

**KERALA STATE ELECTRICITY REGULATORY COMMISSION
Thiruvananthapuram**

**Petition No.TP-12 of 2005
ARR&ERC OF COCHIN PORT TRUST FOR FY 2006-07**

March 30, 2006

Present : Shri. C.Balakrishnan, Chairman
Shri C.Abdulla, Member
Shri.M.P.Aiyappan, Member

Cochin Port Trust, Cochin : Petitioner

O R D E R

The Kerala State Electricity Regulatory Commission having scrutinized the Petition on ARR&ERC for 2006-07 filed by Cochin Port Trust *vide* their letter No. CAD/costing/ARR & ERC-2006-07 dated 29th November 2005 and considered the comments of the KSEB on the petition, heard the views of the petitioners, public and stakeholders in the Commission's proceedings on 7th march 2006 and having considered other documents and materials on record passes the following order in exercise of the powers vested in it under the Electricity Act 2003, in this behalf.

M.P.Aiyappan
Member

C.Abdulla
Member

C.Balakrishnan
Chairman

Authenticated copy for issue

SECRETARY

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Chapter I

INTRODUCTION

1.1 Preamble

Cochin Port Trust is a deemed distribution Licensee under the proviso of Section 14 of Electricity Act 2003, in accordance with the distribution license issued to Port Trust by H.H. the Maharaja of erstwhile Cochin State for distribution of electricity in the Cochin Port Trust Area and nearby premises. Presently, Cochin Port Trust (CPT) receives power through two 11 kV feeders from the Kerala State Electricity Board (KSEB) to meet its own power requirements and to supply to the consumers within Cochin Port Trust area. Cochin Port Trust has 1324 Consumers comprising of 15 HT consumers, 441 LT Consumers and 868 domestic LT consumers during the FY 2005-06.

The Commission has passed an order dated 28th June 2005 on petition No TP-10 filed by Cochin Port Trust in respect of ARR & ERC of the Licensee (Cochin Port Trust) for 2005-06. In this order, the Commission had approved an Annual Aggregate Revenue Requirement of Rs 1397.67 lakh and total Expected Revenue from Charges of Rs.1488.39 lakh for the year 2005-06 leaving surplus of Rs 90.72 lakh. .

1.2 Procedural History

Cochin Port Trust (CPT) filed a petition for ARR and ERC for the financial year 2006-07 on 30-11-05. The petition for ARR and ERC was placed before the Commission after initial scrutiny for the procedural requirements and the petition was admitted and registered as TP .12 of 2005 on 13th December 2005.

A copy of the ARR & ERC was forwarded to KSEB on 2nd January 2006 for comments. Comments from KSEB were received vide letter dated 5th January 2006(Annexure II). The comments from KSEB were forwarded to CPT on 11th January 2006. Also clarification on certain points was sought for from CPT while forwarding the comments from KSEB (Annexure III).

Reply to the clarifications sought from the Commission and KSEB were furnished by CPT vide letter dated 30th January 2006 (Annexure IV).

As the next step in processing the petition, the Commission held proceedings for public hearing at Wellington Island, Kochi on 7th March 2006.

The proceedings of the public hearing were conducted smoothly. Views expressed by stakeholders during public hearing are enclosed as Annexure I. The Commission subsequently called for a meeting with the Licensee for seeking further clarifications. This meeting was held on 28th March 2006 at Thiruvananthapuram at Commission's office.

The Commission has thus ensured that the due process contemplated under the governing Act and Regulations were followed and adequate opportunity was provided at every stage to all individuals and organizations concerned, to express their views.

In finalising the order on the ARR & ERC for the FY 2006-07, the Commission has taken into consideration the materials filed by the Licensee the clarifications furnished by the Licensee in the meeting with the Commission, and further views expressed by the Stakeholders during the proceedings held for hearing their objections.

Chapter II

ENERGY REQUIREMENT PROJECTIONS FOR 2006-07

2.1 Methodology

In estimating the demand and energy requirement for 2006-07, the Licensee had adopted a strategy that the sales and purchase will increase by 3% over the figures for 2005-06.

2.2 Projections by the Licensee

The energy requirement projections for 2006-07 made by Licensee is summarized below:

Sl. No	Category	Energy Sales in lakh kwh
1	LT	
	Domestic	14.49
	Others	64.68
	Sub Total LT	79.17
2	HT	142.59
	Sub Total HT	142.59
3	Self consumption	33.64
	GRAND TOTAL	255.40

The Licensee has stated to assume a 3% growth in consumption from 2005-06 to 2006-07.

2.3 COMMISSION'S OBSERVATIONS

The Licensee has not assumed any increase in the number of consumers. The increase in consumption is attributed to increase in consumption by existing consumers. Commission accepts the assumption.

