KERALA STATE ELECTRICITY REGULATORY COMMISSION

THIRUVANANTHAPURAM

PRESENT : Shri. K.J.Mathew, Chairman Shri P Parameswaran, Member Shri. Mathew George, Member

August 1, 2011

Petition OP No.16 / 2011

In the matter of ARR&ERC of Cochin Port Trust for 2011-12

M/s. Cochin Port Trust

- Petitioner

ORDER

Background

1. M/s Cochin Port Trust (hereinafter called CPT or licensee) is a deemed Distribution Licensee of the Commission. The Commission has been approving the ARR&ERC of M/s CPT since 2004-05. The licensee vide letter dated 2-5-2011 had submitted the ARR&ERC petition for 2011-12 before the Commission. As per the petition, the total revenue requirements for 2011-12 was projected as Rs.2162.63 lakhs and the revenue from charges as Rs.2097.94 lakhs, thereby showing a revenue gap of Rs.64.70 lakhs. The summary of the petition is given below:

Summary of ARR&ERC projected for 2011-12

	2010-11 (Actuals) (Rs. Lakhs)	2011-12 (projected) (Rs.lakhs)
Revenue from sale of power	1,949.12	2,097.94
Non-Tariff Revenue	-	-
Total Revenue	1,949.12	2,097.94
Expenses		
Purchase of power	1,183.79	1,291.67
Repair & Maintenance	12.61	19.24
Employee costs	238.21	250.12
A&G expenses	40.69	41.69
Depreciation	156.12	163.33
Interest & Financing charges	373.75	396.58
Total Expenses	2,005.17	2,162.63
Surplus/(deficit)	-56.05	-64.70

Hearing on the matter

- 2. The hearing on the petition was held on 8-7-2011 at Cochin Custom House Agent's Association Hall, Willington Island. Kerala State Electricity Board and some consumers presented their objections on the petition. According to KSEB, the distribution expenses of the Licensee is exorbitantly high. The per unit cost of distribution ranges from Rs.2.51/kWh to Rs.2.88/kWh, which is the highest and hence unreasonable. The Board has also criticized the sales estimation and revenue estimation of the licensee. The Repair and maintenance expenses projected by the licensee is inclusive of generating set, which was disallowed by the Commission. The licensee is claiming interest and financing charges and depreciation but the loans are not properly repaid which is creating double burden on the consumers. The self consumption of the licensee shall be appropriately billed and accounted in revenue. The T&D loss projected for the year 2011-12 is 2.8% which is higher than the actual T&D loss reported for 2008-09 ie. 2.43% The employee cost projected is not as per the truing up order and the total number of employees engaged for electrical operations is about 151, which shows that each employee caters only 9 consumers. The licensee projected Rs.22.50 lakhs for security arrangements which is about 76% of the A&G expenses. It is also not clear that approval for capital expenditure has been sought by the licensee. The Board has stated that the Commission should look in to the progress made on the segregation of expenses as directed by the Commission.
- 3. M/s FACT Limited in their objections stated that the total consumption reported by the licensee includes its own consumption and hence it is to be separated. The energy is used for street lighting and other utilities of CPT's own business of port operations also for which user charges are collected from the users. Hence the cost of the same shall not be included in the ARR&ERC. The Overheads of generating stations shall not be charged on ARR since it is exclusively used for port operations and for few consumers. Only a small portion of the staff is used for electrical operations of the licensee and hence employee cost shall be split up for power distribution. The rate charged for HT consumers is about 150 to 250% higher than the power purchase cost which is exorbitant. There is also free electricity distributed for quarters, the cost of which needs to be borne by the licensee.
- 4. M/s Tata Global Beverages Limited has also given written objections. In their objections they have pointed out that the licensee's claim of 52.58% increase in expenses is inflated and needs to be scientifically determined. They have raised

concern over the high employee cost being loaded into ARR, which is comparatively higher than that of other licensees. The Objector provided a comparison of various parameters with other licensees to show the higher cost involved in the case of CPT.

