Preface

Government commercial concerns, the accounts of which are subject to audit by the Comptroller and Auditor General of India (CAG) fall under the following categories:

- Government companies,
- Statutory corporations, and
- Departmentally managed commercial undertakings.

2. This Report deals with the results of audit of Government companies and Statutory corporations including Kerala State Electricity Board and has been prepared for submission to the Government of Kerala under Section 19A of the Comptroller and Auditor General's (Duties, Powers and Conditions of Service) Act, 1971, as amended from time to time. The results of audit relating to departmentally managed commercial undertakings are included in the Report of the Comptroller and Auditor General of India (Civil) - Government of Kerala.

3. Audit of the accounts of Government companies is conducted by the CAG under the provisions of Section 619 of the Companies Act, 1956.

4. In respect of Kerala State Road Transport Corporation, Kerala State Electricity Board and Kerala Industrial Infrastructure Development Corporation which are Statutory corporations, CAG is the sole Auditor. As per State Financial Corporations (Amendment) Act, 2000, CAG has the right to conduct the audit of accounts of Kerala Financial Corporation in addition to the audit conducted by the Chartered Accountants appointed by the Corporation out of the panel of auditors approved by the Reserve Bank of India. In respect of Kerala State Warehousing Corporation, CAG has the right to conduct the audit of their accounts in addition to the audit conducted by the Chartered Accountants appointed by the State Government in consultation with CAG. The Audit Reports on the annual accounts of all these corporations are forwarded separately to the State Government.

5. The cases mentioned in this Report are those which came to notice in the course of audit during the year 2009-10 as well as those which came to notice in earlier years but were not dealt with in the previous Reports. Matters relating to the period subsequent to 2009-10 have also been included, wherever necessary.

6. Audit has been conducted in conformity with the Auditing Standards issued by the CAG.

Overview

1. Overview of Government companies and Statutory corporations

Audit of Government companies is governed by Section 619 of the Companies Act, 1956. The accounts of Government companies are audited by Statutory Auditors appointed by CAG. These accounts are also subject to supplementary audit conducted by CAG. Audit of Statutory corporations is governed by their respective legislations. As on 31 March 2010, the State of Kerala had 96 working PSUs (91 companies and 5 Statutory corporations) and 27 non-working PSUs (all companies), which employed 1.10 lakh employees. The working PSUs registered a turnover of ` 12,349.97 crore for 2009-10 as per their latest finalised accounts. This turnover was equal to 5.76 per cent of State GDP indicating an important role played by State PSUs in the economy. The PSUs had accumulated loss of Rs. 1,212.70 crore as per their latest finalised accounts.

Investments in PSUs

As on 31 March 2010, the investment (Capital and long term loans) in 123 PSUs was ` 8,080.69 crore. Power Sector accounted for nearly 36.20 per cent of total investment in 2009-10. The Government contributed ` 726.40 crore towards equity, loans and grants / subsidies during 2009-10.

Performance of PSUs

As per the latest finalised accounts, out of 96 working PSUs, 45 PSUs earned profit of ` 728.61 crore and 46 PSUs incurred loss of ` 377.44 crore. The major contributors to profit were Kerala State Electricity Board (` 217.42 crore), Kerala State Beverages (Manufacturing & Marketing) Corporation Limited (` 109.67 crore), Steel Complex Limited (` 49.83 crore), The Kerala Minerals and Metals Limited (` 60.63 crore) and The Plantation Corporation of Kerala Limited (` 33.66 crore). Heavy losses were incurred by Kerala State Road Transport Corporation (` 136.39 crore), The Kerala State Cashew Development Corporation Limited (` 125.41 crore), Kerala State Development Corporation for Scheduled Castes and Scheduled Tribes Limited (` 31.52 crore) and The Kerala State Civil Supplies Corporation Limited (` 19.57 crore).

Quality of accounts

The quality of accounts of PSUs needs improvement. During the year, out of 87 accounts of companies finalised, the statutory auditors had given unqualified certificates for 8 accounts, qualified certificates for 74 accounts, adverse certificates (which means that accounts do not reflect a true and fair position) for two accounts and disclaimers (meaning the auditors are unable to form an opinion on accounts) for three accounts. Additionally, CAG gave adverse comments on 12 accounts and disclaimer comments on no account during the supplementary audit. The compliance of companies with the Accounting Standards remained poor as there were 125 instances of non-compliance in 52 accounts during the year.

Arrears in accounts and winding up

73 working PSUs had arrears of accounts of 197 accounts as of 30 September 2010. The extent of arrears was one to twelve years. There were twenty seven non-working PSUs including five under liquidation.

2. Performance reviews relating to Government companies

Performance review relating to ***Working of Kerala Electrical and Allied Engineering Company Limited (KEL).*** Executive summary of audit findings is given below:

Working of Kerala Electrical and Allied Engineering Company Limited

KEL is a PSU under the administrative control of Industries Department, Government of Kerala with a business objective of maximizing profit growth by carrying on the business of Electrical, Mechanical and Structural Engineering and Manufacturing Engineering equipments, fittings and electrical accessories. The Company with different ranges of products has five manufacturing units and 867

employees catering to the vital sectors of Railways, Electricity Boards and Electrical consumers.

Financial position and working results

The finalisation of accounts from 2007-08 onwards has been delayed. The accumulated loss which stood at ` 90.78 crore in 2005-06 decreased marginally to ` 86.02 crore in 2009-10. As per the provisional accounts, Mamala, Kundara and Kasaragod units had shown profits during 2007- 08 and 2008-09.

Production performance

The company suffered from poor capacity utilization. It did not have adequate work orders. There was no substantial upgradation of plant and machinery during the last five years. Shortcomings in plant facilities like non synchronisation of activities of the operating units contributed to poor production performance.

Purchase policy

The Company had not evolved a centralized purchase policy though the value of consumption of raw material and components was around ` 60 crore annually.

Consumption of raw materials

Excess consumption of major raw materials compared to the norms fixed was noticed in different units.

Absence of costing system

There was no scientific costing system to compute the cost of production, resulting in Company accepting orders below cost at Kundara, Kasaragod and Mamala units to keep them working.

Absence of credit policy

The Company had not formulated a centralized credit policy specifying maximum credit limits. As a result, there was huge accumulation of sundry debtors.

Manpower management

Management failed to determine the staff requirement at various units in a scientific manner based on the turnover and the work requirement. Instances of low employee productivity were also noticed.

3. Performance reviews relating to Statutory Corporation

Performance review relating to '***Generation activities of Kerala State Electricity Board'***. Executive summary of audit findings is given below:

Generation activities of Kerala State Electricity Board

Introduction

One of the core objectives of 11th Five Year Plan (2007-12) has been "Supply of power to all" by the end of the plan period. The National Electricity Policy (NEP) 2005 declared by Central Government, also envisaged development of power sector based on optimal utilisation of resources like coal, gas, nuclear material, hydro and renewable sources of energy. This performance audit covering the period 2005-06 to 2009-10 was conducted to examine as to what extent the State of Kerala has equipped itself to achieve the stated plan objective. Overall efficiency of the State Power undertaking namely, Kerala State Electricity Board (Board), in utilising the existing resources, and planning for the sustained development of power sector in the State was also evaluated as a part of this audit study.

Salient features of power sector in Kerala

Kerala is a power deficient State, where the requirement and available capacity were in the order of 2998 MW and 2563.25 MW (Board-2126.48, Others-436.77 MW) respectively, as at the end of the year 2009-10. The growth in demand in the State during the review period was 546 MW whereas capacity addition was only 124.30 MW. The energy sources in the State were predominantly hydel. During the review period, actual generation of power in the State was only 70 to 82 per cent of average demand and 62 to 77 per cent of peak demand.

Status of capacity additions

Capacity addition plans of Board were not realistic. Assessment in audit disclosed that the likely capacity addition during 11^{th} plan will be about 21 per cent of targets (610.15 MW) As against five projects of Board included in National Electricity Plan for capacity addition during 11^{th} plan viz Kuttiady Additional Extension (100 MW), Athirappally (163MW), Pallivasal Extension (60 MW), Thottiyar (40 MW) and Mankulam (40 MW) only the first one, which spilled over from 10^{th} plan, is commissioned (May 2010) during the plan-period.

Project Implementation

Though the State was having identified but untapped hydel generation potential, new project proposals of Board in hydel sector were either getting abandoned due to non receipt of Forest/Environmental clearances or their implementation made difficult on account of problems connected with land acquisition. Delay in land acquisition has already affected the implementation schedules of all projects executed/under execution during plan period. The project implementation processes were also quite slow paced. The investigation and preparation of Draft Project Reports often took time in excess of five years, as against the normal period of two years reckoned in the National Electricity Plan. Inadequacies in investigation had led to design changes during course of construction and consequent time and cost overrun. Deficiencies in Project Management had resulted in time/cost overrun. Delay in decision making at different stages of construction caused further slippages in time schedules.

Renovation and Modernisation of existing stations

As on 31.3.2010 Renovation and Modernisation works of power plants at Poringalkuthu, Sholayar and Kuttiady were overdue, but got postponed for different reasons. High incidence of machine outages was noticed in all these stations. Generation losses to the tune of ` 12.60 crore occurred due to outages of machines, when the dams were spilling. Post RMU performance of machines of Pallivasal and Sabarigiri Stations was not successful. The re-conditioned machines developed serious technical problems at both the stations. The runner buckets of three of the machines of Pallivasal were developing frequent pitting and cracks, resulting in generation losses, due to machine outages for runner-repairs. Machine no.4 of Sabarigiri station commissioned after RMU works in February 2007 exploded in May 2008, causing damages and losses. The explosion was attributed to manufacturing defects.

Plant Availability

As against CERC norm of 80 per cent plant availability during 2004-09, the average plant availability in KSEB was 76.36 per cent for major Hydel stations, 37.16 per cent for small HEPs and 46.47 per cent for Thermal stations. High rate of breakdowns as a result of inadequate maintenance operations lowered the plant availability.

Poor performance of Small HEPs

None of the 10 independent SHEPs have been giving satisfactory performance. The actual output for all the five years was lower than potential output. The overall short generation was 195.42 MU.

Input efficiency

Diesel power stations of the Board at Brahmapuram and Kozhikode were mainly operated as peak load stations due to high operational costs. Timely maintenance operations were also not undertaken due to delay in decision making on the basis of cost-benefit considerations. Generation losses due to inadequate fuel stock and consumption of fuel in excess of norms were also noticed at these stations. Owing to curtailed operations on considerations of cost, the plant load factor of diesel stations was only in the range of 5.97 per cent to 38.98 per cent during the review period

Financial Management

As observed in audit, decisions on project financing were being taken without active involvement of Finance Wing and the system lapse caused drawal of high interest bearing loans without genuine requirement and resultant cost overrun.

Project Accounts were being closed years after their completion and no effective system of post implementation evaluation of projects was in place.

Instances of drawal of excess payments by project contractors against LCs, resulted out of deficiencies in contract payment terms as well as bill passing systems were also noticed

Conclusions and recommendations

Power potential from non conventional energy sources was not adequately developed by the state despite liberal financial assistance

from Central Government. Forest/ environmental clearances were the major hurdles faced by the Board in implementing new projects.

Capacity constraints and financial problems too prevented the Board from undertaking R & M activities of the existing HEPs and those carried out were also not fully successful. PLF of thermal plants of the Board were very low due to curtailed operation.

The review contains nine recommendations: The Board should evolve an action plan on priority basis to expedite the implementation of 11th Plan projects and avoid slippages. Policy guidelines from Government in matters of forest clearances, land acquisition and rehabilitation of people affected by projects would be helpful to the Board in its efforts to meet the targets for capacity addition. Project investigation-systems have to be strengthened by incorporating collective decision making in the initial stages itself to avoid inadequacies in designs at later stages. The Board should establish proper system for project monitoring enabling the flow of management information to the top management on time to take decisions on project management. The performance standards of contract agencies engaged by the Board were wanting in many respects. This highlighted the need for more stringent pre-qualification norms while short listing the contract agencies. Preventive maintenance schedules of the power stations have to be adhered to with more regularity and consistency. Cost benefit aspects of operation of Thermal Stations have to be examined more closely with updated and accurate cost data and possibility to optimise the utilisation examined with a view to contain the operational cost. System of maintenance of project accounts should be strengthened to avoid undue delay in closure of accounts.

4. Transaction audit observations

Transaction audit observations included in this Report highlight deficiencies in the management of PSUs, which resulted in serious financial implications. The irregularities pointed out are broadly of the following nature:

Loss of ` 23.46 crore in three cases due to non-compliance with rules, directives, procedures, terms and conditions of contracts.

(Paragraphs 4.1, 4.3 and 4.7)

Loss of ` 5.17 crore in seven cases due to non-safeguarding of the financial interests of organisation.

(Paragraphs 4.5, 4.6, 4.8, 4.9, 4.10 and 4.11)

Loss of ` 13.31 crore in one case due to defective / deficient planning.

(Paragraph 4.2)

Loss of ` 1.19 crore in one case due to inadequate/ deficient monitoring.

(Paragraph 4.4)

Gist of some of the important audit observations is given below:

Deficiencies in planning, execution and management of **Roads and Bridges Development Corporation of Kerala Limited** in contracts for construction of Railway Over Bridges resulted in blocking of funds (` 31.42 crore) besides payment of unproductive interest of ` 13.31 crore and cost overrun of ` 16.17 crore**.**

(Paragraph 4.2)

Decision of **Kerala State Civil Supplies Corporation Limited** to allot OMSS wheat to bulk roller flour mills in contravention of GOI directives deprived the targeted population availability of wheat at ` 14.95 per kg which resulted in undue benefit of ` 6.02 crore to private mills**.**

(Paragraph 4.3)

Failure of **Malabar Cements Limited** to accept dry fly ash supplied by a contractor led to stoppage of supply, subsequent encashment of bank guarantee and consequent loss of ` 14.49 crore.

(Paragraph 4.7)

Providing incorrect estimated figures of consumptions instead of actuals in respect of EHT / HT / LT consumers by **Kerala State Electricity Board** for fixation of tariff to KSERC resulted in avoidable loss of revenue of ` 2.52 crore during July 2008-September 008 and also earned unintended revenue of ` 12.67 crore during October 2008-April 2009**.**

(Paragraph 4.9)

Lack of system in **Kerala State Electricity Board** for ascertaining prevailing market prices and non-synchronisation of fresh tender during the delivery period of additional quantity resulted in loss of savings of ` 1.10 crore.

(Paragraph 4.10)

Chapter I

1. Overview of State Public Sector Undertakings

Introduction

1.1 The State Public Sector Undertakings (PSUs) consist of State Government companies and Statutory corporations. The State PSUs are established to carry out activities of commercial nature while keeping in view the welfare of people. In Kerala the State PSUs occupy an important place in the state economy. The State PSUs registered a turnover of ` 12,358.76 crore for 2009-10 as *per* their latest finalised accounts as of September 2010. This turnover was equal to 5.76 *per cent* of State Gross Domestic Product (GDP) for 2009-10. Major activities of Kerala State PSUs are concentrated in power sector. The State PSUs registered a profit of ` 331.78 crore in the aggregate for 2009-10 as per their latest finalised accounts. They had employed 1.10 lakh[1] employees as of 31 March 2010. The State PSUs do not include three Departmental Undertakings (DUs), which carry out commercial operations but are a part of Government departments. Audit findings on these DUs are incorporated in the Civil Audit Report for the State.

1.2 As on 31 March 2010, there were 123 PSUs as per the details given below. Of these, three companies[2] were listed on the stock exchange(s).

Type of PSUs	Working PSUs	Non-working PSUs[3]	Total
Government companies[4]	91	27	118
Statutory corporations	05	…	05
Total	**96**	**27**	**123**

1.3 During the year 2009-10, two PSUs[5] were established and two PSUs[6] were closed down.

Audit Mandate

1.4 Audit of Government companies is governed by Section 619 of the Companies Act, 1956. According to Section 617, a Government company is one in which not less than 51 *per cent* of the paid up capital is held by Government(s). A Government company includes a subsidiary of a Government company. Further, a company in which 51 *per cent* of the paid up capital is held in any combination by Government(s), Government companies and corporations controlled by Government(s) is treated as if it

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[1] **As per the details provided by 78 PSUs.**
[2] **Keltron Component Complex Limited, The Travancore Cements Limited and The Travancore Sugars and Chemicals Limited**
[3] **Non-working PSUs are those which have ceased to carry on their operations.**
[4] **Includes 619-B companies.**
[5] **Malabar Distilleries Limited and Kerala State Coastal Area Development Corporation Limited.**
[6] **The Kerala Fisheries Corporation Limited and Kerala Fishermen's Welfare Corporation Limited.**

were a Government company (deemed Government company) as per Section 619-B of the Companies Act.

1.5 The accounts of the State Government companies (as defined in Section 617 of the Companies Act, 1956) are audited by Statutory Auditors, who are appointed by CAG as per the provisions of Section 619(2) of the Companies Act, 1956. These accounts are also subject to supplementary audit conducted by CAG as *per* the provisions of Section 619 of the Companies Act, 1956.

1.6 Audit of Statutory corporations is governed by their respective legislations. Out of five Statutory corporations, CAG is the sole auditor for Kerala State Electricity Board, Kerala State Road Transport Corporation and Kerala Industrial Infrastructure Development Corporation (KINFRA). In respect of Kerala State Warehousing Corporation and Kerala Financial Corporation, the audit is conducted by Chartered Accountants and supplementary audit by CAG.

