

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Thiruvananthapuram

Petition No.TP-7 of 2005

**ARR&ERC for FY 2005-06
of
Tata Tea Limited, Munnar**

June 28, 2005

Present : Shri.M.K.G.Pillai, Chairman
Shri.C.Balakrishnan, Member

Tata Tea Limited, Munnar

Petitioner

ORDER

The Kerala State Electricity Regulatory commission having scrutinized the Petition on ARR&ERC for 2005-06 filed by Tata Tea Ltd. *vide* their letter No.E.49 dated February 14, 2005 and considered the comments of the KSEB on the petition, heard the views of the petitioner and the KSEB in the Commission's proceedings on 26.4.2005 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.

C.Balakrishnan
Member

M.K.G.Pillai
Chairman

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Sd/-
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Chairman

Authenticated copy for issue

Secretary

KERALA STATE ELECTRICITY REGULATORY COMMISSION

THIRUVANANTHAPURAM

Order on Petition No.TP-7 of 2005

ARR&ERC for FY 2005-06 of Tata Tea Limited, Munnar

I. BACKGROUND

Tata Tea Limited, Munnar is the successor of the Kannan Devan Hills Produce Company Limited (KDHP Co.), which was a sanction holder for distribution of power for its own use and to the consumers within the Munnar area from the Government of His Highness, the Maharaja of Travencore since 28. 5. 1948. Accordingly, Tata Tea Limited Munnar is a deemed distribution Licensee under the first proviso to Section 14 of Electricity Act 2003.

Presently, Tata Tea Limited, Munnar receives power at 11kV from the Kerala State Electricity Board (KSEB). About 40 MU of energy is purchased annually from KSEB with a Contract Demand of 7000 k VA. The Licensed area comprises of 240 sq. km of hilly terrain with distributed load centers, reported to be having about 180 km of HT lines and 170 km of LT lines. Power is also supplied back to KSEB through the distribution system of Tata Tea Limited at 13 feed back points.

Tata Tea Limited (TTL) had 14268 LT-Domestic consumers, 1175 LT - Commercial Consumers and 5 HT Consumers during FY2003-04. The number of consumers is expected to grow to 14310 LT-Domestic consumers, 1207 LT - Commercial Consumers and 7 HT Consumers in FY 2005-06.

Tata Tea Limited purchased 42.69 MU of electrical energy from KSEB and sold 10.88 MU to the ultimate consumers during the year 2003-04. Tata Tea Limited purchased 42.47 MU of electrical energy from KSEB and sold 10.59 MU

to the ultimate consumers during the year 2004-05. The energy intake is expected to be 39.91 MU with 10.26 MU sales to outside consumers in FY 2005-06. Feed back energy to the KSEB (the Board) during 2003-04 and 2004-05 were 4.16 MU and 4.74 MU respectively. The feed back is expected to increase to 5.40 MU in FY 2005-06. The energy intake and consumption details are tabulated below:

	<i>(MU)</i>		
Consumption	FY 2003-04	FY 2004-05	FY 2005-06
Self Consumption	19.39	18.88	15.99
Sales	10.88	10.59	10.26
Loss	8.26	8.26	8.26
Feedback to KSEB	4.16	4.74	5.40
Intake from KSEB	42.69	42.47	39.91

The position regarding actual T& D loss during 2003-04 and that estimated for 2004-05 and 2005-06 as reported by Tata Tea Limited is given below:

Year	Energy Intake, MU	AT & T Loss, MU	AT& T Loss (%)
2003-04	42.69	8.26	19.34
2004-05	42.47	8.26	19.44
2005-06	39.91	8.26	20.69

II. ARR&ERC FILED BY TATA TEA LTD FOR THE YEAR 2005-06

The ARR&ERC for FY 2005-06 filed by Tata Tea Limited projected a revenue requirement of Rs. 1364.54 Lakhs and expected a revenue receipt of Rs. 1139.59 Lakhs leaving a revenue gap of Rs.224.95 Lakhs, as per details given below: -