Analysis and decision of the Commission

- 5. **Energy Sales:** The licensee has projected total sales for the year 2011-12 as 337.02 lakhs units. Of this, own consumption is estimated as 25.19 lakhs units and the total energy requirement projected is 346.40 lakh units for 2011-12. The Licensee has estimated an increase of 9.4% in sales where as the energy input is projected to increase by 9% over previous year.
- 6. The Board has objected to the sales projections of the licensee. The 9% increase without substantial addition of consumers is not a reasonable estimation. However, considering the expansion activities in the Vallarpadam area, there may be chances of increase in sales. Accordingly, the Commission inclined to accept the projections of the licensee for 2011-12.

Proposed and approved Energy sales for 2011-12

	2010-11 (Actual)		2011-12 (projected)		2011-12 (Approved)	
	No. of	Energy Sold	No. of	Energy Sold	No. of	Energy Sold
	installations	(lakh units)	installations	(lakh units)	installations	(lakh units)
HT consumers	22	194.69	19	221.22	19	221.22
LT I - Domestic	808	16.83	808	17.67	808	17.67
LT II Colonies	2	3.72	2	3.91	2	3.91
LT III Industry	3	0.02	3	0.02	3	0.02
LT IV(a) Swimming pool	2	0.48	2	0.50	2	0.50
LT IV(b) Seamens' Hostel & Club	3	1.48	3	1.56	3	1.56
LT IV (c) Educational institutions	8	0.69	8	0.72	8	0.72
LTV Commercial -Three phase	259	59.94	259	62.93	259	62.93
LTV Commercial -Single phase	261	3.14	261	3.30	261	3.30
Self Consumption		27.09		25.19		25.19
Total		308.08		337.02		337.02

7. **T&D loss and Energy requirement:** The energy loss reported by the licensee for 2011-12 is 2.73% and the actual loss in 2010-11 is 3.08%. The actual T&D loss reported from 2005-06 to 2008-09 is given below:

Actual T&D loss from 2004-05 to 2008-09

	2004-05	2005-06	2006-07	2007-08	2008-09
Total energy sales (lakh units)	266.67	284.07	277.81	277.91	277.81
Total energy input (lakh units)	274.24	292.32	286.57	286.54	284.72
Actual Distribution Loss (lakh units)	7.57	8.25	8.76	8.63	6.91
Actual Distribution loss(%)	2.76	2.82	3.06	3.01	2.43

8. The loss target proposed by the licensee for 2011-12 is much higher than the actual in 2008-09. The Commission is of the view that increase in energy loss cannot be allowed. Considering the actual T&D loss of 2.43% in 2008-09, the Commission decides to fix the T&D loss target for 2011-12 as 2.25%. The licensee shall take necessary steps to reduce the loss to the approved level. Based on the approved level of loss, the energy requirement for 2011-12 is approved as shown below:

Approved T&D Loss for 2011-12

Category	2011-12 (Projection)	2011-12 (Approved)
Total Sales (lakh units)	337.02	337.02
Distribution Loss (lakh units)	9.40	7.80
Gross energy requirement (lakh units)	346.40	344.80
Distribution Loss (%)	2.71%	2.25%

- 9. **AT&C Loss:** In the distribution business, T&D loss and AT&C loss are the common performance parameters employed. The collection efficiency reported by the licensee is nearly 100%. Hence the AT&C loss for 2011-12 is fixed as 2.25%.
- 10. Power purchase cost: In the ARR, the licensee has projected the power purchase cost as Rs.1291.67 lakhs. The power purchase cost was estimated without considering the revision of BST, which is effective from 1/12/2010. The licensee has mentioned that BST increase was not taken into consideration on account of pending litigation. The licensee expects that about 28% reduction in the contract demand and about 21% reduction in energy at the input point at Wellington Island where as about 36% increase in demand and 30% increase in energy at Vallarpadom input point. The power purchase cost estimated by the licensee is as follows:

Power purchase cost projected by the licensee for 2011-12

	Proposed by
	Licensee
Units purchased (MU)	34.65
Fixed charges (Rs. lakhs)	269.06
Variable charges (Rs.lakhs)	1022.61
Total charges (Rs.lakhs)	1291.67
Average rate (Rs./kWh)	3.73

11. The Commission notes that the licensee has approached the Hon. High Court and obtained a stay on the Bills issued by KSEB, which cannot be construed as the stay on the Orders on BST. Since there is no legal bar on the BST order, the Commission proceeds to estimate the power purchase cost based on the revised BST which is applicable from 1-12-2010. The licensee has estimated that the average demand at Wellington Island will be reduced by 1751kVA per month and the demand at Vallarpadam will be 2250kVA. Based on the approved energy requirements and revised BST, the approved power purchase cost for 2011-12 is estimated as follows:

Power purchase cost approved for 2011-12

	Projected by	Approved by
	the Licensee	the Commission
Energy requirement (lakh units)	346.40	344.80
Average contract/maximum Demand		
Wellington Island (kVA)	4543	4543
Vallarpadam (kVA)	2250	2250
Fixed Charges (110kV) (Rs./kVA)	330	245
Fixed Charges (11kV) (Rs./kVA)	330	275
Total Fixed Charges (Rs.lakhs) (A)	269.06	207.81
Energy Charges (Rs./kWh)	2.95	3.16
Total Energy Charges (Rs.lakhs) (B)	1022.61	1,089.57
Total Charges (Rs.lakhs) (C=A+B)	1291.67	1,297.38
Average Power purchase cost (Rs./kWh)	3.73	3.76

12. The Commission desires to point out that only the relevant BST has to be applied on both the points of supply, ie., at 110kVand 11kV. The licensee shall take up the matter with KSEB and get the anomalies in the BST bill corrected. Thus based on the projections of the licensee on contract demand, approved energy input, and revised BST, the approved power purchase cost for 2011-12 is estimated as Rs.1297.38 lakhs.

- 13. Interest and financing charges: The licensee has projected the interest and financing charges as Rs.369.58 lakhs. The licensee has mentioned that the opening balance of loans of Government of India is Rs.3930.08 lakhs, additional capital investment of Rs.425 lakhs is planned at Vallarpadam area for upgradation of distribution system. Hence the total outstanding loans at the end of 2011-12 shown by the licensee was Rs.4355.08 lakhs.
- 14. The Commission in the truing up order has not allowed the interest on account of the fact that the licensee has not paid the interest to Government of India. Thus, the interest charges proposed for the existing loans can be allowed only if it is likely to be incurred. The Commission for the time being allows the interest as proposed by the Licensee, which shall be adjusted once the actual accounts are available. Though the licensee in the petition has shown the source of capital expenditure as Government of India loans, in the public hearing representative of the licensee mentioned that they are expecting a subsidy from Government of India and the same may be utilized for capital expenditure. Since the funding sources of the loans is not clearly stated by the licensee, the Commission is not in a position to allow the interest cost for capital expenditure proposed. Further, the licensee has also not provided the detailed capital expenditure programme for approval. The interest if any paid may be allowed in the truing up process after considering the actual capital expenditure.
- 15. **Depreciation:** The GFA at the beginning of the year 2011-12 proposed by the licensee is Rs.3701.00 lakhs. The total addition to GFA proposed is Rs.425 lakhs under the head 'substations'. The depreciation projected by the licensee for 2011-12 is Rs.163.32 lakhs as shown below:

Depreciation proposed for 2011-12

	GFA at the beginning of 2011-12 (Rs.lakhs)	Depreciation (Rs. Lakhs)
Generating plant and Machinery	597.35	35.50
Substations	2,600.31	99.37
11kV works	324.50	11.68
LT lines, Service connections	33.30	1.20
Metering equipments	5.67	0.34
Miscellaneous equipments	94.07	14.41
Others	45.80	0.82
Total	3,701.00	163.32