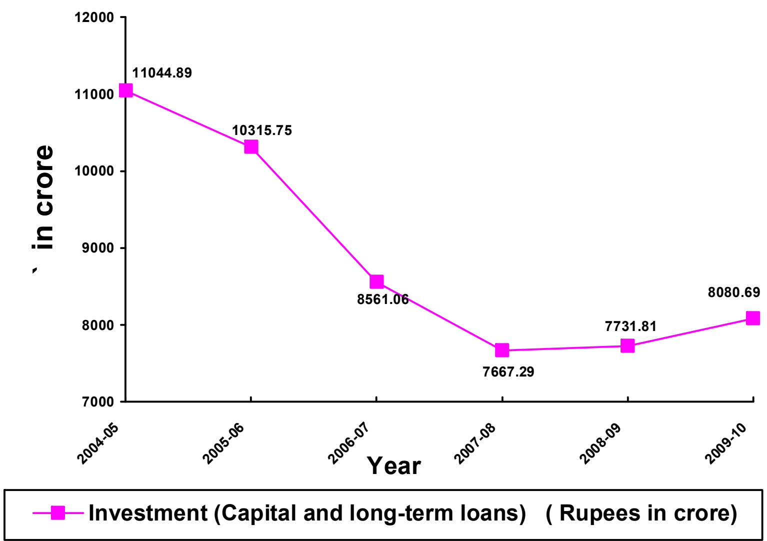
Investment in State PSUs

1.7 As on 31 March 2010, the investment (capital and long-term loans) in 123 PSUs (including 619-B companies) was ` 8,080.69 crore as per details given below.

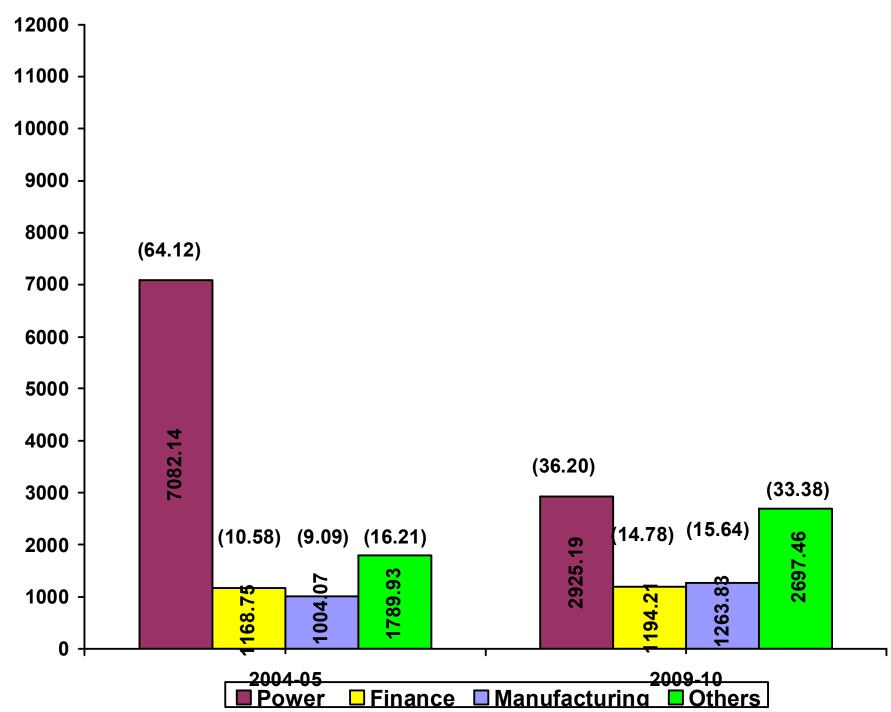
Type of PSUs	Government Companies			Statutory Corporations			Grand Total
	Capital	Long Term Loans	Total	Capital	Long Term Loans	Total	
Working PSUs	1,908.05	933.03	2,841.08	2,213.09	2,848.90	5,061.99	7,903.07
Non-working PSUs	58.60	119.02	177.62	…	…	…	177.62
Total	**1,966.65**	**1,052.05**	**3,018.70**	**2,213.09**	**2,848.90**	**5,061.99**	**8,080.69**

A summarised position of Government investment in State PSUs is detailed in ***Annexure 1.***

1.8 As on 31 March 2010, of the total investment in State PSUs, 97.80 *per cent* was in working PSUs and the remaining 2.20 *per cent* in non-working PSUs. This total investment consisted of 51.73 *per cent* towards capital and 48.27 *per cent* in long-term loans. The investment has declined by 26.84 *per cent* from `11,044.89 crore in 2004-05 to ` 8,080.69 crore in 2009-10 as shown in the graph below.



1.9 The investment in various important sectors and percentage thereof at the end of 31 March 2005 and 31 March 2010 are indicated below in the bar chart. The major chunk of PSU investment was mainly in power sector during the five years which has seen its percentage share declining from 64.12 *per cent* in 2004-05 to 36.20 *per cent* in 2009-10. The capital investment increased by ` 743.20 crore during 2005-10 and long term loan reduced by ` 3,707.40 crore. There is overall net reduction of investment by ` 2,964.20 crore during the period.



(Figures in brackets show the percentage of total investment)

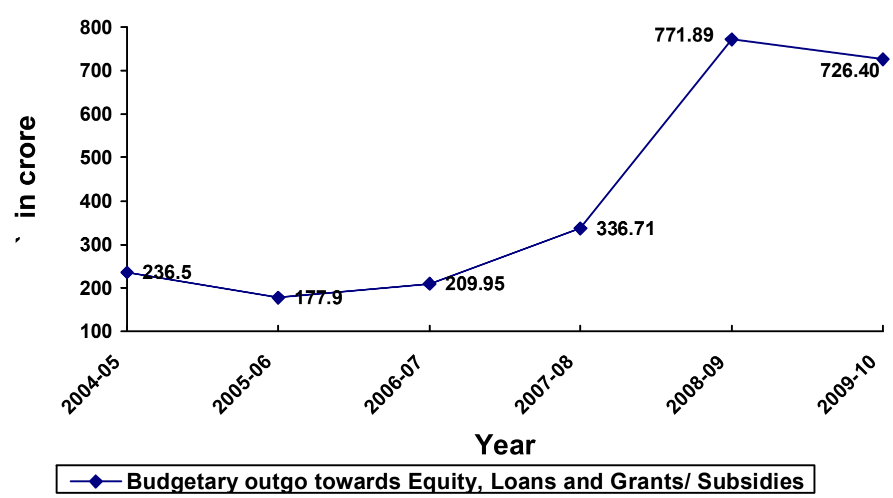
Budgetary outgo, grants/subsidies, guarantees and loans

1.10 The details regarding budgetary outgo towards equity, loans, grants/ subsidies, guarantees issued, loans written off, loans converted into equity and interest waived in respect of State PSUs are given in ***Annexure 3***. The summarised details are given below for three years ended 2009-10.

(Amount: ` in crore)

Sl. No.	Particulars	2007-08		2008-09		2009-10	
		No. of PSUs	Amount	No. of PSUs	Amount	No. of PSUs	Amount
1.	Equity Capital outgo from budget	17	56.81	21	279.18	25	114.95
2.	Loans given from budget	11	147.11	13	148.11	16	322.73
3.	Grants / Subsidy received	23	132.79	29	344.60	24	288.72
4.	Total Outgo (1+2+3)		336.71		771.89		726.40
5.	Loans converted into equity	1	23.94	1	22.22	1	12.38
6.	Loans written off	1	0.04	2	16.21	3	41.24
7.	Interest / Penal interest written off	2	18.10	3	18.56	5	572.33
8.	Total Waiver (6+7)		18.14		34.77		613.57
9.	Guarantees issued	11	1,809.26	11	2,593.10	11	2,673.59
10.	Guarantee Commitment	27	4,985.48	26	3,998.65	20	3,728.63

1.11 The details regarding budgetary outgo towards equity, loans and grants / subsidies for past six years are given in a graph below.



The above chart indicates that the budgetary assistance in the form of equity, loan and grant/ subsidy by the State Government to PSUs has increased from ` 236.50 crore in 2004-05 to ` 771.89 crore in 2008-09 and the same has marginally decreased to ` 726.40 crore in 2009-10. During 2009-10, the State Government had waived loans and interest / penal interest of ` 613.57 crore due from eight PSUs as against ` 34.77 crore waived during the previous year.

During the year 2009-10, the Government had guaranteed loans aggregating ` 2,673.59 crore obtained by nine working Government companies (` 2,348.59 crore) and two Statutory corporations (` 325.00 crore). At the end of the year, guarantees of ` 3,728.63 crore against 16 working Government companies (` 3,238.21 crore) and four Statutory corporations (` 490.42 crore) were outstanding. As per the provisions of the Kerala Ceiling on Government Guarantee Act 2003, the Government shall guarantee only loan taken by PSUs. The guarantee commission payable shall not be less than 0.75 *per cent* and payable on the actual balance, outstanding interest / penal interest etc., as on 31 March of previous year. The amount due shall be paid in two equal instalments on 1st April and October of every financial year. The guarantee commission paid/payable to the Government by Government companies (` 38.39 crore) and Statutory corporations (` 3.57 crore) during 2009-10 was ` 41.96 crore out of which ` 22.07 crore had been paid and a balance of ` 19.89 crore was outstanding as on 31 March 2010. The PSUs which had major arrears were The Kerala State Cashew Development Corporation Limited (` 3.92 crore, Kerala State Electronics Development Corporation Limited (` 5.86 crore) and Kerala State Power and Infrastructure Finance Corporation Limited (` 4.04 crore) and Kerala Industrial Infrastructure Development Corporation (` 1.41 crore).

Reconciliation with Finance Accounts

1.12 The figures in respect of equity, loans and guarantees outstanding as per records of State PSUs should agree with that of the figures appearing in the Finance Accounts of the State. In case the figures do not agree, the concerned PSUs and the Finance Department should carry out reconciliation of differences. The position in this regard as at 31 March 2010 is stated below.

(` in crore)

Outstanding in respect of	Amount as per Finance Accounts	Amount as per records of PSUs	Difference
Equity	2,534.67	3,999.87	1,465.20
Loans	4,200.84	1,000.54	3,200.30
Guarantees	4,847.24	3,728.63	1,118.61

1.13 Audit observed that the differences occurred in respect of 88 PSUs and Audit has also written (March 2010) to the Chief Secretary and Principal Secretary (Finance) to the Government of Kerala to initiate steps to reconcile the difference as on 31 March 2009. Individual PSUs have also been appraised of the difference in May 2010. The Government and the PSUs should take concrete steps to reconcile the differences in a time-bound manner.

Performance of PSUs

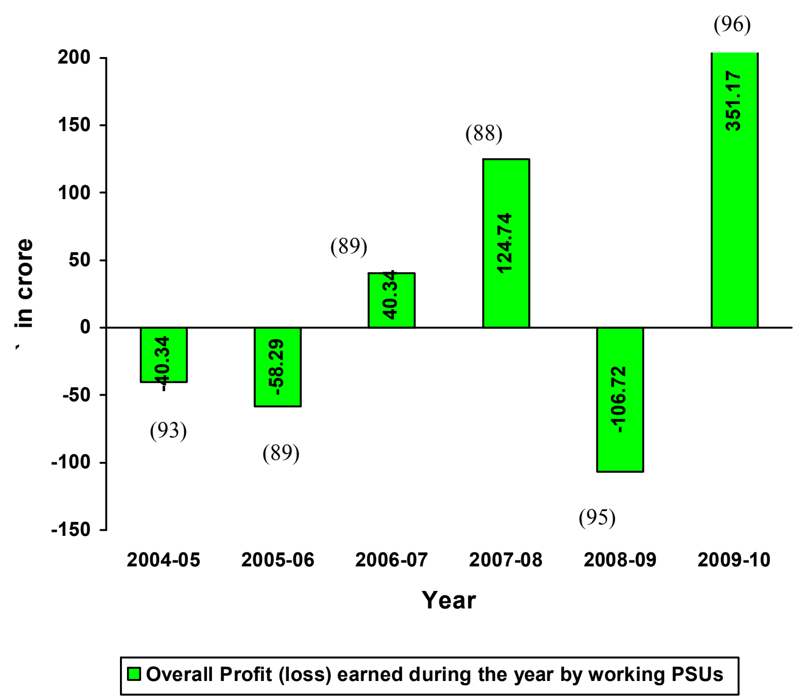
1.14 The financial results of PSUs, financial position and working results of working Statutory corporations are detailed in ***Annexures 2, 5 and 6*** respectively. A ratio of PSU turnover to State GDP shows the extent of PSU activities in the State economy. Table below provides the details of working PSUs' turnover and State GDP for the period 2004-05 to 2009-10.

(` in crore)

Particulars	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Turnover[7]	7,614.42	8,222.23	8,846.01	10,082.22	10,877.80	12,349.97
State GDP	1,07,054	1,18,998	1,32,739	1,48,485	1,80,281	2,14,580.00[8]
Percentage of Turnover to State GDP	7.11	6.91	6.66	6.79	6.03	5.76

The percentage of turnover of PSUs to the State GDP has been declining steadily.

1.15 Profit / (loss) earned (incurred) by State working PSUs during 2004-05 to 2009-10 are given below in a bar chart.



(Figures in brackets show the number of working PSUs in respective years)

As evident from the above chart, profit (loss) earned (incurred) by working PSUs had been fluctuating widely.

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[7] **Turnover as per the latest finalised accounts as of 30 September.**

[8] **GDP figures are provisional based on quick estimates.**

During the year 2009-10, out of 96 working PSUs, 45 PSUs earned profit of ` 728.61 crore and 46 PSUs incurred loss of ` 377.44 crore as per their latest finalised accounts, while two[9] PSUs had neither profit nor loss. Remaining three[10] PSUs had not either commenced commercial activities or prepared their first accounts. The major contributors to profit were Kerala State Electricity Board (` 217.42 crore), Kerala State Beverages (Manufacturing & Marketing) Corporation Limited (` 109.67 crore), Steel Complex Limited (` 49.83 crore), The Kerala Minerals and Metals Limited (` 60.63 crore) and The Plantation Corporation of Kerala Limited (` 33.66 crore). Heavy losses were incurred by Kerala State Road Transport Corporation (` 136.39 crore), The Kerala State Cashew Development Corporation Limited (` 125.41 crore), Kerala State Development Corporation for Scheduled Castes and Scheduled Tribes Limited (` 31.52 crore) and The Kerala State Civil Supplies Corporation Limited (` 19.57 crore).

1.16 Some other key parameters pertaining to State PSUs are given below.

(` in crore)

Particulars	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Return on Capital Employed (*Per cent*)	7.90	7.73	9.84	7.87	4.89	8.95
Debt	7,608.35	6,850.33	5,052.48	4,085.37	3,925.13	3,900.95
Turnover[11]	7,614.42	8,222.23	8,846.01	10,082.22	10,877.80	12,349.97
Debt / Turnover Ratio	1:1	0.83:1	0.57:1	0.41:1	0.36:1	0.32:1
Interest Payments	316.19	472.03	460.86	407.33	733.76	767.41
Accumulated Profits (losses)	(2,343.09)	(2,445.52)	(2,447.73)	(2,026.74)	(2,055.58)	(1,212.70)

(Above figures pertain to all PSUs except for turnover which is for working PSUs).

1.17 Return on capital employed which was 7.90 *per cent* in 2004-05 increased to 9.84 *per cent* during 2006-07 reduced to 4.89 *per cent* in 2008-09. The same increased to 8.95 *per cent* in 2009-10. At the same time accumulated losses of PSUs increased from ` 2,343.09 crore in 2004-05 to ` 2,447.73 crore in 2006-07 and thereafter reduced to ` 1,212.70 crore in 2009-10. The debt / turnover ratio also steadily declined from 1:1 in 2004-05 to 0.32:1 in 2009-10.

1.18 The State Government had formulated (December 1998) a dividend policy under which all PSUs are required to pay a minimum return of twenty *per cent* on the paid up share capital contributed by the State Government. As per their latest finalised accounts, 45 PSUs earned an aggregate profit of ` 728.61 crore and 14 PSUs declared a dividend of ` 33.92 crore. The State

[9] Serial no 30 and 76 in *Annexure* 2.

[10] Serial No 58, 81 and 91 in *Annexure* 2.

[11] Turnover of working PSUs as per the latest finalised accounts as of 30 September.

Government policy on dividend payment was, however, complied with by only six[12] companies.

Arrears in finalisation of accounts

1.19 The accounts of the companies for every financial year are required to be finalised within six months from the end of the relevant financial year under Sections 166, 210, 230, 619 and 619-B of the Companies Act, 1956. Similarly, in case of Statutory corporations, their accounts are finalised, audited and presented to the Legislature as per the provisions of their respective Acts. The table below provides the details of progress made by working PSUs in finalisation of accounts by September 2009.

Sl. No.	Particulars	2005-06	2006-07	2007-08	2008-09	2009-10
1.	Number of Working PSUs	89	89	88	95	96
2.	Number of accounts finalised during the year	74	84	74	99	93[13]
3.	Number of accounts in arrears	186	191	203[14]	198[15]	197[16]
4.	Average arrears per PSU (3/1)	2.20	2.15	2.31	2.08	2.05
5.	Number of Working PSUs with arrears in accounts	68	70	71	71	73
6.	Extent of arrears (in years)	1 to 12	1 to 13	1 to 13	1 to 13	1 to 12

1.20 The performance of finalisation of accounts during the year 2009-10 was marginally lesser compared to previous year. Average arrears per PSU has been on the decline since 2007-08 and reached 2.14 during 2009-10. During 2009-10, twenty one[17] working PSUs did not finalise even a single account which contributed to the accumulation of arrears in accounts.