(Rs.lakhs)				
Sl.No	Particulars	2003-04	2004-05	2005-06
1	Power Purchase Cost	1098.30	1136.83	1101.87
2	Duty Under Sec.3 & 4	48.59	52.92	50.03
3	Duty on Self Generation	0.60	0.59	0.59
4	Duty on Lines Loss	2.39	2.42	2.77
5	Repair& Maintenance Expenses	17.47	17.41	18.29
6	Employee cost	42.94	45.30	43.44
7	Periodical Inspection Charges	0.92	0.93	0.93
8	Surcharge	4.69	4.58	3.92
9	Fuel Expense for Electrical Dept	2.16	1.78	2.27
10	Elec. Dept. vehicle Maintenance.	1.73	1.86	1.69
11	Admin.& Office Expenses	1.68	1.64	1.62
12	Depreciation	85.81	76.68	76.58
13	Interest on security deposit	6.69	6.69	6.69
14	Excess revenue paid to KSEB	53.34	53.63	53.63
15	Arrears from consumers	14.60	0.29	0.20
16	Gross Expenses (total 1 to 15)	1381.90	1403.56	1364.54
9	Less Expenses capitalized	-	-	-
10	Interest capitalized	-	-	-
11	Aggregate Revenue Requirement	1381.90	1403.56	1364.54
12	Revenue from Tariff	1192.36	1208.71	1139.08
13	Non tariff Income	3.06	0.53	0.51
14	Total Revenue	1195.42	1209.24	1139.59
15	Revenue Gap	186.48	194.32	224.95

The Commission sought the comments of the KSEB on the ARR& ERC filed by Tata Tea Limited and the KSEB submitted its comments *vide* letter No. KSEB/ TRAC/T/ SERC/ TATATEA /266/R1/05/204 dated 16.3.2005.

Response to the comments from KSEB was submitted by Tata Tea Limited *vide* their letter No. KERC/21 dated 8.4.05.

The Comments of KSEB and the response of Tata Tea Limited thereof are summarized below:

The KSEB stated that though the KSEB has been billing Tata Tea Limited at Grid Tariff, Tata Tea Ltd., was not making the payments at the revised Tariff.

Regarding remittance of the additional income collected from the consumers by way of tariff revision of the Licensee's consumers, the Board did not have adequate details to check whether the entire additional revenue by way of tariff revision had been passed on to the Board. The KSEB stated that the total outstanding arrear as on 31.1.2005 of Tata Tea Limited was Rs. 4,97,49,860 including a long pending arrear of Rs. 40,10,426. The Board stated that Tata Tea Ltd are not remitting the charges for the un-metered feed back points as per calculation of the Board. The Board stated that as a consensus between the Board and the Licensee has not yet been reached regarding continuation of the concession of 5% rebate on total bill, the execution of a new agreement as per the Order of the Commission on the petition DP14 is still pending.

Tata Tea Limited stated that they had taken up the matter regarding the revision of tariff with the Honorable High Court of Kerala and obtained a stay on the payment to the Board as per the revised grid tariff. The stay is still continuing. Tata Tea Limited were remitting the additional income collected from the consumers to the KSEB every month and as requested by KSEB on 22.11.2004, the data regarding the same was submitted to Deputy Chief Engineer, TRAC, KSEB. TTL stated that the amount of arrears indicated by the KSEB was incorrect and the KSEB had not responded to the objections raised by them regarding the various discrepancies in the billing. All the data sought by the Board in connection with the execution of the new agreement has already been furnished by TTL on time. TTL stated that the proposals to install meters by TTL on the feedback points were not agreed to by the Board. From August 2003 onwards, TTL were making the payments by making the corrections in the Board's calculations on the feed back power and as Board has not raised any objection on these corrections, TTL presumed that these were acceptable to the Board. TTL expressed concern on frequent supply interruptions and low voltage. TTL stated that as the energy consumption was accounted/metered at the LT side for all the feed back points, (except the Vagauvarri feeder) the transformer

loss left unaccounted. Therefore, the Board's contention that 4% loss on the feed back energy is born by the Board as transmission loss is not correct.

