT VI A	11	15.06	15.36	15.67	7.22
LT VI B	30	22.37	22.82	23.27	7.65
LT VI B (G)	10	14.62	14.91	15.21	7.84
LT VI C	12	41.35	42.18	43.02	9.70
LT VI (G)	14	5.64	5.75	5.87	10.97
LT VII A Single	203	19.71	20.11	20.51	8.25
LT VII A 3 Phase	194	504.71	514.80	525.09	10.71
LT VII C	4	2.03	2.07	2.11	10.74
Self Consumption	48	213.20	217.68	222.25	4.01
HT Govt	3	68.46	69.83	71.23	6.84
HT IV Commercial	19	1588.54	1620.31	1652.72	9.58
HT IV Malabar	2	251.47	256.50	261.63	8.06
Total	**1242**	**2802.63**	**2858.90**	**2916.56**	

43. In reply to the comment of KSEBL on the income from sale of power, the licensee submitted that the downward trend for certain type of consumers is due to the drop in consumption with the same connected load. It was also clarified that CoPT has only two consumers under LT-VI industrial category which are flour mills whose consumption is nominal and the consumers are open during Sundays and holidays only. The licensee has clarified that the income from sale of power is exclusive of the duty under section 3 (1) of the Kerala Electricity Duty Act, 1963.

44. The Commission has analyzed the trends of the consumption pattern with regard to the major consumers while determining the energy requirements. Based on the analysis and taking the weighted average rate for each of the major categories of the consumers based on 2014-15 figures, the commission approves the following revenue from the sale of power based on the projections for the control period. The consumption and average rates of the major categories of consumers are given in the table below.

Table 25
Consumption and average rates of major category of consumers In 2014-15

Consumer category	Consumption (MU)	Revenue Rs in lakhs	Average rate Rs. per unit
Domestic	0.68	30.66	4.51
LT Commercial	4.85	513.62	10.59
Self-consumption	5.21	208.92	4.01
HT	20.30	1871.66	9.22
Others	1.51	122.47	8.11
Total	**32.55**	**2747.33**	

Based on the above facts, the Commission has approved the following amounts as revenue from sale of power for the control period from 2015-16 to 2017-18.

Table 26
Revenue from sale of power approved for the control period

Major category of consumers	Consumption (MU)	Revenue (Rs in lakhs)	Consumption (MU)	Revenue (Rs in lakhs)	Consumption (MU)	Revenue (Rs in lakhs)
Financial year	**2015-16**		**2016-17**		**2017-18**	
Domestic	0.70	31.57	0.72	32.47	0.74	33.37
LT Commercial	5.00	529.50	5.14	544.33	5.30	561.28
Self-consumption	5.36	214.94	5.52	221.35	5.69	228.17
HT	20.90	1926.98	21.53	1985.07	22.18	2044.99
Others	1.55	125.71	1.60	129.76	1.65	133.82
Total	**33.51**	**2828.70**	**34.51**	**2912.98**	**35.56**	**3001.63**

45. **Non-Tariff Income:** The projection for the year 2015-16 is Rs.35.05 lakhs, which is mainly from interest income on the deposits held with KSEB Ltd. The licensee expects no change in the non-tariff income for the succeeding years of the control period. The Commission approves the non-tariff income as projected by the Licensee of Rs.35.05 lakhs for each of the years in the control period.

Table 27
Non-tariff income approved for the control period
Rs in lakhs

Financial year	2015-16	2016-17	2017-18
Non-tariff Income	35.05	35.05	35.05

46. **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 given in the table below:

Table -28

Revenue Gap, projected by the licensee and approved by the Commission for the control period

(Rs. in lakhs)

Financial year	2015-16		2016-17		2017-18	
Particulars	Projected	Approved	Projected	Approved	Projected	Approved
Income						
Revenue from Sale of Power.	2802.63	2828.70	2858.90	2912.98	2916.56	3001.63
Other Income	35.05	35.05	35.05	35.05	35.05	35.05
Total Income	2837.68	2863.75	2893.95	2948.03	2951.61	3036.68
Expenditure						
Purchase of Power	2233.16	2252.70	2277.83	2317.14	2323.38	2384.02
Repairs and Maintenance	116.53	9.42	121.61	9.97	126.95	10.55
Employee Cost	854.39	313.23	905.65	331.55	959.99	350.95
Administration and General Expenses	67.27	35.10	62.70	37.15	65.19	39.33
Depreciation	179.83	197.01	178.72	197.01	221.71	197.01
Interest & Finance Charges	399.84	-	399.84	-	487.09	-
Return on Equity	-	80.29	-	74.38	-	68.47
Total Expenditure	3851.03	2887.75	3946.36	2967.20	4184.32	3050.33
Net Surplus/(Deficit)	**(1013.35)**	**(24.00)**	**(1052.41)**	**(19.17)**	**(1232.71)**	**(13.65)**

Directives of the Commission

47. 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 level stipulated in this order.

(iv) Limit the expenditure to the amounts approved in this order.

(v) Submit necessary details of the assets and their vintage for proper assessment of depreciation.

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

(vii) The licensee shall submit on or before 31.10.2015, the following details as indicated in paragraph 38 of this order

(a) the contract entered into with the security agency,

(b) rent and taxes,

(c) the expenditure solely incurred for power distribution business

(d) common expenditure allocated to the distribution business with the basis for such allocation.

(viii) The licensee shall submit on or before 31.10.2015 the following details relating to self- consumption.

(a) Particulars of self- consuming units of CPT.

(b) The connected load and annual consumption of such self- consuming units.

(c) Consumer categories and tariff applicable to such self- consumption units.

(d) The calculation of average rate of Rs.4.01 / unit for the self-consumption.

Orders of the Commission

48. (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

(Rs. in lakh)

Particulars	2015-16 Approved	2016-17 Approved	2017-18 Approved
Total Income	2863.75	2948.03	3036.68
Total Expenditure.	2887.75	2967.20	3050.33
Net Surplus/(Deficit)	(24.00)	(19.17)	(13.65)

(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 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/-
K.Vikraman Nair
Member

Sd/-
T.M. Manoharan
Chairman

Approved for issue

Sd/-

Santhosh Kumar K.B
Secretary