1.21 In addition to above, there were also arrears in finalisation of accounts by non-working PSUs. Out of 27 non-working PSUs liquidation process was in progress in five PSUs. The remaining 22 non-working PSUs, had arrears of accounts for one to 25 years.

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[12] **Rehabilitation Plantations Limited, Kerala Agro Machinery Corporation Limited, Malabar Cements Limited, The Kerala Minerals and Metals Limited, Kerala State Beverages (Manufacturing & Marketing) Corporation Limited and Kerala State Financial Enterprises Limited.**

[13] **Kerala State Information Technology Infrastructure Limited has prepared accounts from 31 January 2008 to 31 March 2008 and from 1 April 2008 to 31 March 2009 as one single account.**

[14] **Excluding two accounts of Kerala Hi-Tech Industries Limited which was handed over to BrahMos Aerospace Thiruvananthapuram Limited.**

[15] **Including eight arrear accounts of 619-B companies which were added to the list of companies but excluding nine arrear accounts of two companies which have become non-working during the year.**

[16] **Excluding four arrear accounts of Kerala Irrigation Infrastructure Limited which has become non-working during the year but inclusive of two accounts of Kerala State Coastal Area Development Corporation Limited.**

[17] **Kerala Livestock Development Board, Kerala State Horticultural Products Developments Corporation Limited, Kerala State Cashew Development Corporation Limited, Kerala School Teachers and Non-teaching staff Welfare Corporation Limited, Kerala Small Industries Development Corporation Limited, Kerala State Palmyrah Products Development and Workers' Welfare Corporation Limited, Kinfra International Apparel Parks Limited, Autokast Limited, Kanjikode Electronics and Electricals Limited, Keltron Component Complex Limited, Keltron Crystals Limited, Keltron Magnetics Limited, Keltron Rectifiers Limited, Kerala State Bamboo Corporation Limited, Kerala State Textile Corporation Limited, Metal Industries Limited, The Travancore Sugars and Chemicals Limited, Kerala Medical Services Corporation Limited, Kerala State Industrial Enterprises Limited, Vizhinjam International Seaports Limited and Kerala State Coastal Area Development Corporation Limited.**

1.22 The State Government had invested ` 1,070.98 crore (Equity: ` 157.88 crore, Loans: ` 332.86 crore, and Grants: ` 580.24 crore) in 49 PSUs during the years for which accounts have not been finalised as detailed in ***Annexure 4***. In the absence of accounts and their subsequent audit, it can not be ensured whether the investments and expenditure incurred have been properly accounted for and the purpose for which the amount was invested has been achieved or not and thus Government's investment in such PSUs remain outside the scrutiny of the State Legislature. Further, delay in finalisation of accounts may also result in risk of fraud and leakage of public money apart from violation of the provisions of the Companies Act, 1956.

1.23 The administrative departments have the responsibility to oversee the activities of these entities and to ensure that the accounts are finalised and adopted by these PSUs within the prescribed period. Though the concerned administrative departments and officials of the Government were informed every half year by the Audit, of the arrears in finalisation of accounts, no remedial measures were taken. As a result of this the net worth of these PSUs could not be assessed in audit. The matter of arrears in accounts was also taken up with the Chief Secretary / Finance Secretary in April 2010 to expedite the backlog of arrears in accounts in a time bound manner. Principal Secretary to Government of Kerala (Department of Industries and Bureau of Public Enterprises) had earlier instructed in October 2008 to include finalisation of accounts as an agenda in Board meetings, specified the dead line for clearance of arrears of accounts by December 2010 and to engage external agencies for preparing the accounts wherever necessary.

1.24 In view of above state of arrears, it is reemphasised that:

- **The Government may set up a cell to oversee the clearance of arrears and set the targets for individual companies which would be monitored by the cell.**

- **The Government may consider outsourcing the work relating to preparation of accounts wherever the staff is inadequate or lacks expertise.**

Winding up of non-working PSUs

1.25 There were 27 non-working PSUs (all companies) as on 31 March 2010. Liquidation process had commenced in five PSUs. The number of non-working companies at the end of each year during past five years are given below.

Particulars	2005-06	2006-07	2007-08	2008-09	2009-10
No. of non-working companies	25	25	25	28	27

The non-working PSUs are required to be closed down as their continued existence is not going to serve any purpose.

1.26 The stages of closure in respect of non-working PSUs are given below.

Sl. No.	Particulars	Companies	Statutory Corporations	Total
1.	Total No. of non-working PSUs	27	…	27
2.	Of (1) above, the No. under		…	
(a)	Liquidation by Court (liquidator appointed)	04[18]	…	04
(b)	Voluntary winding up (liquidator appointed)	01[19]	…	01
(c)	Closure, i.e. closing orders / instructions issued but liquidation process not yet started.	22	…	22

1.27 During the year 2009-10, two[20] companies were wound up. The companies which have taken the route of winding up by Court order are under liquidation for a period ranging from three to eight years. The process of voluntary winding up under the Companies Act is much faster and needs to be adopted / pursued vigorously. The Government may make an early decision regarding winding up of 22 non-working PSUs where closing orders / instructions have been issued but liquidation process has not yet started. The Government may consider setting up a cell to expedite closing down its non-working companies.

Accounts Comments and Internal Audit

1.28 Seventy working companies forwarded their 87 audited accounts to PAG during the year 2009-10. Of these, 67 accounts of 57 companies were selected for supplementary audit. The audit reports of statutory auditors appointed by CAG and the supplementary audit of CAG indicate that the quality of maintenance of accounts needs to be improved substantially. The details of aggregate money value of comments of statutory auditors and CAG are given below.

(Amount: ` in crore)

Sl. No.	Particulars	2007-08		2008-09		2009-10	
		No. of accounts	Amount	No. of accounts	Amount	No. of accounts	Amount
1.	Decrease in profit	14	33.67	14	33.88	21	102.96
2.	Increase in loss	14	31.68	31	28.72	23	175.85
3.	Non-disclosure of material facts	4	5.61	8	11.33	7	405.12
4.	Errors of classification	1	128.03	…	…	4	7.92

The comments on decrease in profit and increase in loss were on the increasing trend during the three years ended 2009-10.

[18] Keltron Power Devices Limited, Keltron Counters Limited, Keltron Rectifiers Limited and Kunnathara Textiles Limited.
[19] SIDECO Mohan Kerala Limited.
[20] The Kerala Fisheries Corporation Limited and Kerala Fishermen's Welfare Corporation Limited.

1.29 During the year 2009-10, the statutory auditors had given unqualified certificates for eight accounts, qualified certificates for 74 accounts, adverse certificates (which means that accounts do not reflect a true and fair position) for two accounts and disclaimers (meaning the auditors are unable to form an opinion on accounts) for three accounts. Additionally, CAG gave adverse comments on 12 accounts during the supplementary audit. The compliance of companies with the Accounting Standards remained poor as there were 125 instances of non-compliance in 52 accounts during the year.

1.30 Some of the important comments in respect of accounts of companies are stated below.

Kerala Agro Machinery Corporation Limited (2009-10)

- Profit for the year 2009-10 (`13.33 crore) had been overstated by `4.50 crore due to non-creation of provision for the differential amount of applicable central Sales tax and concessional sales tax and interest thereon.

Kerala State Beverages (Manufacturing & Marketing) Corporation Limited (2007-08)

- Net profit for the year 2007-08 (` 166.77 crore) had been overstated by ` 54.04 lakh due to non-provision against time barred debts recoverable from liquor manufacturers.

Kerala State Civil Supplies Corporation Limited (2006-07)

- Loss for the year 2006-07 (` 18.44 crore) was understated by ` 57.01 lakh (net) due to over/ under valuation of closing stock, short provision towards gratuity and service tax and excess provision for depreciation.

Kerala Ceramics Limited (2006-07)

- Net loss for the year 2006-07 (` 69.08 lakh) was understated by `18.01 lakh due to non-provision of interest on cash credit, medium term loan and working capital loan availed from State Bank of Travancore.

Kerala State Electronics Development Corporation Limited (2008-09)

- Net profit for the year 2008-09 (` 6.31 crore) was arrived at after erroneous adjustment, as prior period items, waiver of interest accrued on loans to subsidiary company, disputed sales tax settled under OTS and write back of excess interest charged on Government loans.

Kerala State Industrial Development Corporation Limited (2008-09)

- Operating profit for the year ended 2008-09 (` 19.62 crore) had been overstated by ` 0.54 crore due to erroneous accounting of provision for bad and doubtful debts as an appropriation of profit instead of as a charge against profit.

Transformers and Electricals Kerala Limited (2007-08)

- Net profit for the year 2007-08 (` 24.27 crore) stood overstated by ` 0.43 crore (net) on account of undervaluation of closing stock of finished goods, short provision of expenses towards repairs and non-accounting of interest payable on letters of credit.

Kerala State Backward Classes Development Corporation Limited (2005-06)

- Profit for the year 2005-06 (` 6.07 crore) was overstated by ` 4.41 crore due to non-writing off differential principal outstanding consequent to change in method of apportioning repayment made by beneficiaries.

1.31 Similarly, the five working Statutory corporations had forwarded their six accounts to PAG during the year 2009-10 upto 30 September 2010**.** Of these, four accounts pertained to Corporations where CAG was the sole auditor. Sole audit of three[21] accounts was completed while one[22] was in progress. The remaining two accounts[23] were selected for supplementary audit and Separate Audit Reports issued. The audit reports of statutory auditors and the sole / supplementary audit of CAG indicate that the quality of maintenance of accounts needs to be improved substantially. The details of aggregate money value of comments of statutory auditors and CAG are given below.

(Amount: ` in crore)

Sl. No.	Particulars	2007-08		2008-09		2009-10	
		No. of accounts	Amount	No. of accounts	Amount	No. of accounts	Amount
1	Decrease in profit	1	247.91	…	…	**2**	**1,555.79**
2	Increase in profit	2	385.00	…	…		
3	Decrease in loss	1	57.92	…	…		
4	Increase in loss	…	…	2	6.73	1	0.22
5	Non-disclosure of material facts	2	246.46	2	18.41	1	0.07
6	Errors of classification	2	115.99	2	21.91	1	1.18

[21] Kerala State Electricity Board (2008-09), Kerala State Road Transport Corporation (2006-07) and Kerala Industrial Infrastructure Development Corporation (2008-09).
[22] Kerala State Road Transport Corporation (2007-08).
[23] Kerala State Warehousing Corporation (2006-07) and Kerala Financial Corporation (2009-10).

1.32 During the year 2009-10, the five Statutory Corporations furnished their six accounts and five[24] of them were issued qualified certificates while the remaining one account was under finalisation.

1.33 Some of the important comments in respect of accounts of Statutory corporations are stated below.

Kerala State Electricity Board

- The revised claim of power purchased from Rajiv Gandhi Combined Cycle Power Plant of NTPC amounting to ` 5.82 crore was not provided for during 2007-08.

Kerala State Road Transport Corporation

- Loss for the year 2006-07 (` 155.64 crore) was understated by ` 0.22 crore due to non-provision of liability towards value of stationery, tickets and other consumables received during the year.

1.34 The Statutory Auditors (Chartered Accountants) are required to furnish a detailed report upon various aspects including internal control / internal audit systems in the companies audited in accordance with the directions issued by the CAG to them under Section 619(3) (a) of the Companies Act, 1956 and to identify areas which needed improvement. An illustrative resume of major comments made by the Statutory Auditors on possible improvement in the internal audit / internal control system in respect of 51 companies[25] for the year 2008-09 and 55 for the year 2009-10 are given below.

Sl. No.	Nature of comments made by Statutory Auditors	Number of companies where recommendations were made		Reference to serial number of the companies as *per Annexure* 2	
		2008-09	2009-10	2008-09	2009-10
1.	Non-fixation of minimum / maximum limits of store and spares	5	02	A-01,17,65,82, 85	A-10, 66
2.	Absence of internal audit system commensurate with the nature and size of business of the company	17	22	A-3,6,7,11,17, 18,20,21,22,33,41,47,59,80,84, 85,86	A-2,5,8,14,15,20,22,23,26,28,34,35,45,36,52, 55,62,64,74,82: C-20,23
3.	Non-maintenance of cost record	9	5	A-3,6,7,11,20, 22,62,82,85	A-7,61,66: C-20,23)

[24] **Kerala State Road Transport Corporation (2006-07), Kerala State Warehousing Corporation (2006-07), Kerala Industrial Infrastructure Development Corporation (2008-09), Kerala Finanacial Corporation (2009-10) and Kerala State Electricity Board (2008-09).**

[25] **Sr No. A-76,22,14,43,59,52,66,67,72,75,57,11,71,11,12,7,57,3,5,58,48,46,50,45,62,41,86,80,20,21,83,87,18,19, 70,33,35, 61,82,85,65,76,74,8,62,77,34,26,28,17,44 in *Annexure* – 2.**

4.	Non-maintenance of proper records showing full particulars including quantitative details, situations, identity number, date of acquisitions, depreciated value of fixed assets and their locations	15	18	A-1,3,5,6,18,19, 20,21,22,50,57,62, 65,80,85	A-2,7, 8,12,15, 20,25,28,55,56, 58, 61, 64, 65,66, ,74, 80 B-1,
5	Lack of internal control over sale of power	…	7	…	A-2,5,20,25,40,75; C-5

Recoveries at the instance of audit

1.35 During the course of propriety audit in 2009-10, recoveries of ` 34.45 crore were pointed out to the Management of various PSUs, of which, recoveries of ` 4.85 crore were admitted by PSUs. An amount of ` 4.85 crore was recovered during the year 2009-10.

Status of placement of Separate Audit Reports

1.36 The following table shows the status of placement of various Separate Audit Reports (SARs) issued by the CAG on the accounts of Statutory corporations in the Legislature by the Government.

Sl. No.	Name of Statutory corporation	Year up to which SARs placed in Legislature	Year for which SARs not placed in Legislature		
			Year of SAR	Date of issue to the Government	Reasons for delay in placement in Legislature
1.	Kerala State Electricity Board	2007-08	2008-09	12.11.2010	Yet to be placed in the Legislature
2.	Kerala State Road Transport Corporation	2005-06	2006-07	28.05.2010	Yet to be placed in the Legislature
3	Kerala Financial Corporation	2008-09	2009-10	27.10.2010	Yet to be placed in the Legislature
4	Kerala State Warehousing Corporation	2005-06	2006-07	28.06.2010	Yet to be placed in the Legislature
5	Kerala Industrial Infrastructure Development Corporation	2008-09	2009-10	Accounts not finalised	

Delay in placement of SARs weakens the legislative control over Statutory corporations and dilutes the latter's financial accountability. The Government should ensure prompt placement of SARs in the legislature(s).

Disinvestment, Privatisation and Restructuring of PSUs

1.37 The Government had not laid down any policy in regard to disinvestment, privatisation and restructuring of PSUs so far (September 2010).

Reforms in Power Sector

1.38 The State has Kerala State Electricity Regulatory Commission (KSERC) formed in November 2002 under Section 17 (1) of the Electricity Regulatory Commissions Act 1998[26] with the objective of rationalisation of electricity tariff, advising in matters relating to electricity generation, transmission and distribution in the State and issue of licences. During 2009-10, KSERC has approved (December 2009) the tariff rationalisation of HT / EHT consumers of the Board.

1.39 Memorandum of Understanding (MoU) was signed (August 2001) between the Union Ministry of Power and the State Government as a joint commitment for implementation of reforms programme in power sector with identified milestones. The progress achieved so far in respect of important milestones is stated below.

		Milestone	Achievement as at March 2010
I	**By the State Government:**		
	Reduction in Transmission and Distribution losses	Reduction of loss to 17 *per cent* by December 2004	T&D loss has been reduced from 30.84 *per cent* in 2001-02 to 19.65 *per cent* in March 2010
	Electrification of all villages	100 *per cent*	All Villages electrified
	Metering of all distribution feeders	100 *per cent* by October 2001	Metering of all feeders completed
	Metering of all consumers	100 *per cent* by December 2001	Metering of all consumers completed
	Securitising outstanding dues of Central PSUs	Securitisation limit not to cross two months billing	An amount of ` 1158.25 crore outstanding as on 30.09.2001 has been securitised by Government of Kerala by issuing bonds to CPSUs
	Establishment of State Electricity Regulatory Commission (SERC)	October 2001	KSERC has started functioning on 29/11/2002
	Implementation of tariff orders issued by SERC during the year		KSERC has approved (December 2009) the tariff rationalisation of HT / EHT consumers of the Board, which has been implemented by the latter with effect from 01/01/2010.
	Energy Audit of 11 KV metering	March 2002	Metering of all 11 KV feeders completed
	Energy Audit above 11 KV metering	October 2001	Metering of all feeders above 11 KV completed
	Computerisation of accounting and billing in towns	Computerised billing & customer service centre - Town Schemes (target 66 nos) Billing collection & Accounting in towns (target 619 nos as on 31.03.07)	LT Billing Computerisation completed in all 641 sections of KSEB.

[26] **Since replaced with Section 82 (1) of the Electricity Act, 2003.**

Chapter II

Performance review relating to Government Company

2 Working of Kerala Electrical and Allied Engineering Company Limited

Executive Summary

Kerala Electrical and Allied Engineering Company Limited is a PSU under the administrative control of Industries Department, Government of Kerala with a business objective of maximising profit growth by carrying on the business of Electrical, Mechanical and Structural Engineering and Manufacturing Engineering equipments, fittings and electrical accessories.