The Commission directed Tata Tea Limited, Munnar to furnish copy of the ARR&ERC to their consumers, which was complied with by them. However, none of the consumers responded to the ARR&ERC.

Clarifications and copy of documents called for by the Commission *vide* its letter dated 18.2.05 were also filed by Tata Tea Limited *vide* their letter dated 26.2.05.

III. PROCEEDINGS OF THE COMMISSION

The Commission held proceedings on 26th April 2005 at its Office at Thiruvananthapuram to hear Tata Tea Limited, Munnar, the Kerala State Electricity Board and consumers availing supply from them, on the petition on the ARR&ERC for FY 2005-06 filed by Tata Tea Limited, Munnar. Only the representatives of Tata Tea Limited and KSEB attended the proceedings.

The following gives a summary of the outcome of the proceedings:

1. As per the stay granted by Honorable High Court, Tata Tea Limited have been remitting the dues against the bills of KSEB as per the tariff prior to the revision effective from 1.4.2003. During the hearing, both the parties expressed the view that they would like the stay vacated and enter into a new Power Purchase Agreement.
2. The payment of arrears accrued as a result of the difference between the remittance made by Tata Tea Limited as per the pre-revised tariff and the bills raised by KSEB as per the prevailing tariff, depends on the final Court Order.

3. Out of total thirteen feed back points from the distribution system of Tata Tea Limited to KSEB only one point at Vagavurrai has TOD meter; and another one point has energy meter. All the remaining eleven points are reported to have no meters installed and the energy and demand are accounted by calculations.
4. There is an agreement that KSEB shall bear 4% of energy wheeled through TTL's distribution system at the 13 feed back points. As the energy wheeled is accounted at LT side, the transformer losses remain unaccounted.
5. Tata Tea Limited has a Contract Demand of 7000 k VA, with the condition that if there is no generation at Madupetty, the demand will be limited to 4000 k VA. As per this restriction, Tata Tea Limited reported that Rs. 1.17 Cr was paid as MD penalty charges in FY 2003-04.
6. Tata Tea Limited stated that even though there are TOD meters at the incomer side of the supply; the maximum demand reading indicated in the meters is not taken for billing purposes.

IV. COMMISSION'S APPROACH ON THE ARR& ERC FOR FY 2005-06

1. Power Purchase

a. Sales Projection: According to TTL, selfconsumption was estimated based on the energy required for manufacturing the budgeted crop. The energy sales to outside consumers were projected taking into account the number of consumers and their consumption. Commission accepts the projections on the basis given in the ARR filed, as per details below:

Estimation of Energy Requirements for FY 2006-06

Consumption Center	Consumption (MU)		
	FY 2003-04	FY 2004-05	FY 2005-06
	Actual	Estimate	Estimate
TATA TEA LTD HT Factory	16.22	16.07	13.41
Other than manufacture – Commercial	1.3	1.27	1.17
Establishment	0.84	0.67	0.61
Free supply to employees	1.04	0.87	0.8
Internal consumption	19.39	18.88	15.99
HT Consumers (Outside)	2.35	2.44	2.45
Domestic consumers (outside)	6.5	6.02	5.58
Commercial consumers outside (town and estate)	1.78	1.89	1.99
Street light	0.25	0.25	0.25
Sub total	30.27	29.47	26.25
Feed back to KSEB	4.16	4.74	5.4
Sub total	34.44	34.22	31.65

The AT& C loss reported from 2001-02 is tabulated below

Year	AT &C Loss	
	MU	%
2001-02	9.48	23.40
2002-03	8.93	20.77
2003-04	8.26	19.34
2004-05, estimated	8.26	19.44
2005-06, estimated	8.26	20.69