- 16. The licensee has provided a detailed list of assets showing the year of commissioning, original cost, accumulated depreciation etc., In the GFA, as part of Miscellaneous Assets, items included are boom crane, Van, Computer, High mast tower and Street lights for which Rs.14.41 lakhs depreciation has been claimed.
- 17. The Commission has analysed the details provided by the licensee. The depreciation can be claimed for the assets used for distribution of electricity. However, the miscellaneous assets comprise of items which are not essentially required for distribution business (boom crane, Highmast tower, street light etc.). In the depreciation estimation for miscellaneous assets, the licensee has claimed depreciation of Rs.0.65 lakhs for computers, Rs.5.76 lakhs for high mast tower, Rs.8.0 lakhs for street light totaling Rs.14.41 lakhs. The Commission disallows the depreciation claimed for items except computers.
- 18. The Commission in the truing up orders have mentioned that depreciation for generating sets is not eligible since the same is mostly used for licensee's own use. The depreciation approved for 2011-12 is as shown below:

Approved depreciation for 2011-12

	GFA at the	Depreciation	Allowed
	beginning of 2011-12	projected (Rs.lakhs)	(Rs.lakhs)
Generating plant and Machinery	597.35	35.50	-
Substations	2,600.31	99.37	99.37
11kV works	324.50	11.68	11.68
LT lines, Service connections	33.30	1.20	1.20
Metering equipments	5.67	0.34	0.34
Miscellaneous equipments	94.07	14.41	0.65
Others	45.80	0.82	0.82
Total	3,701.00	163.32	114.06

19. **Employee cost:** The employee cost proposed by the licensee for 2011-12 is Rs.250.12 lakhs. The licensee has given the actual employee cost for 2010-11 as Rs.238.21 lakhs. The Objectors have commented on the high level of employee cost proposed by the Licensee. The Commission in the Truing up Order has also commented on the high level of employee cost and urged for segregation of licensee activities. The licensee has given following apportionment of costs for distribution expenses.

Apportionment of employee costs proposed for 2011-12

	No. of persons working	Annual Salary (Rs.lakhs)	Proportion	Cost booked for Distribution (Rs.lakhs)
Chairman /CMD of the Company	1	18.00	5%	0.90
Chief Engineer/or equivalent	1	8.86	7%	0.62
Executive Engineer or equivalent	1	7.87	40%	3.15
Asst.Executive Engineer	1	8.81	85%	7.49
Asst.Engineers	3	20.75	100%	20.75
All other technical staff	84	126.13	100%	126.13
All other non-technical staff	60	91.09	100%	91.09
Total	151	281.51		250.13

- 20. The details of employee cost provided by the licensee has been analysed in detail. The licensee in the public hearing has clarified that the CPT has large number of employees in the rolls, the cost of which has to be borne at present. Now no recruitments are being made for the vacant positions. employees available have to be deployed in the business and accordingly, the cost has been charged on the distribution business. The Commission has examined the arguments of the licensee. As pointed out by the objectors, the employee cost booked for distribution is substantially high. The number of Technical and non-technical employees booked for distribution business is very high considering the area of operation and number of consumers. The Commission in the truing up order had mentioned that proper apportionment of employee expenses on distribution has to be made. The Commission is in the process of awarding a study for segregation of joint cost of small licensees. Till decision on the issue is taken, the Commission provisionally allows the employee cost projected by the licensee. However, in the truing up only the actual employee expenses based on the final segregation shall be allowed.
- 21.Repair and maintenance expenses: The licensee has projected Rs.19.24 lakhs for repair and maintenance expenses for 2011-12 as against Rs.12.62 lakhs for 2010-11 The licensee has segregated the R&M expenses into consumption of Store (Rs.9.76 lakh) and other expenses (Rs.9.48 lakhs). The R&M expenses projected is inclusive of the R&M expenses for generating sets as shown in the table below.