The Company with different ranges of products has five manufacturing units and 867 employees catering to the vital sectors of Railways, Electricity Boards and Electrical consumers.

Financial position and working results

The finalisation of accounts from 2007-08 onwards has been delayed. The accumulated loss which stood at ` 90.78 crore in 2005-06 decreased marginally to ` 86.02 crore in 2009-10. As per the provisional accounts, Mamala, Kundara and Kasaragod units had shown profits during 2007- 08 and 2008-09.

Production performance

The company suffered from poor capacity utilisation. It did not have adequate work orders. There was no substantial upgradation of plant and machinery during the last five years. Shortcomings in plant facilities like non synchronisation of activities of the operating units contributed to poor production performance.

Purchase policy

The Company had not evolved a centralised purchase policy though the value of consumption of raw material and components was around ` 60 crore annually.

Consumption of raw materials

Excess consumption of major raw materials compared to the norms fixed was noticed in different units.

Absence of costing system

There was no scientific costing system to compute the cost of production, resulting in Company accepting orders below cost at Kundara, Kasaragod and Mamala units to keep them working.

Absence of credit policy

The Company had not formulated a centralised credit policy specifying maximum credit limits. As a result, there was huge accumulation of sundry debtors.

Manpower management

Management failed to determine the staff requirement at various units in a scientific manner based on the turnover and the work requirement. Instances of low employee productivity were also noticed.

Introduction

2.1 The Kerala Electrical and Allied Engineering Company Limited (Company) was incorporated in June 1964. Its core areas of business are electrical, mechanical and structural engineering and manufacturing engineering equipments, fittings and electrical accessories. The Company has five manufacturing units situated in different parts of the state viz., Mamala (Distribution transformers and Civil / Structural works), Kundara (Train lighting Alternators), Kasaragod (General Purpose Alternators), Olavakkod (Fuse Units and Switch gears) and Edarikkod (Brushless Auto Alternators) catering to the vital sectors of Railways, Electricity Boards and Electrical consumers. The Company is under the administrative control of Industries Department, Government of Kerala.

The overall administration of the Company is vested with the Board of Directors, consisting of 13 Directors including Managing Director and Chairman appointed by the Government of Kerala. The Managing Director is the Chief Executive of the Company assisted by officers and staff. The Company also has Regional Offices in Delhi, Mumbai, Kolkatta, Chennai, Bangalore and Thiruvananthapuram for marketing and servicing activities.

Scope of Audit

2.2 The Company is a major industrial concern of the Government of Kerala. The Company has been running in loss since 1987-88 except for two years in 1989-90 and 1996-97. The Company has earned profit during 2007-08, 2008-09 and 2009-10 as per provisional accounts. The accumulated loss as at the end of 31/03/2010 was ` 86.02 crore. The performance review conducted during February 2010 to May 2010 covers the operational activities of the Company at its manufacturing units at Mamala, Kundara, Kasaragod, Olavakkod and Edarikkod for the five years 2005-2010. In order to ascertain the causes for consistent loss and suggest scope for improvement of operations the Company was selected for Performance Review.

Before taking up the review an entry meeting was conducted (February 2010) to discuss the scope of Audit, Audit objectives / criteria / methodology and major areas for Audit. The meeting was attended by the Secretary to Government of Kerala, Industries Department and the Managing Director of the Company.

The working of the Company was last reviewed and included in the Report of the Comptroller and Auditor General of India (Commercial), Government of Kerala for the year ended 31 March 1996. The Report was discussed by the Committee on Public Undertakings (COPU) and their recommendations were included in its 53rd Report (2001-04) which was presented to the Legislature on 20 January 2004. The action taken on the recommendations was placed in the Legislature on 22 March 2005.

Major recommendations of COPU and the action taken thereon / progress thereof are mentioned below.

Para No.	COPU Recommendation	Action taken / Progress
29	Company should conduct a proper market survey and put in all out effort to sell their product in the domestic market. Prospects of exporting its products may also be explored.	• The Company has conducted a study through M/s Deloitte to assess the marketability and scope for diversification during 2008-09. Action on their report is awaited. • The Company achieved export orders valuing ` 5.42 crore during the last five years.
30	While preparing the budgeted sales, the capacity of machinery, average sales during the past five years, the expected sales during the year etc., should be taken into account.	• The Company has prepared the budget (production / sales) based on the expected sales (requirement and demand pattern of the Indian Railways and KSEB).
31	The number of employees was disproportionately high compared to the actual output in Kasaragod unit and suggested austerity measures for recruitment to the need.	• Against the strength of 1010 employees in 2005-06 the present strength was 947 in 2009-10, in the Company as a whole. • The Company has recruited 60 need based employees during the review period. • In respect of Kasaragod unit the strength in 2005-06 was 238 which reduced to 220 in 2009-10. • The Company has not assessed the manpower requirement and no sanctioned strength is fixed. • The Company appointed (June 2010) Kerala State Productivity Council for conducting organisation study at Mamala and Kundara units. Their study is in progress.
34	The viability of the Edarikkode project on brushless auto alternator should be assessed and if it is found financially and industrially viable, steps should be taken to revive the project and make it functional immediately.	The Company constituted (March 2005) a Committee for revival of project. As the marketability of the product was doubtful the Company decided to use the facility for other activities to supplement the production of Mamala unit. The Commercial production, however, from this unit is yet to commence.

Audit Objectives

2.3 We have selected the Company for performance review as it failed to mobilise sufficient working capital and suffered loss due to lack of professionalism in managing various resources to improve the productivity. The audit objectives of the performance review were to ascertain whether;

- the available resources were utilised economically, efficiently and effectively;
- the procurement and contract management system was efficient and performance oriented;
- financial resources were correctly estimated, mobilised and utilised;
- the efficiency of the marketing system was ensured for timely supply of quality product at competitive price and timely realisation of dues;
- there was effective manpower management; and
- the Management Information System / Internal Control / Internal Audit system / Corporate Governance practices were effective.

Audit Criteria

2.4 The topic was selected for Performance Audit Review to assess the performance and suggest improvements. To achieve this end the following audit criteria were adopted:

- targets fixed by the Company in production / material / sales budgets;
- norms in respect of consumption of material and power;
- procurement, sales and credit policy;
- systems and procedures for correct estimation, mobilisation and utilisation of funds;
- human resource policies of the Company; and
- policies and guidelines prescribed for Management Information System / Internal Control / Internal Audit / Corporate Governance.

Audit Methodology

2.5 Audit adopted the following methodologies:

- review of Board minutes, agenda notes and minutes of other committee meetings;

- scrutiny of production / material / sales budgets;
- analysis of production reports / statements;
- scrutiny of purchases / work contracts / transportation arrangements;
- scrutiny of sales orders and sales realisation particulars;
- examination of records in respect of estimation, mobilisation and utilisation of funds;
- review of MIS reports/Internal Audit Reports / Study Reports / Project Reports / Annual Accounts; and
- interaction with the officials of various divisions / departments.

Financial Position and Working Results

2.6 Financial position and working results of the Company during the five years 2005- 2010 are given below:

Financial Position **(` in crore)**

Particulars	2005-06	2006-07	2007-08	2008-09	2009-10
Liabilities				(Provisional)	
Share capital and Advance	71.38	71.38	87.15	87.15	87.15
Reserves and Surplus	0.16	3.66	3.66	3.66	3.66
Borrowings	45.36	47.53	29.45	29.82	28.01
Total	**116.90**	**122.57**	**120.26**	**120.63**	**118.82**
Assets					
Net fixed assets	4.07	2.98	2.42	2.21	2.57
Project work in progress	5.39	5.60	5.89	6.14	6.14
Net current assets	14.00	17.77	21.13	24.86	24.09
Miscellaneous expenses not adjusted	2.66	1.77	0.88	--	--
Accumulated loss	90.78	94.45	89.94	87.42	86.02
Total	**116.90**	**122.57**	**120.26**	**120.63**	**118.82**
Net worth[1]	**(-) 19.24**	**(-) 19.41**	**0.87**	**3.39**	**4.79**

[1] **Paid up capital plus reserves and surplus less accumulated loss.**

Working Results

Particulars	2005-06	2006-07	2007-08	2008-09	2009-10
Income			(Provisional)		
Gross Sales / Works contract, other income	59.44	83.49	101.03	106.10	105.65
Increase / (Decrease) in stock	6.80	(8.39)	2.65	0.62	(1.90)
Total	**66.24**	**75.10**	**103.68**	**106.72**	**103.75**
Expenditure					
Materials consumed	34.03	37.84	58.47	60.74	61.40
Employee costs	17.88	15.85	13.19	16.70	18.90
Others	29.03	25.07	27.52	26.76	22.05
Total	**80.94**	**78.76**	**99.18**	**104.20**	**102.35**
Profit / (Loss)	**(14.70)**	**(3.66)**	**4.50**	**2.52**	**1.40**

Accounts from 2007-08 onwards have not been finalised.

The accounts of the Company are in arrears from 2007-08 onwards. Acute shortage of manpower in accounts department was attributed as one of the reasons for delay in finalisation of accounts. We observed that to make the accounts up-to-date a Chartered Accountant was also engaged on contract basis.

It could be seen from the table that:

The accumulated loss of ` 90.78 crore in 2005-06 decreased to ` 86.02 crore in 2009-10.

- the accumulated loss, which was ` 90.78 crore in 2005-06 marginally decreased to ` 86.02 crore in 2009-10, mainly due to increase in sales and profit in operation in Mamala and Kasaragod units.
- the income from operating activities gradually increased from ` 59.44 crore in 2005-06 to ` 105.65 crore in 2009-10. Correspondingly, the value of raw materials consumed also increased from ` 34.03 crore in 2005-06 to ` 61.40 crore in 2009-10.

Audit findings

2.7 Audit findings emerging from the performance review were reported to the Management / Government of Kerala in July 2010 and were discussed in an exit meeting (August 2010), with the Secretary (I P), Industries Department to Government of Kerala, the Chairman and the Managing Director of the Company. The views expressed in the meeting have been taken into consideration while finalising the performance review.

Investment in Edarikkod unit

2.8 The Edarikkod unit of the Company was established (1995) to manufacture Brushless Auto Alternators (BAA) with a total investment of ` 3.18 crore. The investment (including pay and allowances of workers in the project -` 4.48 crore upto March 2003) without assessing the marketability of the product and ensuring availability of funds was commented in the Report of the Comptroller and Auditor General of India (Commercial) for the year ended 31 March 2003. The COPU which discussed the lack of progress of the project based on the Report recommended (March 2005) to assess the financial and industrial viability of the project and if it was viable, steps should be taken to revive the project and make it functional immediately.

The Company, thereafter, constituted (March 2005) a Committee for revival of the unit and procured (June 2005) machinery and attempted production activities. The attempt also did not meet with success due to lack of sufficient orders and skilled manpower. Even though there were insufficient jobs for existing manpower, the Company kept on posting more staff / workers from other units in excess of requirement. We observed that the Company invested ` 37.14 lakh in machinery and incurred expenditure of ` 1.39 crore (Salary ` 1.25 crore and Power charges ` 14.79 lakh) during 2004-2010.

Management stated (August 2010) that the production of distribution transformers from Edarikkod unit started from December 2009 at the rate of 100 numbers per month. The GoK sanctioned (March 2010) ` 3.00 crore for revival of the unit and had released ` 1.46 crore. We observed that the transformers were produced on contract basis to supplement the orders of Mamala unit due to favourable order position in that unit during 2009-10 which can not be expected to be a permanent feature.

Production

Production planning

2.9 Production planning is a process used by manufacturing companies to optimise the efficiency of their process. Each unit prepared annual production plan based on the delivery schedule of pending and anticipated orders but:-

- Plant capacity was restricted by the low productivity of machineries and equipments and bottleneck in operations;

- All machines did not operate at evenly balanced speed and efficiency, resulting in imbalance between the work loads of different machines. The flexibility of the plant dependent upon its ability to adapt to the introduction of new products, changes in the product mix to increase the production were not present. The Management stated (August 2010) that upgradation of existing machinery could not be done due to shortage of funds. We observed that shortage of funds were due to poor recovery of dues from customers and inability to raise loans from commercial banks.

2.10 Unit-wise production performance against the budgeted and installed capacity during the five years 2005-10 are given in ***Annexure 7***.

It could be seen from the Annexure that:

- The Company itself had set the budgeted production to the installed capacity ranging between 41 and 54 *per cent* in Kundara (Alternators), 59 and 84 *per cent* in Mamala (Transformers) and 25 and 31 *per cent* in Kasaragod (General Purpose Alternators). The Company knew of low demand for its products and low market share which made it keep its budgeted production low.

- The actual production was also at variance with the budgeted production. It was ranging between 68 and 117 *per cent* in Kundara (Alternators), 78 and 179 *per cent* in Mamala (Transformers), 30 and 102 *per cent* in Olavakkod (Switch Gears) and 75 and 116 *per cent* in Kasaragod (General Purpose Alternators).

- The actual production to installed capacity ranged between a poor 6 and 21 *per cent* in Olavakkod (Switch Gears), 48 and 146 *per cent* in Mamala (Transformers), 37 and 59 *per cent* in Kundara (Alternator) and 21 and 29 *per cent* in Kasaragod (General Purpose Alternators).

The Kundara unit was having a Foundry Division with an induction type foundry (installed capacity 1500 Metric tonne per annum) since 1985. The foundry was producing castings for axle / alternator pulleys for train lighting alternators for captive consumption and requirements of Kasaragod unit as also sale of raw casting to few private parties. The details of capacity utilisation, cost of production per Kilo gram (Kg) and the selling price per Kg of the foundry during the five years 2005-10 are given in ***Annexure 8***.

We observed that the average capacity utilisation was a dismal 28 *per cent* of the installed capacity during the five years 2005-10. The foundry was working for only single shift per day. The cost of production varied from ` 39.65 to ` 54.88 per Kg while the selling price varied from ` 37 to ` 55 per Kg during 2005-10. The castings produced by the unit were costlier than the prevailing market rate and did not find market. The increased cost of inputs also affected the profitability.

We observed that the Management did not take initiative either to increase the production and diversifying casting range or to ascertain whether it would be profitable for the Company to make itself or buy the castings. Since the casting is the input for manufacture of train lighting alternator, procuring castings from the market at cheaper price would have resulted in cost reduction, competitive pricing and increased profitability.

Management stated (August 2010) that procuring casting from the market at cheaper rates would adversely affect quality of their products. We noticed that Kasaragod unit has been procuring machined castings from private parties and no instances of quality complaints were reported so far (October 2010).

Shortfall in production targets and commercial losses

2.11 Production though below capacity, the Company still did not adhere to delivery schedules fixed by the customers. The Company faced penalty /

liquidated damages by the customers (referred to in paragraph ***2.25***). The Company also lost price variation benefits due to delay in supply (referred to in paragraph ***2.23***) indicating improper management of resources to ensure uninterrupted production.

Plant and machine efficiency

2.12 Investment in plant and machinery and expenditure on repairs and maintenance during the five years 2005-2010 are given below.

(` in lakh)

Particulars[2]	**Kundara**	**Mamala**	**Kasaragod**	**Olavakkod**
Written down value of plant and machinery (31 March 2005)[3]	9.83	31.83	213.73	2.24
Additions	15.36	23.60	23.28	--
Expenditure on repairs and maintenance	5.52	1.44	18.67	--

No substantial upgradation of plant and machinery during the last five years and the plant lay out was improper.

There was no substantial upgradation of plant and machinery in Kundara, Mamala and Olavakkod units during the review period. Kundara unit with its foundry of 1947 make machinery was taken over at the instance of Government of Kerala (GoK) in 1963 and was diversified (1974) into the production of Brushless Alternators for Indian Railways and was upgraded to a mechanised one in 1985. The plant lay out is not sequential to facilitate movement of raw materials to stage of completion without interference of back tracking to minimise the movements of material handling. A proposal submitted (2008) by the Company for standardisation and modernisation of the Kundara plant involving investment of ` 14.88 crore was yet (October 2010) to get approval of GoK. Mamala and Olavakkod also had similar problems. As the Company had not modernised the machinery and re-engineered the processes in the units, even the minimum production efficiency could not be achieved in operations.

Materials management

2.13 To ensure uninterrupted production, various materials used as inputs, such as raw materials, consumables and spares are required to be purchased and made available to the production shop as and when needed. Therefore, efficient management of input materials is of paramount importance for maximising productivity.

The Company had not framed any definite policy for procurement of raw materials and components required in bulk for use with a view to reduce procurement cost. Each unit used to make assessment of the requirements of major raw materials based on production requirement for next two to three months. Enquiries were issued to suppliers as per the list maintained by the purchase department. Limited offers only were received in the case of high

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[2] In respect of Edarikkod unit the expenditure incurred on plant and machinery is shown as project expenses.
[3]Total original cost of plant and machinery held by the Company as on 31 March 2005 was ` 16.84 crore.

value items like lamination, torroidal core etc., as the source of supply was limited. Purchase Committee (PC) was constituted[4] at unit level for making purchase of raw materials valuing upto ` 2 lakh and approval of Corporate Office was sought for purchases exceeding ` 2 lakh.

Consumption of raw materials was ` 42.98 crore and ` 81.20 crore at Kundara and Kasaragod units during the review period and it was ` 108.05 crore during the last four years ending 2009-10 at Mamala unit.