Chapter III

A T & C LOSSES

3.1 Introduction

In the ARR & ERC for 2005-06, the Licensee had estimated the energy consumption for the year 2004-05 at 255.15 lakh units with an energy input of 275.97 lakh units, which showed an aggregate loss of 11.92 lakh units (4.3%). The energy requirement (sales to ultimate consumers) for 2005-06 had been projected at 247.97 lakh units with an energy input of 276.5 lakh units, thus showing a loss of 20.68 lakh units (7.48%). However, in the ARR&ERC for 2006-07, the consumption for 2006-07 was placed at 255.15 lakh units with an energy input of 284.79 lakh units, which involved a system loss of 20.58 lakh units (7.22).

3.2 Commission's Observations

The Licensee has stated that energy audit has not been conducted so far. System improvement for loss reduction can be done only after conducting energy audit. Licensee has promised to conduct energy audit and carryout loss reduction measures immediately. It was expressed that with the commissioning of the proposed 110/11 KV substation considerable loss reduction will be achieved. Commission would like to point out that accuracy of energy meters should be checked. Also it is suggested that for HT consumers check meters may be installed and the consumption monitored from a remote point continuously. Commission is of view that loss reduction should be brought down to 3% in three years for which measures such as improving HT : LT ratio, exacting new transformers for reducing LT unit, balancing 3 phase lines, changing conductor, providing ring main feeders etc has to be taken.

Chapter IV

AGGREGATE REVENUE REQUIREMENT FOR 2006-07

4.1 Introduction

The ARR& ERC submitted by the Licensee projected a total expenditure of Rs 13.79 crores for 2006-07. The details in comparison to the provisions in respect of various items for 2004-05 and 2005-06 are furnished below:

Rs. lakh

SI No	Particulars	2004-05 (Actuals)	2005-06 As approved	2006-07 Now given
1	Power Purchase Cost	801.88	848.68	848.73
2	Interest and finance charges	132.68	134.28	132.68
3	Depreciation	58.56	42.55	61.41
4	Employee Cost	184.77	188	173.72
5	Repairs & Maintenance cost	37.64	87.87	74.23
6	A &G Expenses	89.54	96.29	88.23
7	Other expenses	Nil	Nil	Nil
8	Gross expenses	1305.36	1397.67	1379
9	Less expenses capitalized	Nil	Nil	Nil
10	Less interest capitalized	Nil	Nil	Nil
11	RR	29.72	Nil	27.83
12	ARR	1335.08	1397.67	1406.83
13	Revenue from tariff	1400.87	1481.78	1540.83
14	Non tariff income	6.58	6.61	6.83
15	Total revenue	1407.45	1488.39	1547.6
16	Surplus/Deficit	72.37	90.72	168.6

4.2 Purchase of Power

4.2.1 The ARR submitted by the Licensee has given an energy purchase requirement of 274.24 lakh units during 2004-05. This is based on a total energy requirement of 275.97 lakh units and internal generation of 1.73 lakh units as

stated in the foregoing section. The total cost for power purchase during 2006-07 has been projected at Rs 848.73 lakh.

4.3 Interest And Finance Charges

4.3.1 The ARR has projected a total amount of Rs 1.32 crores towards interest and finance charges. The very same figure of 1.32 crores has been given for all the three years.

4.3.2 Commission's Observations

Commission would like to point out that the surplus from the electricity distribution activity of the Licensee should be used to reduce the debt burden and bring down the interest burden also. Licensee expressed that the total loan received from Govt. of India is as high as 500 Crores and hence the issue of restructuring of the loan is not easy as other financial institutions may not come forward to give loans at cheaper rates in view of the poor overall performance of the Port Trust which was established long ago when mechanization was low and manual labour content very high.

4.4 Depreciation

4.4.1 The Licensee has projected a provision of Rs 0.6141. crores for depreciation during the year 2006-07 based on the following rates.

	Depreciation %	Amount Rs. lakhs
Generating Plant	6/3.6/2	35.39
Sub stations	3.6	14.44
11 kv works	3.6	9.41
LT lines	3.6	0.71
Metering equipment	6.66	0.2
Misc equipment	18	0.99
Others	2	0.28
Total		61.41

4.4.2 Commission's Observations

During the meeting held on 28-03-06 with the Licensee, the utilization of D.G sets was discussed in detail. The Licensee agreed that all the sets are not available throughout the year as units will be on routine and annual maintenance in addition to breakdown maintenances. Further only the smaller sets can be put to service without much delay. Larger set will take considerably more time than the smaller sets to feed power in to the network. Thus whenever KSEB supply fails only the smaller sets will be available without much time delay for meeting the demand. This will require isolation of essential loads of Port Trust from other loads. Thus it can be concluded that the D.G set generation is mainly used by the Port Trust's own consumption. Also, consumers like Luxury hotels will be using their D.G sets when supply fails. Thus the capacity sharing of the D.G sets between Licensee's own consumers and others cannot go beyond the ratio of 1:1. Thus only 50% of the depreciation can be allowed to be debited to distribution account. The revised figures are given below.