The HT: LT ratio of TTL's distribution network is closer to 1:1 and an average power factor of above 0.95 is maintained in the system. As per the details given, TTL has 136 numbers distribution transformers with capacity varying from 5 kVA to 1000 kVA and totaling to 23565 kVA . However, the AT&C loss figure of TTL distribution system is substantially high. The ARR filing for FY 2005-06 does not point out any loss reduction program. The Commission would suggest that TTL shall initiate a loss reduction program immediately. To begin

with, TTL should achieve 3% loss reduction from the present level in FY 2005-06, which means that the loss level shall be brought down to 17.7 %. Corresponding to this, the power purchase requirement for FY 2005-06 will be 38.46 MU.

b. Power Fed back to KSEB: Commission is of the view that the power wheeled by KSEB through TTL's distribution system shall be excluded from the power purchase.

FY	2003-04	2004-05	2005-06
Feed Back to KSEB, MU	4.16	4.74	5.40

By excluding the power fed back to KSEB, the net power purchase for FY 2005- would work out 33.06 MU.

c. Maximum Demand : At present, the Contract Demand of TTL is 7000 k VA. In FY 2003-04, the recorded maximum demand has exceeded the contract maximum demand during 10 months, varying from 6938 k VA to 8773 k VA. From the minutes of the meeting between KSEB and TTL dated 29.4.05, it is noted that KSEB would favorably consider the request for additional 3000 k VA Contract demand. This would make the total Contract Demand to 10000 k VA, which shall be included in the proposed new Power Purchase Agreement. Commission is of the view that 75% of 10000 k VA per month may be assumed for FY 2005-06. Commission disallows the anticipated maximum demand penalty charges of Rs. 91.92 lakhs shown in the ARR for FY 2005-06. The Board shall charge maximum demand by measuring the simultaneous maximum demand on the feeders supplying power to TTL.

d. Power Purchase Cost: The KSEB has hitherto been allowing a rebate of 5% on the total power purchase cost to Tata Tea Limited on account of the difficult terrain in the Munnar area over which the power supply is made. The Commission has not come across any change in the conditions on the basis of which the rebate has been allowed so far. Further, although the KSEB has been availing power at 13 points utilising the distribution network of TTL, it has not

been paying any wheeling charges for the usage of the distribution network. The KSEB has merely allowing a distribution loss of 4% as compared to the overall distribution loss of about 20% occurring in the distribution network of TTL. The Commission also notes that even after allowing a rebate of 5 %, TTL are not in a position to eliminate the revenue gap which works out to more than 5% of the aggregate revenue requirement for 2005-06.

Keeping all the above factors in view, the Commission would direct the KSEB to continue to allow a rebate of 5% on the power purchase cost to TTL. However, this is on the condition that TTL would make prompt payment against the bills raised by the KSEB for the electricity charges at the prevailing tariff.

e. Return on Equity (ROE) : TTL has not proposed any provision towards ROE. TTL have not indicated any equity component separately for their licensee business. Therefore, the Commission is not in a position to include any provision for ROE in the ARR for the FY 2005-06.

Taking into account the estimates for energy requirement and maximum demand as above, the estimated power purchase cost would be Rs. 893.28 Lakhs for FY 2005-06 as given below:

Estimation of Power Purchase Cost as per prevailing Grid Tariff of KSEB

Rs. Lakhs

Annual Energy Charges	
Energy Purchased MU	33.06
Energy charges (@Rs.2.15/kWh)	710.79
Annual Demand charges	
Average demand, 75% of 10000 k VA	7500
Excess Demand	0
Demand charges @ Rs.255/k VA, Rs. Lakhs	229.5
Excess demand charges	0
Total demand charges	229.5
Total Power purchase cost, Rs. Lakhs	940.29
Rebate @ 5%	47.01
Net Power Purchase Cost	893.28

2. Other revenue requirements in the ARR

a. Depreciation: TTL have proposed Rs. 76.58 Lakhs towards depreciation for FY 2005-06. TTL stated that this amount has been arrived by applying straight line method at the rate of 7.07 % on the value of the capitalized electrical equipments. But, the asset data submitted by TTL *vide* letter dated 24.5.05 shows only Rs. 77.18 lakhs as written down value of the fixed assets under electrical distribution system on as on 31.5.2005. The Commission shall admit depreciation on this amount. Based on the CERC guidelines for similar asset classifications, the rate of depreciation shall be 3.6 %.