Systemic lapses in purchase

2.14 The systemic deficiencies such as lack of purchase policy, lapses in placement of purchase orders etc., highlighted at Paragraph No. 2B.6.1 in the Report of the Comptroller and Auditor General of India (Commercial) for the year ended 31 March 1996 are yet to be addressed. Although the value of consumption of raw materials and components had increased from ` 34.03 crore in 2005-06 to ` 61.40 crore in 2009-10 formal contracts were not entered into with the suppliers to ensure legal validity. The purchase orders did not contain any standard terms and conditions to safeguard the interest of the Company.

We also noticed that the Company paid liquidated damages to its customers for belated supply for want of materials, which could not be passed on to its suppliers due to absence of proper procurement policy. The deficiencies in the procurement system resulted in the Company incurring extra expenditure in the following instances:-

- Supply of 200 Kilo Litre (KL) of Transformer Oil (TO) to meet the production schedule during January to March 2008 at Mamala unit was not done at agreed rate. The party supplied only 20 KL at the agreed rate and the balance 180 KL was supplied upto July 2008 at higher rate resulting in extra expenditure of ` 22.36 lakh.

- In Kundara (Alternator division) considerable delay ranging even upto eight months in getting 'torroidal core' after placement of orders were observed. Similarly there was delay ranging upto six months in getting 'laminations' from regular suppliers. The delay in supply / short supply resulted in interruption of production and loss of 6508 mandays due to idling.

We observed that the unit did not pursue with the suppliers vigorously to minimise delay. The Management replied (August 2010) that working capital shortage was one of the major constraints for timely placement of orders. We observed that the Company had sufficient working capital to manage its raw material requirement but the system of prioritisation of payments to suppliers was not effective due to delay in receipt of payments from its customers.

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[4] **Purchase Committee: DGM (Marketing), DGM (Materials), DGM (Design), DGM (Production), AM (Finance) and unit head.**

2.15 Inventory control techniques mainly consist of classification of inventory, fixation of minimum, maximum; re-order levels and economic ordering quantity of each item of inventory, identification of slow/ non-moving / obsolete item of inventory, minimising inventory carrying cost and disposal of obsolete / undesired items of inventory etc.

A system of annual physical verification of stock of finished goods and raw materials was in place in all the four units of the Company. Obsolete / slow moving materials valuing ` 23.40 lakh were accumulated in two units (Kundara and Kasaragod) for more than five to ten years despite having a system for identifying the same. The Company replied (August 2010) that action to dispose of the materials is being taken.

The Company had been catering to the requirement of various products from institutional as well as individual customers according to their specifications. However, non / delay in lifting of finished goods by the customers within the agreed period in Kundara, Mamala and Olavakkod units led to accumulation (ten to 108 months) of finished goods resulting in blocking of funds amounting to ` 86.97 lakh with interest[5] burden of Rs ` 40.81 lakh ***(Annexure 9)***.

Excess consumption of raw materials

Consumption of the major raw materials was in excess of norm valuing ` 1.29 crore.

2.16 The norms for consumption of raw material are fixed at unit level. A comparison of actual consumption of major raw materials with the norms fixed revealed that there was excess consumption in respect of four major raw materials in Kundara and Kasaragod units valuing ` 1.29 crore during the five years 2005-2010.

Company replied (August 2010) that the raw material might have been consumed for repair and supply of spares used for failed product in Kundara unit. These items could not be segregated and properly accounted for. Out of the total excess consumption of ` 1.29 crore 60 *per cent* pertained to Kasaragod unit. The Management assured (August 2010) that the reasons for excess consumption would be analysed.

Marketing

Sales performance

2.17 The budgeted sales, actual sales, sales to major customers, profit/loss in four manufacturing units during 2005-10 were as follows:

(` in crore)

Year	Particulars	Units			
		Kundara	Mamala	Kasaragod	Olavakkod
2005-06	Budgeted Sales	15.47	29.61	19.10	2.50
	Actual Sales	14.06	22.38	20.36	0.74
	Percentage of actual sales	90.88	75.58	106.60	29.60

[5] **Interest calculated at the borrowing rate of 14.50 *per cent*.**

	to Budgeted Sales				
	Sales to major customers	11.91	10.34	14.65	--
	Percentage of sales to major customers to total sales	85	46	72	--
	Profit / (loss)	(0.40)	0.35	(0.73)	(0.35)
2006-07	Budgeted Sales	15.46	29.37	22.55	2.50
	Actual Sales	15.52	25.00	39.45	0.62
	Percentage of actual sales to Budgeted Sales	100.38	85.12	174.94	24.80
	Sales to major customers	14.79	9.82	34.56	--
	Percentage of sales to major customers to total sales	95	39	88	--
	Profit / (loss)	(3.65)	(4.20)	4.78	(0.59)
2007-08	Budgeted Sales	20.82	36.58	26.65	3.23
	Actual Sales	18.49	34.58	39.49	2.72
	Percentage of actual sales to Budgeted Sales	88.81	94.53	148.18	84.21
	Sales to major customers	15.07	20.73	35.46	--
	Percentage of sales to major customers to total sales	82	60	90	--
	Profit / (loss)	0.33	1.10	3.20	(0.13)
2008-09	Budgeted Sales	22.77	42.35	34.00	3.00
	Actual Sales	20.24	45.20	33.14	2.43
	Percentage of actual sales to Budgeted Sales	88.89	106.73	97.47	81.00
	Sales to major customers	17.11	19.27	28.70	--
	Percentage of sales to major customers to total sales	85	43	87	--
	Profit / (loss)	0.04	2.19	0.65	(0.36)
2009-10	Budgeted Sales	21.94	47.77	40.76	4.00
	Actual Sales	16.34	63.36	16.71	2.11
	Percentage of actual sales to Budgeted Sales	74.48	132.64	41.00	52.75
	Sales to major customers	11.52	41.30	7.54	--
	Percentage of sales to major customers to total sales	71	65	45	--
	Profit / (loss)	(2.97)	7.27	(2.91)	0.01

It could be seen from the above that provisional accounts of Mamala, Kundara and Kasaragod units had shown operational profits during 2007-08 and 2008-09. The achievement of sales in Kundara ranged between 74.48 and 100.38 *per cent* of targeted sales during the period 2005-2010. Mamala unit achieved more than the targeted sales during 2008-09 (106.73 *per cent*) and 2009-10 (132.64 *per cent*) and consistently managed higher sales except during 2005-06 (75.58 *per cent*) due to reduction in orders from KSEB. Olavakkod unit achieved sales of 29.60 *per cent* and 24.80 *per cent* to the budgeted sales during 2005-06 and 2006-07 respectively. Better demand from KSEB and private customers during 2007-2009 increased the actual sales up to 84.21 *per cent* and 81 *per cent* of budgeted sales respectively but it came down to 52.75 *per cent* in 2009-10. Kasaragod unit achieved 174.94 *per cent* and 148.18 *per cent* against the targeted sales during 2006-07 and 2007-08 respectively due to the increase in orders from Railways. In 2008-09 and 2009-10, however, the actual sales decreased to 97.47 *per cent* and 41.00 *per cent* respectively due to reduction in orders from Railways.

We observed that the marketing departments of units did not evolve new strategies to increase the customer base with attractive yet remunerative pricing and credit policy. We recommend that the Company should follow market savvy techniques to stay in competition.

Poor success rate in tenders

2.18 The Company had not formulated any policy / guidelines for participating in tenders invited by State Electricity Boards / Utilities, Railways and other customers. Each unit participated independently in tenders floated by the institutional customers like Indian Railways, State Electricity Boards / Utilities etc., for supply of standardised products and quoted on the basis of estimate prepared by their marketing departments. We noticed that the success rate in tenders in respect of Mamala unit (Transformer) was 4 to 16 *per cent*, Kasaragod unit (Alternators) was 6 to 25 *per cent* and that of Kundara unit was 11 to 27 *per cent* during the review period. The data in respect of Olavakkod unit was not available. The Company replied (August 2010) that the poor success rate was due to stiff competition from private sector enterprises. It is observed that the Company is losing on orders because of higher fixed costs.

We recommend that the Company must follow a pragmatic policy and may quote for tender above its marginal cost so as to fetch orders and ensure contribution towards recovery of fixed cost as well.

Non- diversification of customer base

2.19 The three units viz., Mamala, Kundara and Kasaragod were dependent only on single customer for its sales. In respect of Olavakkod unit the orders were evenly received from KSEB and private customers.

- Mamala unit derived above 57 *per cent* of its sales from KSEB during the years 2007-08 and 2009-10. The second major customer of the unit was Tamil Nadu Electricity Board (TNEB) with average share of around 20 *per cent* of the total sales except in 2007-2008.

- Kundara unit derived 83 *per cent* of its sales from Indian Railways during 2005-2010. The revenue from sale of castings to Kasaragod unit was on an average three *per cent* of the total sales. The revenue from other sources constituted an average 14 *per cent* of the total sales.

- Kasaragod unit derived 86 *per cent* of its sales from Railways except in 2009-10 when the sales declined to 45 *per cent* of the total turnover due to reduction in orders.

The dependence on single customer for the bulk of the sales revenue poses a high risk to the sustainability of the units in the present environment. For example, the sales of Kasaragod unit for the year 2009-10 took a hit due to reduced orders from Indian Railways. We recommend that the Company must expand its customer base to survive in the competitive market.

Expenditure incurred (2005-10) on two regional offices amounting to ` 91.58 lakh became wasteful due to non-canvassing of orders.

The Company had not taken any effective action to increase its market share by resorting to marketing / advertisement campaigns etc., in trade journals or Industry manuals etc., to create awareness and interest in its products. The Company is having Regional Offices at Mumbai, Chennai, Delhi, Kolkatta, Bangalore and Thiruvananthapuram for marketing and liasoning purpose and incurred ` 2.75 crore towards salaries and administration expenses for the review period of 2005-10. Apart from this an amount of ` 1.33 crore was paid as sales commission to marketing agents. It was noticed that Mumbai and Delhi offices had not procured orders during the review period. Orders were procured through the efforts of marketing departments at unit level by participating in tenders and through private marketing agents appointed on commission basis. The expenditure amounting to ` 91.58 lakh on salary and establishment expenses (Delhi ` 57.64 lakh and Mumbai ` 33.94 lakh) for the five years (2005-10) did not prove fruitful. The Management failed to monitor the performance of these offices and the purpose for which these were set up. Management stated (August 2010) that after sales services were being attended to from these offices and staff strength were minimal. We suggest that the Company may fix targets for these offices and a managerial decision may be taken for cost reduction in unproductive areas of marketing.

Diversification activities

2.20 The Company appointed (June 2008) M/s Deloitte Touche Tohmatsu India Pvt Ltd, Chennai to conduct a focused study on the diversification options available for the Company to achieve sustained growth and profitability at a fee of ` 11.75 lakh. The study report submitted (March 2009) by M/s Deloitte suggested five diversification options viz., manufacturing of electric motors, power transformers, 'electrics' for locomotives, wind electric generators and industrial fans / blowers involving capital investment of ` 193.23 crore.

The Company had heavier products of the same rating compared to competitors showing that there is opportunity for value engineering.

The report of M/s Deloitte highlighted the lack of value engineering in products by comparing the gross weight of various ranges of alternators manufactured by the Company to that of its competitors such as Stanford, Elgi and Kirloskar and found that it was in excess by seven *per cent* to 36 *per cent*. The consultant had worked out an increase of 26 *per cent* profit by saving two *per cent* in material cost by value engineering. The annual savings on material cost was estimated at ` 1.17 crore. Management stated (August 2010) that a proposal had been submitted to GoK for financing the diversification and steps have been taken for reduction of raw material cost by negotiating price of supplies.

We observed that though the Company analysed and found the recommendations of consultant financially and technologically feasible (March 2009), it had neither fixed any time frame for implementation of these recommendations nor discussed it with staff.

Pricing policy and costing system

2.21 The Company had not adopted any standard scientific mechanism for evaluation of the terms and conditions of purchase orders of customers while accepting their offer. Each unit finalised the selling price on the basis of rough estimate prepared for the purpose of quotation and subsequent negotiations conducted with the customers but not with reference to actual cost data.

We observed that the Company accepted many works and purchase orders from customers and suffered direct loss due to poor evaluation of terms and conditions and bad costing while bidding:

- The Transformer Division of Mamala unit incurred loss of ` 62.78 lakh ***(Annexure 10)*** in three cases due to increase in cost of raw materials during execution of orders whereas the price variation was limited to ten *per cent*.

- Structural Division, Mamala received (September 2008) an order for 26 rail bogie frame from BEML at ` 1,32,500 per frame with an estimated contribution of ` 3,645 per frame. However, the actual cost of fabrication of a bogie frame came to ` 1,76,855 resulting in loss of ` 11.53 lakh due to underestimation of labour man hour rate and overheads.

Unconditional acceptance of tender conditions

2.22 Structural Division (Mamala) undertook fabrication, supply and erection of various gates on dams / reservoirs. Successful execution of such works within the stipulated period was dependant on completion of civil / electrical works which required involvement of various agencies. Therefore, before undertaking such works, the division had to guard against any possible loss on account of delay in completion due to reasons beyond its control.

Unconditional acceptance of tender conditions without safeguarding the financial interest resulted in avoidable expenditure of ` 41.04 lakh in two work orders.

We observed that in at least two cases the division accepted the tender conditions without safeguarding its financial interest and resulted in revenue loss of ` 41.04 lakh.

- The 'Gate works' of Upper Tunga Project Dam (UTP) for Karnataka Neeravari Nigam Limited (KNNL) - Omission to include enabling provisions for reimbursement of extra expenditure on account of price escalation from the customer resulted in avoidable expenditure of ` 20.44 lakh.

- The works of design, fabrication, supply, erection, testing and commissioning of automatic tilting shutters of Bihar State Hydro Electric Power Corporation (BSHEPC), Patna resulted in revenue loss of ` 20.60 lakh.

Loss of price variation claims

Due to delay in supply eligible price variation of ` 73.41 lakh could not be enforced.

2.23 As per the terms and conditions of supply of distribution transformers (Mamala unit) to KSEB, the Company is eligible for price variation (PV) upto a maximum of 10 *per cent* plus or minus on the basic price of the transformer on account of increase / decrease in price of raw materials during the scheduled period of supply. The Company could not supply the items in time due to non- availability of working capital for procuring raw materials resulting in loss of price variation claims amounting to ` 73.41 lakh in five supplies ***(Annexure 11)***.

Loss of revenue due to refixation of price

Due to delay in supply KSEB invoked the price refixation clause which resulted in loss of ` 55.64 lakh to the Company.

2.24 KSEB placed (November 2006) orders for supply of fuse units at ` 3.06 crore and additional order (July 2008) valuing ` 73.98 lakh (Olavakkod unit). In the event of delay in supply beyond the scheduled delivery period, the price of such materials will be refixed taking into account the market price of such materials on the date of actual supply or at the same price as per the purchase order whichever is lower. On account of the delay in supplying the materials, KSEB invoked the price refixation clause and refixed the price of both the orders and recovered ` 55.64 lakh resulting in revenue loss to the Company. The reason attributed for delay was non-availability of funds for procuring raw materials. We observed that the unit had requested for advance of ` 50 lakh from KSEB in March 2007 after three months from receipt of PO and the same was received (June 2007) after expiry of delivery schedule.

Loss due to production delays

2.25 The Company was continuously facing working capital shortage, still it manufactured the products before getting firm commitment from customers and obtaining approval from regulatory authorities. We noticed that due to this anomaly ` 15.20 lakh was blocked up.

- The Bangalore Electric Supply Company (BESCOM) placed (August 2003) an order for supply of 1,500 nos. and additional order (September 2003) for supply of 500 nos. of 15 KVA distribution transformers at ` 19,910 per transformer (Mamala unit). As per the contract, 200 transformers per month had to be supplied from October 2003 and to complete the supply of 1000 numbers by February 2004 and 500 transformers against extension order by May 2004. The division supplied only 115 transformers till December 2004. Hence BESCOM short closed (March 2005) the purchase orders and encashed (April 2005) the Bank guarantee amounting to ` 50,000. Due to short closure of the order 80 transformers not lifted by BESCOM costing

` 15.20 lakh are remaining in stock for more than five years (March 2005-May 2010) resulting in blocking of funds.

- There was failure in keeping up the delivery schedules of KSEB and Indian Railways resulting in levy of liquidated damages (LD). On retention of LD, the respective units appealed to the concerned parties citing reasons for delay in supply. Upto 2007-08 the Indian Railways had released ` 1.25 crore considering the merit of the case. It was noticed that no refund was received since September 2008 though the unit took up the matter with customer. The table below indicates the amount of LD levied for the supplies made upto 2009-10.

Non – adherence to delivery schedules resulted in payment of liquidated damages amounting to ` 3.21 crore.

Unit	Supplies prior to 31/03/2005	2005-06	2006-07	2007-08	2008-09	2009-10	Total
	(` in lakh)						(` in crore)
Kundara (Railways)	76.93	44.79	32.27	55.65	10.93	3.37	2.24
Kasaragod (Railways)	Nil	5.87	26.43	0.94	4.12	2.50	0.40
Mamala (KSEB)	22.56	6.21	23.91	4.39	0.24	Nil	0.57
Total	**99.49**	**56.87**	**82.61**	**60.98**	**15.29**	**5.87**	**3.21**

The factors affecting the timely execution of supply orders included shortage of raw materials / components. The procurement was done in small quantities due to working capital constraints depriving the Company of benefit of reduced prices due to bulk buying.

We also observed that the Company was forced to accept orders from its consumers in order to keep its labour force engaged and minimise losses despite knowing that the conditions in POs were not favourable to it.