Repair and maintenance expenses proposed for 2011-12

Particulars	2010-11 (Actual) (Rs.lakhs)			2011-12 (projected) (Rs.lakhs)		
	Consumption store	Other expenses	Total	Consumption store	Other expenses	Total
Generating plant and Machinery	6.11	3.32	9.43	6.42	9.48	15.90
Substations						
11kV works	3.10		3.10	3.25	_	3.25
LT lines, Service connections	0.10		0.10	0.20		0.20
Vehicles						
Furniture & fixtures	0.09		0.09	0.09		0.09
Office equipments & Others						
Total	9.30	3.32	12.62	9.76	9.48	19.24

22. The licensee has projected about 52% increase in the R&M expenses, of which major share is for generating plant. The Commission in the truing up order has mentioned that the R&M expenses for generating sets are not allowable. Considering this, the Commission approves the R&M expenses as shown below:

R&M Expenses approved for 2011-12

Particulars	2011-12 (Approved) (Rs.lakhs)		
	Consumption	Other	
	store	expenses	Total
Generating plant and Machinery			-
Substations			
11kV works	3.25	-	3.25
LT lines, Service connections			
Vehicles			
Furniture & fixtures	0.09		0.09
Office equipments & Others			
Total	3.34	-	3.34

23. Administration and General expenses: The Administration and General expenses proposed by the licensee is Rs.41.69 lakhs for 2011-12 where as the actual expenses for 2010-11 is Rs.40.69 lakhs. The licensee has included Rs.22.50 lakhs towards security arrangements under A&G expenses. Other than this, the projections under various heads are not substantial. The Commission in the truing up order has taken a position that cost of security arrangements booked by the licensee is substantial considering the distribution operations of the licensee. However, the final decision on assigning the joint costs may be taken once the detailed study is over. In the mean time, the Commission

- provisionally approves the A&G expenses as projected by the licensee for 2011-12. The final allowable A&G expenses shall be decided at the time of truing up based on the final decision on apportionment of joint costs.
- 24. Other debits: The licensee has not included any expenses under other debits.
- 25. Return on equity: No ROE has been claimed by the Licensee. The Commission in the Truing up Order of the licensee considered the matter and allowed Rs.10 lakhs per year as surplus which is transferred to the reserves. The Commission hence allows token amount of Rs.10 lakhs as return for the licensee. The reasonable level of return can be considered once the decision based on the results of the consultancy assignment is over.
- 26. **Gross Aggregate revenue requirements:** Based on the above, the Aggregate Revenue Requirements proposed and approved for 2011-12 is as given below.

Approved Aggregate Revenue Requirements for 2011-12

Total Expenses	2,162.64	2,113.18
Return on investment		10.00
Interest & Financing charges	396.58	396.58
Depreciation	163.32	114.06
A& G expenses	41.69	41.69
Employee costs	250.13	250.13
Repair & Maintenance	19.24	3.34
Purchase of power	1,291.67	1,297.38
Expenses	2011-12 (projected) (Rs.lakhs)	2011-12 (Approved) (Rs.lakhs)

27.Revenue from tariff: The licensee has projected the revenue from tariff as Rs.2097.94 lakhs. The licensee has not projected any income from miscellaneous items or non tariff revenue. The projections of the licensee is as shown below:

Revenue from sale of power projected for 2011-12

	Proposed by the licensee		
	Energy Sold (lakh units)	Revenue (Rs.lakhs)	Average Tariff (Rs./kWh)
HT consumers	221.22	1287.54	5.82
LT I - Domestic	17.67	52.64	2.98
LT II Colonies	3.91	21.9	5.60
LT III Industry	0.02	0.14	7.00

LT IV(a) Swimming pool	0.50	3.06	6.12
LT IV(b) Seamens' Hostel & Club	1.56	6.96	4.46
LT IV (c) Educational institutions	0.72	3.43	4.76
LTV Commercial -Three phase	62.93	585.21	9.30
LTV Commercial -Single phase	3.30	24.85	7.53
Self Consumption	25.19	112.21	4.45
Total	337.02	2,097.94	6.22