	Depreciation %	Amount Rs. lakhs
Generating Plant	6/3.6/2	17.69
Sub stations	3.6	14.44
11 kv works	3.6	9.41
LT lines	3.6	0.71
metering equipment	6.66	0.2
Misc equipment	18	0.99
others	2	0.28
Total		43.72

4.5 Employee Cost

4.5.1 The ARR submitted by the Licensee projects an amount of Rs 1.7372 crores towards employee cost during 2006-07. A comparison with the provisions as approved by the Commission for 2005-06 are furnished below:

Approved cost for 2005-06	Rs 188.00 lakh
Cost now projected for 2006-07	Rs 173.72 lakh

It is noted that sixty technical personal, eleven non-technical personal and three Assistant Engineers are utilized for managing the business. Of the total cost given as 137.22 lakh, 101.07 lakh is for meeting the cost for technical staff and 21.07 lakh for non-technical staff.

4.5.2 Commission's Observations

Commission is of opinion that the figures are very much on the higher side. Licensee stated that most of the staff were recruited during early periods when mechanization was very low and hence there is no scope for deploying the staff to other works. Commission pointed out that VRS can be offered. Licensee's representatives had stated that VRS was tried but not with much success.

4.6 Repair and Maintenance Charges

4.6.1 The ARR has projected a requirement of Rs74.23 lakh towards Repair and Maintenance charges during the year 2006-07. The approved amount for 2005-06 is Rs 87.87 lakh.

4.6.1 Commission's Observations

Commission pointed out that the charges for D.G set maintenance is very high. Licensee stated that the same is due to steep increase in oil price.

4.7 Administration & General Expenses

4.7.1 The Licensee has projected an amount of Rs 88.23 lakh towards A&G expenses for 2006-07 as compared to Rs 96.29 lakh approved for 2005-06. The A&G expenses consist of rent, taxes, insurance, legal charges, audit fees, electricity duty under Section 3(1) of the Kerala Electricity Duty (KED) Act and other charges such as travel expenses, freight, purchase related expenses, etc.

4.7.2 Commission's Observations

Commission has noted that the provision of 54.02 lakh was very high. During the discussion with the licensee on 28-03-06, it was stated by the Licensee's representatives that para military forces are used as security personnel and guarding all transformer points is a statutory requirement and hence the high cost.

4.8 Statutory Surplus/Return on Equity

4.8.1 Licensee has provided an amount of Rs 27.83 lakh for Revenue Return by taking 3% of NFA.

4.8.2 Commission's Observations

As the assets have been mobilized with loan from Govt. of India , there is no equity contribution to the business. The return on assets concept has not been accepted for Electricity business be it Generation Transmission or Distribution. The ROE concept has been adopted by CERC after exhaustive study of Cost of Capital. Hence Commission cannot provide any amount for RR.

4.9 Overall Position Regarding Aggregate Revenue Requirement For 2006-07

Based on the above discussion, the overall position regarding the Aggregate Revenue Requirement for 2006-07 would be as below:

Rs.lakh

Item	As per ARR of LICENSEE	As approved by KSERC
ROE	27.83	Nil
Power purchase	848.01	848.01
Interest charges	132.68	132.68
Depreciation	61.41	43.72
Employee Cost	173.72	173.72
Repair & Maintenance	74.23	74.23
Administration & General	88.23	88.23
Other Expenses	Nil	Nil
Less: Expenses capitalized	Nil	Nil
Less: Interest capitalised	Nil	nil
ARR (a+b)	1406.83	1360.59

Chapter V

REVENUE RECEIPTS DURING 2006-07

5.1 Revenue from Tariff Income

Revenue from Tariff Income for 2006-07 has stated to have been projected by the LICENSEE on the basis of the anticipated consumption by various categories of consumers under different slabs at the prevailing tariff rate under each slab and each category. Details in this connection have been furnished in Data Form 19 attached to the ARR & ERC for 2006-07 filed by the Licensee, which are summarized below.