Credit policy

2.26 The Company had not formulated a corporate credit policy. The units accept purchase orders from the customers and sales effected on the terms and conditions as specified therein, individually and are not part of larger policy. We noticed:

- absence of a simple penalty clause for delay in receipt of sale proceeds
- non-enforcement of partial advance payment along with PO clause and balance before taking delivery. In the case of limited orders, no price variation clause was included. Units relaxed the terms to maintain sufficient order level. Absence of these terms and conditions resulted in delay in lifting / non lifting of finished goods as discussed in paragraphs ***2.25*** supra and delay in sales realisation etc. In five cases

Relaxation of terms of payment at the request of customers resulted in interest loss of ` 24.48 lakh.

(Annexure 12) the Company sustained interest loss of ` 24.48 lakh due to delay in realisation of dues / delay in lifting.

- There was accumulation of sundry debtors (March 2010) amounting to ` 49.90 crore. The unit /age-wise position of debtors is given below:

Accumulation of sundry debtors (March 2010) of ` 49.90 crore out of which ` 6.89 crore was pending for more than three years.

(` in crore)

	Kasaragod	Kundara	Mamala	Olavakkod	Total
< 1 year	5.95	6.71	23.12	0.66	36.44
1 to 2 years	0.34	1.23	1.09	0.47	3.13
2 to 3 years	0.44	1.35	1.64	0.01	3.44
> 3 years	1.13	1.64	4.08	0.04	6.89
Total	**7.86**	**10.93**	**29.93**	**1.18**	**49.90**

There was no substantial reduction of old debts in respect of Mamala and Kasaragod units leading to working capital crunch at these units. Out of ` 4.08 crore pending for more than three years in respect of Mamala unit an amount of ` 1.19 crore was pending for recovery from KSEB (retention money, price variation claim etc.) for more than three to ten years. Similarly an amount of ` 63.97 lakh due from private parties is pending for more than one to three years (Kasaragod, Kundara and Mamala) indicating that management failed to take possible action for improving recovery of dues. The Company replied that a provision for doubtful debts amounting to ` 4.18 crore had been created.

We recommend that the Management should take a critical view of its debtors and make greater efforts to realise its dues.

Financial Management

Estimation of funds requirement

2.27 To assess the fund requirements, the Company prepared annual financial budgets based on projections regarding purchases, sales and capital expenditure in respect of all manufacturing units.

2.28 Details of working capital of the Company during 2005-10 were as given below:

(` **in crore**)

Particulars	2005-06	2006-07	2007-08	2008-09	2009-10
Current Assets			(based on provisional figures)		
Inventory	26.66	18.77	23.16	23.72	20.75
Sundry debtors	18.78	27.06	31.63	41.56	49.90
Cash and bank	0.96	1.41	0.69	0.72	0.81
Loans and advances	4.79	4.43	3.21	2.23	2.16
Total (A)	51.19	51.67	58.69	68.23	73.62
Current liabilities					
Sundry creditors	14.75	10.10	14.64	16.52	23.01
Other current liabilities	16.81	17.11	16.57	19.81	19.00

Provisions	5.63	6.71	6.35	7.03	7.44
Total (B)	37.19	33.92	37.56	43.36	49.45
Working capital (A-B)	14.00	17.75	21.13	24.87	24.17

In order to tide over the poor working capital position, the Company had cash credit and bill discounting arrangement with a consortium of banks. Accordingly, the units availed the facility to the maximum limit throughout the period. The present Cash Credit (CC) limit of ` 15.15 crore was obtained during 1996-97 when the turn over was ` 65.88 crore. This limit could not be increased in spite of 60 *per cent* increase in turn over as the Company was unable to finalise its accounts in time. Low CC limits contributed to paucity of working capital leading to delay in procurement of raw materials for production and opportunities foregone. Other reasons for working capital deficit were poor operational performance and poor recovery of dues from customers.

Non-remittal of statutory dues

2.29 As per the provisions of Employees Provident Funds & Miscellaneous Provisions Act, 1952, the employer has to remit the EPF contribution (Employer/Employees' share and administrative expenses) of a particular month by 15th calendar day of the next month.

2.30 Payment of contribution for the period from April 2005 to January-2010, in respect of three units (Mamala, Kundara and Olavakkod) was continuously defaulted. As per provisions of the EPF Act (section 7 Q), simple interest at the rate of 12 *per cent* per annum is chargeable for delay in payment of contribution from the due date to the actual date of payment and damages are also leviable (section 14B) for default in payment of contribution at the rate ranging from 5 *per cent* to 37 *per cent* per annum depending upon the period of default. We calculated the liability of the Company for the period April-2005 to Jan-2010 for the damages and penalty as ` 1.04 crore.

Manpower management

2.31 The existing and effective manpower of the Company for five years 2005-2010 was given below.

(Manpower in nos)
(Value of production ` in crore)

Unit	Particulars	2005-06	2006-07	2007-08	2008-09	2009-10
Kundara	Existing Manpower	370	371	356	350	344
	Effective Manpower	346	349	338	332	324
	Value of production	15.44	14.66	21.87	21.70	15.34
Mamala	Existing Manpower	293	311	299	293	282
	Effective Manpower	279	298	289	284	269
	Value of production	30.28	25.43	41.18	48.40	61.40
Kasaragod	Existing Manpower	238	235	230	229	220
	Effective Manpower	202	192	192	197	194
	Value of production	17.33	37.37	37.77	32.83	14.72
Olavakkod	Existing Manpower	32	36	37	36	34

	Effective Manpower	28	30	33	32	30
	Value of production	0.78	0.74	3.29	2.76	1.96
Edarikkod	Existing Manpower	5	5	6	6	6
	Effective Manpower	25	14	12	13	24
	Value of production	Nil	Nil	Nil	Nil	Nil
Regional Offices and Registered Office	Existing Manpower	72	64	64	64	61
	Effective Manpower	39	37	39	38	26
Total	Existing Manpower	1010	1022	992	978	947
	Effective Manpower	919	920	903	896	867

The Company employed 867 employees against the existing strength of 947 as at the end of 31 March 2010. The Company has not done any periodic assessment of the manpower needs and has not fixed any sanctioned strength based on the requirement so far.

It could be seen that the management failed to deploy the manpower at various units in a scientific manner based on the requirements so that overstaffing or understaffing at units could be avoided. Management had not formulated any policy for redeploying employees between units. Employees were transferred from one unit to another on ad hoc basis. Terms and conditions of services / pay and allowances / incentives to staff and workers, production norms etc are defined and determined based on Long Term Agreement (LTA) entered into between management and staff/worker's associations. We observed no uniformity of pay and service conditions between units resulting in disparity among employees affecting redeployment. Management commissioned (June 2010) a study by Kerala State Productivity Council to go into job evaluation, assessment of human resources requirement etc.

Low employee productivity

2.32 One of the major factors that influenced rate of production was work norms fixed in LTA. A comparison of standard mandays required for production with actual mandays utilised including overtime during the five years ending 31/03/2010 are given in ***Annexure 13***. It could be seen from the annexure that average mandays utilised was in excess of standard mandays required for actual production by 107 *per cent* in Kasaragod, 51 *per cent* in Mamala and 31 *per cent* in Kundara during the five years 2005-2010. Despite availability of excess manpower the Company paid overtime wages amounting to ` 5.78 crore (2005-10) which was avoidable. It was further observed that there was no maximum limit fixed for engaging employees on overtime in violation of Section 64 (4) (iv) of Factories Act 1948 which had the impact of low productivity during normal working hours. Instances of abnormal overtime hours worked by employees were noticed**.** On a test check 53 instances were noticed in Mamala and Kundara units, where overtime worked by an employee in a month (March 2010) ranged from 100 hours to an impossible 204 hours and 101 hours to 190 hours respectively. These number of OT hours were against working hours norms settled in Factories Act.

Internal Controls and Management Information System

2.33 Internal controls and management information systems, financial management, purchase, sales management procedures etc., were found inadequate. Also internal audit did not cover major functional and critical areas like production, yield, material consumption and wastage, productivity as compared to norms as per LTA, break down of machineries and overtime payment, identification of obsolete / non-moving stock of raw materials and finished goods etc. The internal audit reports were not put up to the Board in the absence of Audit Committee for taking corrective action.

Conclusions

The products of the Company had a brand value due to its quality. However, the Company suffered losses due to lack of professionalism in managing procurement, production and marketing aspects. Non-existence of costing and scientific pricing policy, failure in negotiating tender conditions and the dependence on single customers adversely affected the fortunes of the Company. The Company failed to mobilise sufficient working capital due to poor recovery rate from the customers and inability to raise credit from bankers due to delay in finalisation of accounts. The production efficiency was adversely affected due to usage of obsolete machinery; improper plant lay out, absence of procurement policy and non-achievement of production as per work norms. The Company failed to economise the procurement of raw materials and to achieve the norms fixed for consumption of the same. The Company was often forced to accept the unfavorable terms of the purchase orders received from its customers despite knowing the same. The Company continued with unviable unit at Edarikkod thereby further increasing the losses. The Company failed to assess the actual manpower required, leading to availability of man power in excess of requirement.

Recommendations

We recommend

- ***The Company should take effective steps to implement standard and marginal costing system and frame suitable pricing policy.***
- ***Company should vigorously negotiate against any unfavorable purchase order conditions imposed by the customers to protect the interest of the Company.***
- ***The Company should strengthen the contract documentation.***
- ***The Company should frame appropriate policies and systems for procurement and material management.***

- ***The Company should take effective steps to widen the customer base for its products by creating awareness of the quality and brand name of its products.***

- ***Effective action for timely recovery of dues pending from customer should be taken to improve the working capital position. The Government also should help the Company in this matter.***

- ***Production planning and methodology must keep pace with the time and the portfolio of products be widened.***

- ***Customer base needs to be widened to reduce dependence on Government Departments who themselves are going through transformation and are no longer obliged to give orders to PSUs and are looking for better products at competitive prices.***

Chapter III

Performance review relating to Statutory Corporation

Kerala State Electricity Board

3. Performance Review on the Generation activities of Kerala State Electricity Board

Executive Summary

Introduction

One of the core objectives of 11th Five Year Plan (2007-12) has been "Supply of power to all" by the end of the plan period. The National Electricity Policy (NEP) 2005 declared by Central Government, also envisaged development of power sector based on optimal utilisation of resources like coal, gas, nuclear material, hydro and renewable sources of energy. This performance audit covering the period 2005-06 to 2009-10 was conducted to examine as to what extent the State of Kerala has equipped itself to achieve the stated plan objective. Overall efficiency of the State Power undertaking namely, Kerala State Electricity Board (Board), in utilising the existing resources, and planning for the sustained development of power sector in the State was also evaluated as a part of this audit study.

Salient features of power sector in Kerala

Kerala is a power deficient State, where the requirement and available capacity were in the order of 2998 MW and 2563.25 MW (Board- 2126.48, Others- 436.77 MW) respectively, as at the end of the year 2009-10. The growth in demand in the State during the review period was 546 MW whereas capacity addition was only 124.30 MW. The energy sources in the State were predominantly hydel. During the review period, actual generation of power in the State was only 70 to 82 per cent of average demand and 62 to 77 per cent of peak demand.

Status of capacity additions

Capacity addition plans of Board were not realistic. Assessment in audit disclosed that the likely capacity addition during 11th plan will be about 21 per cent of targets (610.15 MW). As against five projects of Board included in National Electricity Plan for capacity addition during 11th plan viz., Kuttiady Additional Extension (100 MW), Athirappally (163 MW), Pallivasal Extension (60 MW), Thottiyar (40 MW) and Mankulam (40 MW) only the first one, which spilled over from 10th plan, is commissioned (May 2010) during the plan period.

Project Implementation

Though the State was having identified but untapped hydel generation potential, new project proposals of Board in hydel sector were either getting abandoned due to non-receipt of Forest / Environmental clearances or their implementation made difficult on account of problems connected with land acquisition. Delay in land acquisition has already affected the implementation schedules of all projects executed / under execution during plan period. The project implementation processes were also quite slow paced. The investigation and preparation of Draft Project Reports often took time in excess of five years, as against the normal period of two years reckoned in the National Electricity Plan. Inadequacies in investigation had led to design changes during course of construction and consequent time and cost overrun. Deficiencies in Project Management had resulted in time / cost overrun. Delay in decision making at different stages of

construction caused further slippages in time schedules.

Renovation and Modernisation of existing stations

As on 31.3.2010, Renovation and Modernisation works of power plants at Poringalkuthu, Sholayar and Kuttiady were overdue, but got postponed for different reasons. High incidence of machine outages was noticed in all these stations. Generation losses to the tune of ` 12.60 crore occurred due to outages of machines, when the dams were spilling. Post RMU performance of machines of Pallivasal and Sabarigiri Stations was not successful. The re-conditioned machines developed serious technical problems at both the stations. The runner buckets of three of the machines of Pallivasal were developing frequent pitting and cracks, resulting in generation losses, due to machine outages for runner-repairs. Machine no.4 of Sabarigiri station commissioned after RMU works in February 2007 exploded in May 2008, causing damages and losses. The explosion was attributed to manufacturing defects.

Plant Availability

As against CERC norm of 80 per cent plant availability during 2004-09, the average plant availability in KSEB was 76.36 per cent for major Hydel stations, 37.16 per cent for small HEPs and 46.47 per cent for Thermal stations. High rate of breakdowns as a result of inadequate maintenance operations lowered the plant availability.

Poor performance of Small HEPs

None of the 10 independent SHEPs have been giving satisfactory performance. The actual output for all the five years was lower than potential output. The overall short generation was 195.42 MU.

Input efficiency

Diesel power stations of the Board at Brahmapuram and Kozhikode were mainly operated as peak load stations due to high operational costs. Timely maintenance operations were also not undertaken due to delay in decision making on the basis of cost-benefit considerations. Generation losses due to inadequate fuel stock and consumption of fuel in excess of norms were also noticed at these stations. Owing to curtailed operations on considerations of cost, the plant load factor of diesel stations was only in the range of 5.97 per cent to 38.98 per cent during the review period.

Financial Management

As observed in audit, decisions on project financing were being taken without active involvement of Finance Wing and the system lapse caused drawal of high interest bearing loans without genuine requirement and resultant cost overrun.

Project Accounts were being closed years after their completion and no effective system of post implementation evaluation of projects was in place.

Instances of drawal of excess payments by project contractors against LCs, resulted out of deficiencies in contract payment terms as well as bill passing systems were also noticed.

Conclusions and recommendations

Power potential from non-conventional energy sources was not adequately developed by the state despite liberal financial assistance from Central Government. Forest / environmental clearances were the major hurdles faced by the Board in implementing new projects.

Capacity constraints and financial problems too prevented the Board from undertaking R & M activities of the existing HEPs and those carried out were also not fully successful. PLF of thermal plants of the Board were very low due to curtailed operation.

The review contains nine recommendations:
The Board should evolve an action plan on priority basis to expedite the implementation of 11th Plan projects and avoid slippages. Policy guidelines from Government in matters of forest clearances, land acquisition and rehabilitation of people affected by projects would be helpful to the Board in its efforts to meet the targets for capacity addition. Project investigation-systems

have to be strengthened by incorporating collective decision making in the initial stages itself to avoid inadequacies in designs at later stages. The Board should establish proper system for project monitoring enabling the flow of management information to the top management on time to take decisions on project management. The performance standards of contract agencies engaged by the Board were wanting in many respects. This highlighted the need for more stringent pre-qualification norms while short listing the contract agencies. Preventive maintenance schedules of the power stations have to be adhered to with more regularity and consistency. Cost benefit aspects of operation of Thermal Stations have to be examined more closely with updated and accurate cost data and possibility to optimise the utilisation examined with a view to contain the operational cost. System of maintenance of project accounts should be strengthened to avoid undue delay in closure of accounts.

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Introduction

3.1 Power is an essential requirement for all facets of life and has been recognised as a basic human need. The availability of reliable and quality power at competitive rates is very crucial to sustain growth of all sectors of the economy. The Electricity Act 2003 provides a framework conducive to development of the Power Sector, promote transparency and competition and protect the interest of the consumers. In compliance with Section 3 of the *ibid* Act, the Government of India (GOI) prepared the National Electricity Policy (NEP) in February 2005 in consultation with the State Governments and Central Electricity Authority (CEA) for development of the Power Sector based on optimal utilisation of resources like coal, gas, nuclear material, hydro and renewable sources of energy. The Policy aims at, *inter alia*, laying guidelines for accelerated development of the Power Sector. It also requires CEA to frame National Electricity Plan (NE Plan) once in five years. The Plan would be short term framework of five years and give a 15 years' perspective.

3.2 At the beginning of 2005-06, electricity requirement in the State of Kerala was assessed as 12698 Million Units (MU) of which only 6629.06 MU were available leaving a shortfall of 6068.94 MU, which works out to 47.79 *per cent* of the requirement. The total installed power generation capacity in the State of Kerala was 2618.74 Mega Watt (MW) (Kerala State Electricity Board (KSEB)-2047.23 MW, Others-571.51 MW) and effective available capacity was 2438.95 MW (KSEB-2047.23 MW, Others-391.72 MW) against the peak demand of 2452 MW leaving deficit of 13.05 MW. As on 31 March 2010 the comparative figures of requirement and available capacity were 2998 MW[1] and 2563.25 MW (KSEB-2126.48 MW, Others-436.77 MW) with deficit of 434.75 MW. Thus there was a growth in demand of 546 MW[2] during review period, whereas the capacity addition was only 124.30 MW (KSEB-79.25 MW, Others-45.05 MW).