b. Excess revenue paid back to KSEB:The amount calculated on the energy units sold in terms of the difference in tariff prior to 1st April, 2003 and after 1st April, 2003 is termed as excess revenue. TTL has indicated an amount of Rs. 53.63 Lakhs as excess revenue to be paid to KSEB in FY 2005-06. Since the power purchase for FY 2005-06 is considered as per the prevailing tariff (and not as per pre-revised tariff being paid on the strength of the stay granted by Honorable High court), the question of providing excess revenue does not arise.

c. Arrear amount to be received from various consumers:Arrears in electricity charges from consumers as such shall not form part of the ARR. Provision of Rs. 20,000 included in the ARR for 2005-06 on this account is disallowed.

d. Electricity Duty: Electricity duty under Section 3 of KED Act works out to Rs. 6.16 Lakhs for 2005-06. In addition to this TTL are also called upon to pay duty on distribution losses in excess of 13.75%, as per As per G.O. (RT) No. 122/2001/PD dated 21.6.2001, which works out to Rs. 2.27 Lakhs for 2005-06. The total allowable duty for 2005-06, therefore works out to Rs. 8.93 Lakhs. Duty Payable under Section 4 of KED Act and surcharge are not admissible as pass

through under ARR. Similarly, duty on diesel generation is also not allowed since the power generated is for TTL's own consumption.

e. Employee Cost: The employee cost for the distribution license's business is indicated as Rs. 43.44 Lakhs, which is admitted.

f. Repair and Maintenance Cost: Repair and Maintenance Cost works out to Rs. 22.25 Lakhs as per details below:

i.	R&M:	Rs. 18.29 Lakhs
ii.	Fuel Expenses for vehicles:	Rs. 2.27 Lakhs
iii.	Maintenance of Vehicles:	Rs. 1.69 Lakhs
	Total:	Rs. 22.25 Lakhs

g. Administration and General Expenses: The Commission seeks to approve an amount of Rs. 2.55 Lakh towards Administration and General Expenses.

3. Aggregate Revenue Requirement for 2005-06:

On the above basis, the Commission approves an Aggregate Revenue Requirement of Rs. 973.23 Lakhs for 2005-06 as given below :

(Rs. Lakhs)

Sl. No.	Particulars	2005-06
1	Power Purchase Cost	893.28
2	Duty Under Section 3	8.93
3	Interest charges	-
4	Depreciation	2.78
5	Employee cost	43.44
6	Repair & Maintenance Cost	22.25
7	Administration & General Expenses	2.55
8	Other Expenses	--
9	Gross Expenses (total 1 to 7)	973.23
10	Less Expenses capitalized	-
11	Interest capitalized	-
12	Aggregate Revenue Requirement	973.23

4. Revenue from Charges

a. **Interest on Security Deposit:** The KSEB at present is not paying any interest on Security deposit. Once the new Power Purchase Agreement is executed in accordance with the provisions of the Electricity Act 2003, Tata Tea Limited may have the option to execute irrevocable LC in lieu of security deposit. Therefore the amount shown as interest on Security Deposit should be excluded from the revenue receipt of TTL for 2005-06.

b. **Revenue on TTL's self consumption:** Revenue from selfconsumption is considered at HT-1 tariff rates. TTL's internal energy consumption is 40% of the total intake. 40% of total demand has been allowed as MD on self consumption.