Sl.No	Category	Energy Sales in lakh kwh	Revenue in Rs Lakhs
1	LT		
	Domestic	14.49	26.81
	Others	64.68	632.4
	Sub Total LT	79.17	1410.54
2	HT	142.59	751.43
3	Self consumption	33.64	129.62
	GRAND TOTAL	255.40	1540.16

The total revenue realization from tariff is projected at Rs 15.4077 crores on a total energy consumption of 25.541 MU.

5.2 Revenue from Non Tariff Income

The revenue from Non-Tariff income for 2006-07 has been projected at Rs 6.83 lakh as compared to Rs 6.81 lakh during 2005-06.

5.6 Expected Revenue From Charges

Based on the above discussion, the Commission would place the expected revenue from charges for 2006-07 at Rs 15.476 crores as per the following break up.

		Rs.Crores
1	Income from Tariff	15.4077
2	Non- tariff Income	0.0683

Chapter VI

COMMISSION'S ORDER ON THE ARR & ERC FOR THE YEAR 2006-07

6.1 Aggregate Revenue Requirement for the Year 2006-07

As discussed in the Chapter IV on ARR for 2006-07, the Commission approves an Aggregate Revenue Requirement of Rs 13.6059.crores as against Rs14.0683 corers proposed by the Licensee. The comparative details are furnished below:

Aggregate Revenue Requirement: Rs. 13.60 Crores.

Item	As per ARR of Licensee Rs lakh	As approved by KSERC Rs lakh
ROE	27.83	Nil
Power purchase	848.01	848.01

Interest charges	132.68	132.68
Depreciation	61.41	43.72
Employee Cost	173.72	173.72
Repair & Maintenance	74.23	74.23
Administration & General	88.23	88.23
Item	As per ARR of Licensee Rs. lakh	As approved by KSERC Rs lakh
Other Expenses	Nil	Nil
Less: Expenses capitalized	Nil	Nil
Less: Interest capitalised	Nil	Nil
ARR (a+b)	1406.83	1360.59

6.2 Expected Revenue From Charges

As discussed in the Chapter V on Revenue Receipts, the Commission has accepted the total expected revenue from charges at Rs 15.476 crores projected by the LICENSEE in the ARR for 2006-07. The comparative break-up is furnished below:

Expected Revenue from Charges: Rs. 15.476 Crores

Sl. No	Category	Energy Sales in lakh kwh	Revenue in Rs Lakhs
1	LT		
	Domestic	14.49	26.81
	Others	64.68	632.4
	Sub Total LT	79.17	1410.54
2	HT	142.59	751.43
3	Self consumption	33.64	129.62
4	Non Tariff income		6.83
	GRAND TOTAL	255.40	1547.60

6.3 Commission's Order

On the above basis, the Commission hereby approves an Annual Aggregate Revenue Requirement of Rs13.6059 crores and Total Expected

Revenue from Charges of Rs15.476. crores for the year 2006-07 as against Rs14.0683 crores and Rs15.476. crores projected respectively by the Licensee. The benefit of Revenue surplus of Rs.1.8701 Crores shall be passed on to consumers by way of Tariff reduction. A part of the surplus may be used for system strengthening after getting the project report implementation plan.

Chapter VII

COMMISSION'S DIRECTIVES

1. On finalization of the accounts for the FY 2005-06, CPT shall submit the actual audited accounts for the electricity distribution business for the FY 2005-06 along with following details:

- i. Actual monthly TOD meter recording of kWh, kVAh. kVARh, maximum demand, average PF and LF for normal, peak and off-peak period and similar recorded meter reading for self consumption and for energy sold to consumers, category wise and voltage wise.
 - ii. Monthly cyclic billing and collection data in respect of all categories of consumers.
 - iii. Payments to the KSEB along with billing details.
 - iv. Actual distribution loss based on the metered figures.
- 2.** Licensee shall conduct energy audit and take loss reduction measures to bring down AT&C losses by 1 % in 2006-07.
- 3.** Licensee shall file a petition for rationalization of tariff before 30th April 2006 taking into consideration the revenue surplus for reduction of existing Tariff. While submitting a Tariff proposal following factors should be taken in to account.
1. National Tariff Policy and National Electricity Policy issued by Government of India and Regulations issued by the Commission for retail Tariff shall be closely followed
 2. The tariff should reflect a steady decrease in cross subsidy. That is the variation between higher and lower Tariff shall be $\pm 20\%$ with in a period of 5 years.
 3. Multi year Tariff proposal with a control period of 3 years may be considered.
- 4.** Licensee shall deploy excess staff to other activities to the extent possible

and bring down employee cost in a phased manner.

5. Licensee should explore the possibility of availing loan from REC/PFC for capital works including the installation of 110 kV Substation.
6. Licensee should introduce Ring Main System for 11 KV with SCADA at the earliest and Trouble call Management System for reducing power outages.