3.3 In Kerala, generation of power is carried out by Kerala State Electricity Board (Board), a statutory body constituted on 01-04-1957 under Section 5 of the Electricity Supply (Act), 1948 for the coordinated development of

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[1] **Requirement in terms of MU– 17200 MU.**
[2] **Growth in demand in terms of MU – 4502 MU.**

Generation, Transmission and Distribution of electricity in the State of Kerala under the administrative control of the Power Department of the Government of Kerala. As per Section 172 (a) of the Electricity Act 2003 and as mutually decided by the Government of India and the State Government, Board has continued as Transmission utility and Distribution licensee till 24-09-2008. In exercise of powers conferred under Section 131 of the Electricity Act, 2003, State Government has vested (September 2008) all functions, properties, interests, rights, obligations and liabilities of Board with it till it is re-vested in a corporate entity. Accordingly, Board has been continuing all the functions as a Generation utility, State Transmission Utility and a Distribution Licensee in the State.

3.4 The Management of the Board is vested with a Board of Directors comprising of Chairman, Technical Members for Generation, Transmission and Distribution, Member (Finance), two ex-officio members and one non-official member, all appointed by the State Government. The day-to-day operations are carried out by the Chairman, who is the Chief Executive with the assistance of Members, Chief Engineers and Financial Adviser. As on 31 March 2010 the Board had 24 hydro generation stations, two thermal generation stations and one renewable energy station with the installed capacities of 1889.85 MW, 234.60 MW and 2.03 MW respectively.

3.5 The turnover of the Board was ` 5349.82 crore in 2008-2009 equal to 48.13 *per cent* and 2.97 *per cent* of the State PSUs' turn over and State Gross Domestic Product, respectively. Out of total turnover of ` 5349.82 crore, the Board's turnover from generation activities was to the tune of ` 722.43 crore. It employed 28043 employees as on 31 March 2010 of which 1038 employees were deployed in generating activities of the Board.

Scope and Methodology of Audit

3.6 The present review conducted during February 2010 to May 2010 covers the performance of the Board in respect of generation activities only during the period from 2005-06 to 2009-10. The review mainly deals with Planning, Project Management, Financial Management, Operational Performance, Environmental Issues and Monitoring by Top Management. The audit examination involved scrutiny of records at the Head Office and 17 out of 27 generating stations. All major hydel generating stations, except for Kakkad and both thermal stations, with gross installed capacity of 2035.85 MW (95.74 per cent of total installed capacity) were reviewed.

3.7 The methodology adopted for attaining the audit objectives with reference to audit criteria consisted of explaining audit objectives to top management, scrutiny of records at Head Office and selected units, interaction with the auditee personnel, analysis of data with reference to audit criteria, raising of audit queries, discussion of audit findings with the Management and issue of draft review to the Management for comments.

Audit Objectives

3.8 The objectives of the performance audit were:

Planning and Project Management

- To assess whether capacity addition programme taken up / to be taken up to meet the shortage of power in the State is in line with the National Policy of Power for All by 2012;
- To assess whether a plan of action is in place for optimisation of generation from the existing capacity;
- To ascertain whether the contracts were awarded with due regard to economy and in transparent manner;
- To ascertain whether the execution of projects were managed economically, effectively and efficiently;
- To ascertain whether hydro projects were planned and formulated after taking into consideration the optimum design to get the maximum power, dam design and safety aspects; and
- To ascertain whether the Board had taken up the projects under non-conventional sources such as wind, solar, biomass etc., and tap generation from captive power sources.

Financial Management

- To ascertain whether the projections for funding the new projects and upgradation of existing generating units were realistic including the identification and optimal utilisation for intended purpose;
- To assess whether all claims including energy bills and subsidy claims were properly raised and recovered in an efficient manner; and
- To assess the soundness of financial health of the Board.

Operational Performance

- To assess whether the power plants were operated efficiently and preventive maintenance as prescribed was carried out minimising the forced outages;
- To assess whether requirements of each category of fuel worked out realistically, procured economically and utilised efficiently;

- To assess whether the manpower requirement was realistic and its utilisation optimal;

- To assess whether the life extension (renovation and modernisation) programme were ascertained and carried out in an economic, effective and efficient manner; and

- To assess the impact of R&M / LE[3] activity on the operational performance of the Unit.

Environmental Issues

- To assess whether the various types of pollutants (air, water, noise, hazardous waste) in power stations were within the prescribed norms and complied with the required statutory requirements; and

- To assess the adequacy of waste management system and its implementation.

Monitoring and Evaluation

- To ascertain whether adequate MIS existed in the entity to monitor and assess the impact and utilise the feedback for preparation of future schemes; and

- To ascertain whether a documented and proper disaster management system was in place in all generating units.

Audit Criteria

3.9 The audit criteria adopted for assessing the achievement of the audit objectives were:

- National Electricity Plan, norms / guidelines of Central Electricity Authority (CEA) regarding planning and implementation of the projects;

- standard procedures for award of contract with reference to principles of economy, efficiency and effectiveness;

- targets fixed for generation of power ;

- parameters fixed for plant availability, Plant Load Factor (PLF) etc;

- comparison with best performers in the regions / all India averages;

- prescribed norms for planned outages; and

[3] **Repairs Maintenance/Life Extension.**

- Acts relating to Environmental laws.

Financial Position and Working Results

3.10 The financial position of the Board for the four years ending 31 March 2009 was as given below.

(` in crore)

Particulars	2005-06	2006-07	2007-08	2008-09
A. Liabilities				
Paid up Capital	1553.00	1553.00	1553.00	1553.00
Reserves and Surplus (including capital grants but excluding depreciation reserve)	3091.41	3536.11	4055.27	4683.59
Borrowings (Loan Funds)				
Secured	3713.62	2498.52	1856.72	1100.36
Unsecured	…	…	…	…
Current Liabilities & Provisions	5018.79	3422.82	3812.35	4472.61
Total	**13376.82**	**11010.45**	**11277.34**	**11809.56**
B. Assets				
Gross Block	7711.62	8216.85	8684.56	9249.12
Less: Depreciation	2664.28	3070.27	3489.36	3924.10
Net Fixed Assets	5047.34	5146.58	5195.20	5325.02
Capital works in progress	1152.26	1184.48	1090.49	1171.12
Investments	16.52	16.48	16.48	25.80
Current Assets Loans and Advances*	7160.70	3060.61	3772.87	4085.32
Accumulated Losses				
Miscellaneous Expenditure	…	1602.30	1202.30	1202.30
Total	**13376.82**	**11010.45**	**11277.34**	**11809.56**

**Includes regulatory asset during the four years 2005-09 and intangible asset (` 0.69 crore) in 2008-09.*

The Board's financial position during 2005-2009 showed improving trend due to:

(i) Reduction in system losses, improvement in revenue assessment and collection consequent to replacement of faulty meters / static meters with electronic meters, effective anti theft activities and partial revision in tariff during 2007-08;

(ii) Swapping of high cost loans; and

(iii) Good storage of water in the hydel reservoirs except during 2008-09. Consequent increase in cash flow also enabled reduction in long term borrowings with higher interest burden.

The 'reserves and surplus' position shown in the balance sheet was, after adjusting subsidy / regulatory asset representing revenue gap (for the purpose of meeting Central Electricity Regulatory Commission's (CERC) stipulation of 14 *per cent* return on equity). The revenue gap so adjusted, however, got reduced from ` 144.56 crore in 2005-06 to ` 91.28 crore in 2007-08, but increased to

` 749.17 crore during 2008-09 due to increased power purchase necessitated by failure of monsoon.

The debt equity ratio of the Board varied from 2.39:1 during 2005-06 to 0.71:1 during 2008-09 as a result of repayment of high cost loans, equity remaining constant.

3.11 The Board did not keep activity-wise accounts of income and expenditure and therefore, the statement below has been prepared adopting expenditure figures apportioned to 'Generation activity' (ie., whole expenses of Generation Wing plus allocated finance charges[4]) and, in the same way apportioning gross revenue in the ratio of expenditure allocated to each activity. The details of working results like cost of generation of electricity, revenue realisation, net surplus / loss and earnings and cost per unit of operation are given below:

Cost of generation of electricity vis-à-vis revenue realisation of Generation Profit Centre

ϒ ***Information not available***

[4] **Basis of allocation not on record.**

Sl No	Description	2005-06	2006-07	2007-08	2008-09
		(` in crore)			
1	Income				
	Revenue	626.96	447.34	627.31	718.54
	Other income including interest/subsidy	0.92	1.18	0.66	3.89
	Total Income	627.88	448.52	627.97	722.43
2	Generation				
	Total Generation (in MUs)	7600.78	7745.78	8703.55	6494.50
	Less: Auxiliary Consumption (in MUs)	46.42	50.67	55.86	54.06
	Total generation available for Transmission and Distribution (in MUs)	7554.36	7695.11	8647.69	6440.44
3	Expenditure				
(a)	Fixed Cost				
(i)	Employees Cost (less expenditure capitalised)	35.41	32.22	31.49	48.89
(ii)	Administrative and General Expenses	3.77	4.98	5.29	5.28
(iii)	Depreciation	139.02	145.64	110.08	110.48
(iv)	Interest and Finance charges (net)[5]	196.09	0.02	0.01	0.03
	Total fixed cost	374.29	182.86	146.87	164.68
(b)	Variable cost				
(i)	Fuel consumption				
	(a) Coal				
	(b) Oil	51.09	111.53	195.73	414.59
	(c) Gas				
	(d) Naphtha				
	(e) Other fuel related cost including shortages / surplus				
(ii)	Cost of water (hydel/thermal/gas/others)				
(iii)	Lubricants and consumables	0.21	0.30	0.24	0.37
(iv)	Repairs and maintenance	9.31	5.12	7.02	14.92
	Total variable cost	60.61	116.95	202.99	429.88
(c)	Total cost 3(a)+3(b)	434.90	299.81	349.86	594.56
4	Realisation (per unit) `	0.831	0.583	0.726	1.122
5	Fixed Cost (per unit) `	0.495	0.238	0.170	0.256
6	Variable cost (per unit) `	0.080	0.152	0.235	0.667
7	Total cost per unit (5+6) `	0.575	0.390	0.405	0.923
8	Contribution (4-6) per unit `	0.751	0.431	0.491	0.455
9	Profit /Loss(-) per unit (4-7) `	0.256	0.193	0.321	0.199

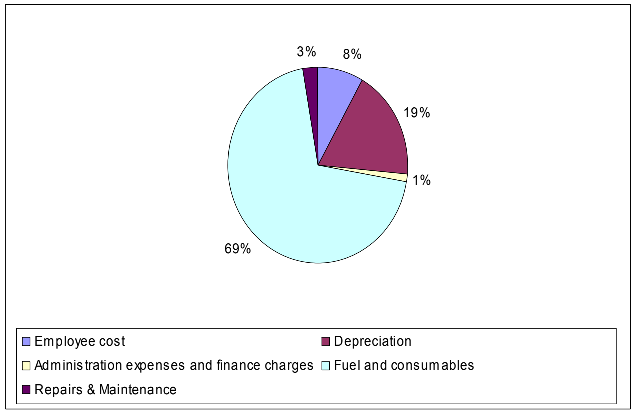
[5] **Basis of allocation not on record.**

The generation activity was marginally profitable during the review period since own generation at normal level could be maintained during most of these years. The reduction in interest and finance charges also significantly contributed to the positive working results.

Elements of Cost

3.12 Fuel for thermal stations and depreciation constituted the major elements of cost for the Generation profit centre. The percentage break up of allocated costs of Generation Profit Centre for 2008-09 is given below in the pie chart.

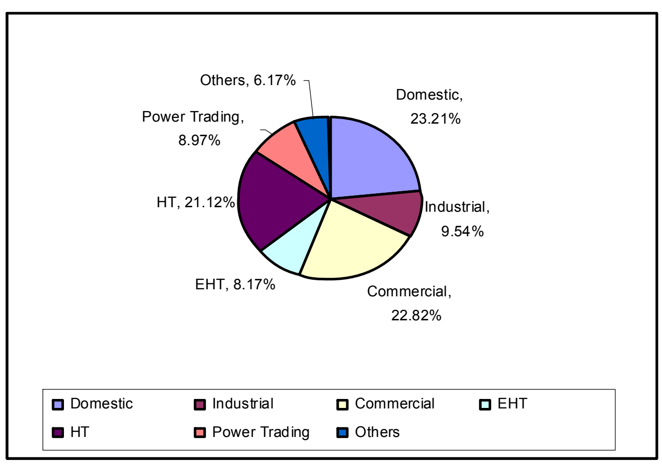
Components of various elements of cost



For the Board as a whole, purchase of power was the major element of cost accounting for 55.69 per cent followed by employee cost (20.46 *per cent*), depreciation (7.08 *per cent*), cost of own generation (6.76 *per cent*) interest and finance charges (5.54 *per cent*) and other operational expenses (4.47 *per cent).*

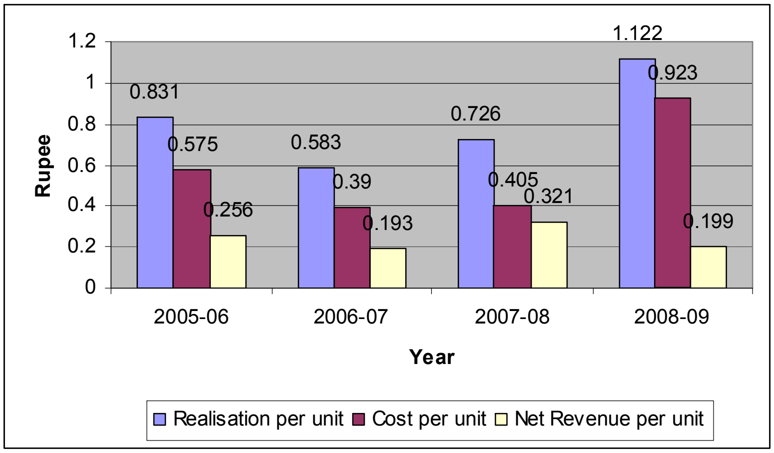
Elements of revenue

3.13 Sale of Power constitutes almost 100 *per cent* of Board's revenue. Segment-wise distribution of revenue was as indicated below:



Recovery of cost of operations

3.14 The revenue realisation covered up the cost during the four years 2005-09. The trends of recovery of cost of operations are shown in the graph given below:-



Audit Findings

3.15 We explained the audit objectives to the Board / Government during an 'entry conference' (March 2010). Subsequently, we reported the findings to the Board and the State Government in July 2010 and discussed in an 'exit conference' (August 2010) which was attended by Principal Secretary to Government of Kerala, Power Department and Special Officer, Kerala State Electricity Board. The Board / Government replied to audit findings in August 2010. The views expressed by them have been considered while finalising this review. The audit findings are discussed below.

Operational Performance

3.16 The operational performance of the Board for the five years ending 2009-10 is given in the ***Annexure 14***. The performance was evaluated on various operational parameters as described below. It was also seen whether the Board was able to maintain pace in terms of capacity addition with the growing demand for power in the State. Audit findings in this regard are discussed in the subsequent paragraphs. These audit findings show that the generation losses were controllable and there was scope for improvement in performance.

Planning

3.17 NEP aims for availability of over 1,000 Units of electricity per capita by 2012, for which it was estimated that need based capacity addition of more than 1,00,000 MW would be required during 2002-2012 in the country. The Government has laid emphasis on the full development of hydro potential being cheaper source of energy as compared to thermal. The Central Government would support the State Government for expeditious development of hydro power projects by offering the services of Central Public Sector Undertakings like NHPC[6] NTPC[7] and NEEPCO[8]. In order to fully meet both energy and peak demand by 2012, there is need to create adequate reserve capacity margin. In addition to enhancing the overall availability of installed capacity to 85 *per cent*, a spinning reserve of at least five *per cent* would need to be created. Besides, environmental concerns would have to be suitably addressed through appropriate advance actions. The power availability in the State indicating own generation, purchase of power, peak demand and net deficit was as under.

3.18 During the period 2005-10, the actual generation in the State was substantially less than the peak as well as average demand as given below:

Year	Generation within the State (MW)	Peak demand (MW)	Average demand (MW)	Percentage of actual generation to average demand	Percentage of actual generation to peak demand
2005-06	1804	2624	2406	74.98	68.75
2006-07	2143	2880	2627	81.58	74.41
2007-08	1864	3020	2666	69.92	61.72
2008-09	1953	2931	2499	78.15	66.63
2009-10	2305	2998	2854	80.76	76.88

As may be seen from the above, the actual generation was only 69.92 to 81.58 *per cent* of the average demand and 61.72 to 76.88 *per cent* of the peak demand. However, the total supply even after import was not sufficient to meet the peak demand, as given below:

Year	Peak demand (MW)	Peak demand met (MW)	Sources of meeting peak demand		Peak deficit (Percentage of peak demand)
			Own (MW)	Import (MW)	
2005-06	2624	2578	1804	774	1.75
2006-07	2880	2742	2143	599	4.79
2007-08	3020	2745	1864	881	9.11
2008-09	2931	2765	1953	812	5.66
2009-10	2998	2998	2305	693	-

Even after import of power, shortfall of power to peak hour demand ranged between 46 to 275 MW.

3.19 There remained a shortfall of 46 to 275 MW (about 1.75 *per cent* to 9.11 *per cent* of the peak demand) even after import except in 2009-10. Consequently rotational (cyclic) load shedding was forced on the populace for 14 days in 2007-08, 278 days in 2008-09 and 17 days in 2009-10. Station-wise shortfall in generation is discussed in paragraphs 3.55 and 3.56 *infra.*

Management stated (August 2010) that all efforts to meet consumer demand were taken and any restrictions imposed were on account of transmission constraints, low inflow, forced outages of machines and maintenance needs of major stations.