Revenue from TTL Self consumption, as per HT-1 Tariff

	Rs. Lakhs
Normative Demand for TTL, 40% of total MD of 7500 k VA	3000.00
Annual MD Charges, @Rs. 270 per k VA	97.20
Annual Unit Charges, @ Rs. 3 per k Wh for 15.99 MUs	479.70
Total revenue from self consumption	576.90

c. **Revenue from consumers:** Revenue from energy sold to outside consumers works out to Rs. 337.46 lakhs as per details below:

Revenue from consumers

Consumers	Consumption, MU	Revenue, Rs. Lakhs
	FY 2005-06	
HT Consumers (Outside)	2.45	103.29
Domestic consumers (outside)	5.58	79.50
Commercial consumers outside (town and estate)	1.90	149.52
Street light	0.25	5.14
Total	10.18	337.46

d. **Non Tariff Income:**TTL have indicated a non tariff income of Rs. 0.51 lakhs which is taken into account in the total revenue.

On the above basis, the expected revenue from charges for 2005-06 would work out to Rs. 914.86 Lakhs.

(Rs. Lakhs)

Revenue from Tariff	
From Self Consumption	576.90
From energy sold	337.45
Non tariff Income	0.51
Total Revenue	914.86

5. In view of the foregoing, the ARR&ERC for the FY 2005-06 would be as below:-

(Rs.lakhs)

Sl. No.	Particulars	2005-06
1	Power Purchase Cost, with 5% rebate	893.28
2	Duty Under Sec.3 of KED Act	8.93
2	Interest charges	-
3	Depreciation	2.78
4	Employee cost	43.44
5	Repair & Maintenance Cost	22.25
6	Administration &General Expenses	2.55
7	Other Expenses	--
8	Gross Expenses (total 1 to 7)	973.23
9	Less Expenses capitalized	-
10	Interest capitalised	-
11	Aggregate Revenue Requirement	973.23
12	Revenue from Tariff	914.35
13	Non tariff Income	0.51
14	Total Revenue	922.96
15	Revenue Gap	58.37

V. COMMISSION'S ORDER ON ARR&ERC FOR 2005-06

The Commission hereby approves an Aggregate Revenue Requirement of Rs. 973.23 lakhs and total Expected Revenue from Charges of Rs. 914.86 Lakhs leaving a revenue gap of Rs. 58.37 Lakhs for 2005-06.

The Commission approves the continuance of the existing tariff and other charges by Tata Tea Limited till further orders. The revenue gap shall be absorbed by TTL in their other business activities.

VI. COMMISSION'S DIRECTIVES

1. Tata Tea Limited shall install meters at appropriate points for metering to cover all its self/internal electrical energy consumption centers and all the consumer feeders for quantitatively assessing the distribution loss in the HT & LT network.

2. Tata Tea Ltd. shall prepare and submit to the Commission, within a month, a distribution loss reduction program with progressive loss reduction. Commission would set a target of 3% loss reduction for the base year of FY 2005-06.

3. The KSEB shall install maximum demand meters to measure simultaneous maximum demand of the supply feeders to Tata Tea Limited. The KSEB shall not charge any penalty if the recorded MD is within the agreed Contract Demand. As the recorded maximum demand of TTL is more than 7000 k VA from 2003-04 onwards, TTL and the KSEB shall expedite the matter of enhancing contract demand.

4. The KSEB shall install TOD meters on the primary side of all feed back points, and feed back energy and power shall be accounted and adjusted based on the

actual metered figures. The percentage of distribution loss borne by KSEB on feed back energy shall be continued at the rate of 4%, till actual metered data is established. Once the actual loss figures are metered and established, the details shall be submitted to the Commission.

5. The KSEB shall continue to allow the present 5% rebate on the total power purchase bill to Tata Tea Limited. This is subject to the condition that Tata Tea Ltd. shall make prompt payment against the bills raised by the KSEB at the prevailing tariff.

6. The KSEB shall furnish details of the measures taken to improve the supply voltage and the details on the logic adopted to minimize the tripping of the supply feeders to TTL.

7. Draft Power Purchase Agreement initialed by both parties shall be submitted to the Commission for approval, within a month from the date of this order.

Commission issues this order subject to the stay order I.A. No. 263/2003 in W.P.(C) No. 15833/2003 dated 23.5.2005 issued by the Honourable High Court of Kerala and final decision thereof.