28. Some of the objectors have pointed out the underestimation of revenue by the licensee especially for HT consumers. The Board has stated that the average realization for 2010-11 for HT consumers given by the licensee is Rs.6.05 per unit where as for 2011-12 the average realization is only 5.82/kWh. The Commission is of the view that there is substance in the argument. Hence, the Commission re-estimates the revenue based on actual realization for the previous year 2010-11. Accordingly the approved revenue for 2011-12 is shown below:

Revenue from sale of power approved by the Commission for 2011-12

	Approved by the Commission		
	Energy sales	Revenue	Average Tariff
	(lakh units)	(Rs.lakhs)	(Rs./kWh)
HT consumers	221.22	1,338.38	6.05
LT I – Domestic	17.67	52.66	2.98
LT II Colonies	3.91	21.94	5.61
LT III Industry	0.02	0.15	7.42
LT IV(a) Swimming pool	0.50	3.03	6.06
LT IV(b) Seamens' Hostel & Club	1.56	6.97	4.47
LT IV (c) Educational institutions	0.72	3.41	4.74
LTV Commercial -Three phase	62.93	585.25	9.30
LTV Commercial -Single phase	3.30	24.85	7.53
Self Consumption	25.19	99.25	3.94
Total	337.02	2,135.88	6.34

29. **Revenue Surplus/gap:** The revenue gap proposed by the licensee is Rs. 64.69 lakhs. After considering the materials and explanation by the licensee, the Commission has arrived at a surplus of Rs.22.70 lakhs for the year 2011-12 as follows:

Approved ARR&ERC for 2011-12

Particulars	2011-12 (projected) (Rs.lakhs)	2011-12 (Approved) (Rs.lakhs)
Purchase of power	1,291.67	1,297.38
Repair & Maintenance	19.24	3.34
Employee costs	250.13	250.13
A& G expenses	41.69	41.69
Depreciation	163.32	114.06
Interest & Financing charges	396.58	396.58
Return on investment	-	10.00
Total Expenses	2,162.63	2,113.18
Revenue from sale of power	2,097.94	2,135.88
Other income		
Total Revenue	2,097.94	2,135.88
Surplus/(deficit)	(64.69)	22.70

30. The Commission notes that the licensee has not yet fulfilled the commitments made at the time of truing up and also not completely complied with the direction of the Commission issued along with the Truing up Order. The Commission has directed M/s CPT to submit a report on separate audit of distribution business of the licensee by the C&AG within two months. The licensee is yet to furnish the status report. The Commission has also directed to furnish a list of connections under self consumption along with appropriate tariff category and consumption. The direction is yet to be complied with.

Orders of the Commission

31. After the analysis of the ARR&ERC and the clarifications thereof submitted by the licensee, the Commission provisionally approves the ARR of Rs.2113.18 lakhs and estimated revenue of Rs.2135.88 lakhs, leaving a revenue surplus of Rs.22.70 lakhs for the year 2011-12 for M/s. Cochin Port Trust as stated above. The licensee shall take earnest efforts to limit the expenses at the approved level. The existing Retail Supply tariffs will continue till further orders.

Directions

- a) The licensee shall provide within one month, the list of connections under 'self consumption' and the appropriate tariff category, and consumption against each connection for 2010-11.
- b) The licensee shall within four months inform the status of separate auditing of the distribution business by C&AG.

- c) The licensee shall inform the progress of creation of separate fund for transferring the surplus arrived at after the truing up.
- d) The licensee shall keep separate accounts for identifiable expenses like employee costs, A&G expenses and R&M expenses of licensed business.
- 32. The petition is disposed of. Ordered accordingly.

Sd/-	Sd/-	Sd/-
P.Parameswaran Member	Mathew George Member	K.J.Mathew Chairman
		Approved for Issue
		Secretary