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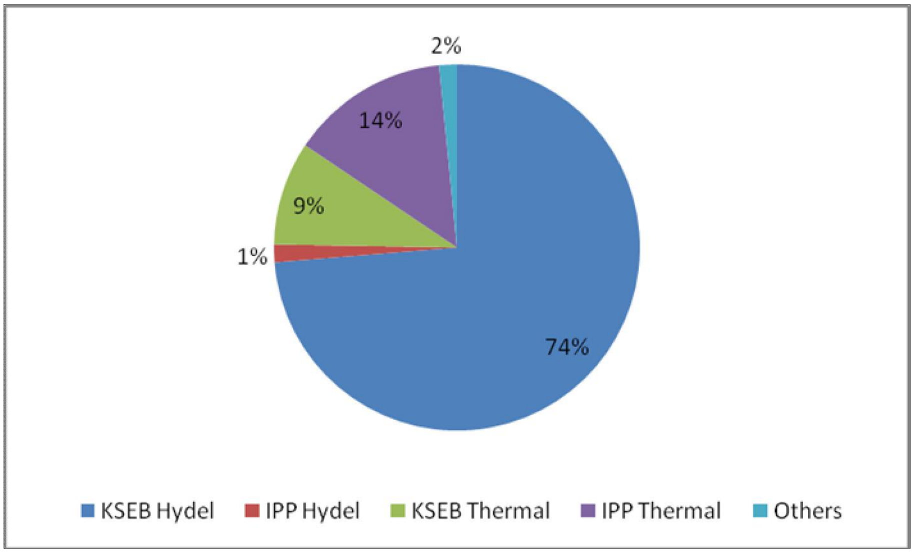
[6] National Hydro Power Corporation Limited.
[7] National Thermal Power Corporation Limited.
[8] North Eastern Electric Power Corporation Limited.

The fact, however, remains that the main reason for load shedding was the capacity constraints of the State to meet the growing electricity demand from own generation.

3.20 This section deals with capacity additions and optimal utilisation of existing facilities.

Capacity Additions

3.21 The State had total effective capacity of 2438.95 MW at the beginning of 2005-06 and increased to 2563.25 MW at the end of 2009-10. The break up of generation capacity as on 31 March 2010, under thermal, hydro, Central, IPP and others is shown in the pie chart below.



3.22 To meet the energy generation requirement of 17200 MUs in the State during 2009-10, a capacity addition of about 2627.37 MW was required during 2005-06 to 2009-10, at the existing plant load factor (PLF).

3.23 The projects categorised as 'Projects under Construction' (PUC) and 'Committed Projects[9] (CP) earmarked for capacity addition during Plan period according to NE Plan are detailed below.

(In MW)

Sector	Thermal	Hydro	Non-conventional Energy	Total (for Plan period)	Additions planned for review period
PUC	…	263[10]	…	263	100
CP	…	140[11]	…	140	...
Total		**403**		**403**	**100**

[9] National Electricity Plan defines Committed Projects as projects for which the formal approval to take up the same has been granted by CEA.
[10] Athirappally (163 MW) and Kuttiady Additional Extension (100 MW).
[11] Pallivasal (60 MW), Mankulam (40 MW) and Thottiyar (40 MW).

3.24 The NE Plan had incorporated only major Hydro Electric Projects (HEPs) as state specific projects and indicated overall national target of 14000 MW for Small Hydro Electric Projects (SHEPs[12]) without identifying them state wise. The Board, in its 11th Plan approach paper, targeted overall capacity addition of 610.15 MW during Plan period which included 20 SHEPs with a total generation potential of 149.15 MW. The Achencoil (30 MW) and Chinnar (28 MW) HEPs, did not form part of 11th Plan targets in the NEP; but were identified as projects earmarked for commissioning during 12th Plan. These projects were however included by Board in 11th Plan itself envisaging capacity addition during 2011-12. Thus, Board's capacity addition plans, to the extent of 403 MW (610.15 – (149.15+58)) only were specifically recognised in NE Plan. The particulars of capacity additions envisaged by KSEB, actual additions and peak demand vis-à-vis energy supplied during review period are given below.

Sl.No	Description	2005-06	2006-07	2007-08	2008-09	2009-10 (Provisional)
1.	Capacity at the beginning of the year (MW)	2047.23	2068.23	2085.73	2090.73	2123.23
2.	Additions Planned for the year as per NE Plan (MW) (11th Plan)				100.00[13]	
3.	Additions planned by the Board (MW)	185.00	200.00	132.50	10.80	41.00
4.	Actual Additions (MW)	21.00	17.50	5.00	32.50	3.25
5.	Capacity at the end of the year (MW) (1 + 4)	2068.23	2085.73	2090.73	2123.23	2126.48
6.	Shortfall in capacity addition (MW) (3-4)	164.00	182.50	127.50	Nil	37.75
7.	Energy requirement (MUs)	13760.00	14549.00	15384.00	16266.00	17200.00
8.	Energy supplied (MUs)	13618.96	14798.06	15375.55	15606.09	17335.58
	a) Energy produced (MUs)	7554.36	7695.11	8647.69	6440.44	7189.52
	b) Energy Purchased (MUs) (net of sale)	6064.60	7102.95	6727.86	9165.65	10146.06
9.	**Surplus(+)/ Shortfall(-) in meeting demand (MUs)**	**(-)141.04**	**(+)249.06**	**(-)8.45**	**(-)659.91**	**(+)135.58**

3.25 The actual capacity addition by KSEB during 2005-10 was 79.25 MW (13.92 *per cent*) (***Annexure 15***) as against 569.30 MW planned, leaving shortfall of 490.05 MW. The State was not in a position to meet the demand as the power generated by Board as well as power purchased fell short to the extent of 8.45 MUs to 659.91 MUs during review period, except for 2006-07 and 2009-10.

We observed that:-

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[12] **Hydel projects with capacity of less than 25 MW.**

[13] **Kuttiyadi Additional Extension Scheme (100 MW) planned for 2008-09 and Athirappally (163 MW), Pallivasal (60 MW), Thottiyar (40 MW) and Mankulam (40 MW) planned for 2010-11.**

- The capacity addition plans of the Board were unrealistic. These were made without adequate preparedness for implementation and before obtaining forest / environmental clearances wherever required, as discussed in paragraphs 3.38 to 3.43. The Ministry of Environment and Forests, GOI had not yet cleared (October 2010) Athirappally HE Project (163 MW) which was the single largest project planned for implementation during 11th Plan period.

  The execution of other three projects included under NE Plan viz., Pallivasal, Mankulam and Thottiyar HEPs also were behind schedule as the Board failed in completing land acquisition process within the projected time frame. Pallivasal Project also encountered material changes in design parameters of water conductor system, due to discrepancies in project investigation. These three projects were bound to spill over to 12th Plan. Out of five projects identified by CEA for capacity addition during 11th Plan, only one Project viz., Kuttiadi Additional Extension – 100 MW (slipped over from 10th Plan) could be commissioned during the plan period, recording only 24.81 *per cent* achievement of specific target (403 MW) fixed for the State in the NE Plan.

- Generation potential of five projects included under the plan proposals was incorrect. The capacity projected was 87 MW as against actual of 67.75 MW.

- Out of 27 projects planned by KSEB for commissioning during 11th Plan, envisaging capacity addition of 610.15 MW, 18 projects with proposed capacity of 367.35 MW (60.21 *per cent*) have not yet been taken up (October 2010) for execution though the Plan period ends by 2012. Based on status of 11th Plan projects (October 2010), actual achievement of capacity addition was only 28.75 MW as against 184.30 MW targeted (only 15.60 *per cent*) for the first three years of the plan period (2007-10). Further, about 60 *per cent* of the projects planned for implementation were run of the river schemes. Generation potential of these schemes is confined to monsoon months, during which power availability position was comfortable and cheaper. Therefore, the effective capacity addition achieved on implementation of these schemes would be very marginal.

- The slow pace of project implementation was attributable to lack of importance given to investigation work. Test check of projects forming part of 11th Plan proposals indicated that their investigation and surveys were commenced during 1980s and 1990s and the time taken for finalisation of DPRs was more than five years on an average as against a normal period of two years envisaged in the NE Plan.

Development of energy from non-conventional (renewable) sources

3.26 The NE Plan emphasised the need for development of maximum energy from renewable sources. The State Planning Board had estimated (2006) the power generation potential from non-conventional / renewable sources in Kerala at 1715 MW. However, the State could tap power generation potential of only 173.925 MW (Small Hydel-133.85 MW, Wind-30.075 MW and Co-generation-10 MW) up to 31 March 2010 of which Board's share was 95.88 MW (Small Hyde-93.85 MW, Wind-2.03 MW). The State Government had also established (January 1986) Agency for Non Conventional Energy and Rural Technology (ANERT) for development of non-conventional energy sources. ANERT approached the Board for setting up a 3.5 – 5 MW demonstration wind farm at Ramakkalmedu on cost sharing basis but Board failed to find out a suitable agency for establishing the project and in the absence of internal know-how also, the proposal was shelved (January 2009).

Optimum utilisation of existing facilities

3.27 In order to cope with the rising demand for power, not only the additional capacity needs to be created, the plan needs to be in place for optimal utilisation of existing facilities and also undertaking life extension programme / replacement of the existing facilities which are near completion of their age besides timely repair / maintenance. The details of the power generating units, which have completed the age of 30-35 years and therefore, fell due for Renovation and Modernisation / Life extension programmes (as per CEA norms) during the five years ending 2009-2010 vis-à-vis actually taken up are indicated in the Table below.

Sl. No.	Name of Station	Unit No	Installed Capacity (MW)	Year of installation	Year of RMU as per CEA norms	Status of RMU works
1	Poringalkuthu	1	8	1957	1992	The RMU works planned in 1992 (cost of ` 9.54 crore) and again in 1996 (cost ` 40 crore) was postponed due to financial constraints. DPR has since been finalised (June 2010) involving investment of ` 68.20 crore for implementation during 11th Plan period (2007-12) as against 2007-08 indicated in the NE Plan. An RMU Division was formed (July 2010) at Poringal to oversee the project works. However, the work is yet to be commenced (August 2010).
		2	8	1958	1993	
		3	8	1959	1994	
		4	8	1960	1995	
2	Sholayar	1	18	1966	2001	The RMU was scheduled for completion in 11th Plan (2007-12) but DPR was under preparation (August 2010).
		2	18	1968	2003	
		3	18	1968	2003	
3	Kuttiady	1	25	1972	2007	A feasibility study was already made and RMU was programmed for 11th plan, so that the work could be taken up after commissioning Kuttiady Additional Extension Scheme (KAES) nearing completion (September 2010).
		2	25	1972	2007	
		3	25	1972	2007	
4	Idukki	1	130	1976	2011	The Board assessed the machines to be giving satisfactory performance and hence RMU works were proposed for commencement during 12th Plan after conducting Residual Life Assessment (RLA) studies.
		2	130	1976	2011	
		3	130	1976	2011	

Sl. No.	Name of Station	Unit No	Installed Capacity (MW)	Year of installation	Year of RMU as per CEA norms	Status of RMU works
5	Idamalayar	1	37.5	1987	2022	RMU works were advanced since both machines developed critical operational problems prematurely during 1990s. Orders were placed (November 2008) with BHEL, scheduling completion by November 2010, at a cost of ` 11.70 crore. Equipment supplies were in progress (August 2010).
		2	37.5	1987	2022	

From the above, it may be seen that none of the 10 units due for Renovation and Modernisation/ Life extension programmes (Sl. No. 1, 2 and 3), were actually taken up as planned.

Management attributed the delay in arranging RMU works to system constraints and delay in selecting the agency for conducting Residual Life Assessment (RLA) study. While system constraint should not be a valid reason for carrying the risk of postponement of RMU works, delay in selection of agency was avoidable through advance planning and action.

The detailed audit observations relating to repair, maintenance and life extension programmes are discussed in succeeding paragraphs.

3.28 We observed that the postponement of RMU works had adverse effects on the performance of the machines. In respect of Poringalkuthu, except for a marginal increase in 2009-10, the hours of operation gradually decreased since 2006-07 and the extent of outages for repairs and maintenance went on increasing from 17.5 *per cent* of scheduled hours in 2005-06 to 28.45 *per cent* in 2008-09 and 23.12 *per cent* in 2009-10.

One or the other machine of the station was under prolonged shut down for periods exceeding three months during the monsoon months[14] of 2007-08 and 2008-09, when the Poringalkuthu reservoir was spilling. We calculate, the consequential generation loss at 14.98 MU with revenue potential worth ` 5.26 crore.

Due to postponement of RMU works, generating machines of Poringalkuthu, Sholayar and Kuttiyadi stations had to be shutdown for long duration. Consequent generation loss amounted to ` 12.60 crore.

3.29 The outages of Sholayar machines were 16.49 to 29.99 *per cent* during 2005-06 to 2008-09 and as a result the operated hours decreased from 16990.87 in 2005-06 to 13536.05 in 2008-09. Machine #3 of the HEP was under forced shut down for six months during 2005-06 due to thrust bearing pad damage. The spillage from the reservoir during this period was 47.2984 Million Cubic Meter (MCM) resulting in generation loss of 20.38 MU with potential revenue worth ` 6.30 crore. The same machine was again under forced shut down for another 62 days during 2006-07 due to the same problem. In November 2009, the machine again encountered stator core blow off and was out of service up to 2 June 2010.

[14] **June-December.**

3.30 Kuttiady machines were also out of service for 2247.08 hours to 6251.13 hours (11.35 to 31.34 *per cent* of scheduled hours) during the four years 2005-09. Machines no. 2 and 3 were under shut down for a period of 36 days (between June 2007 and July 2008) and 29 days (between June 2005 and March 2009) respectively, due to runner damages. Out of 36 days (864 hours) of shut down of machine no 2, for 119 hours during July- August 2007 (spill period) due to runner damages resulted in generation loss of 2.98 MU worth ` 1.04 crore. Machine # 3 was under maintenance shutdown from 11/01/2006 to 27/05/2006 and the repairs of this machine required total shut down of the Station from 11/4/2006 to 22/5/2006.

Repeated occurrence of major break downs indicated the need for urgent renovation and modernisation of these stations, to guard against generation loss of considerable extent.

3.31 The five diesel generating machines of Brahmapuram Diesel Power Plant (BDPP) required repairs and maintenance operations on completion of every 12000 hours of running and the maintenance works needed on completion of every 24000 hours of running was equivalent to complete overhauling costing around ` 3 – 4 crore. In the absence of indigenous know-how, the maintenance/ repair works were being entrusted with the OEM.

While the engines were designed for continuous operation the Diesel Plant was operated only as a peak-load station. Any cold start[15] of the engine was as good as 30 hours of running and therefore, it enhanced the maintenance needs of the machine besides, causing abnormal break down. Hence, scheduled maintenance based on stipulated operational parameters was inevitable and unavoidable for the healthy operation of the plant.

The Table below contains particulars of 24000 hours maintenance works undertaken/ to be undertaken for the machines of BDPP.

Machine No.	Date of commissioning	Hours operated at the time of shut down for overhauling	Date of shutdown for overhauling	Date of starting of overhauling works	Date of re-commission ing after overhauling	Cost of overhauling (` crore)
1	6/5/1997	24722.82	18/10/2007	1/1/2008	21/4/2008	3.23
2	8/8/1997	24748.89	6/2/2004	2/8/2004	18/12/2004	2.28
3	07/10/1997	23937.72	29/5/2009	10/8/2010	Work in progress	4.57 (Estimated)
4	17/12/1997	24751.35	2/2/2009	2/5/2009	1/8/2009	3.21
5	24/11/1998	26113.67	26/8/2010	Not taken up		

In the case of overhauling of four machines (1 to 4), the work of overhauling was started after keeping the machine idle for long durations of three to 14 months due to delay in arranging the work.

[15] **Starting the engine when the jacket water temperature and lube oil temperature are equal to atmospheric temperature is called 'cold start'.**

Management stated (August 2010) that the delay was because of the longer lead time required for arranging supply of imported spares. We are of the opinion that the need for repairs was already known and hence sufficient advance action should have been taken to avoid unnecessary shutdown.

Extra cost on purchase of power due to non-operation of one KDPP machine (April 2005-September 2008) amounted to ` 11.72 crore.

3.32 Maintenance needs of the machines of KDPP were also not attended as per requirement after 12000 hours of operation. Maintenance of machines # 1 to 3 was carried out after operating them for extra hours in the range of 3257 to 5192. Likewise, the 24000 hours maintenance of machine # 5 and 8 was undertaken after running them for extra hours of 7262 and 8787 respectively. The station had effectively operated only seven out of eight machines at a time, keeping one of the machines idle for want of spares. The spares of idling machine were being used in the machines under operation. We observed that the cost of generation at KDPP was always lesser than the price of power imported from NTPC's Kayamkulam Combined Cycle Plant during 2005-09. The extra cost incurred due to non-operation of one of the machines during the period April 2005 to September 2008 (when Kayamkulam power was costlier) amounted to ` 11.72 crore.

The Board maintained (August 2010) that its commitment for availing of bulk supply on round the clock basis from Kayamkulam prevented it from taking advantage of the partial availability from Kozhikode at lesser cost.

We observed that there was no contractual obligation that disabled the Board in limiting drawal of Kayamkulam power to the required level. Further, the Board as a policy scheduled the generation from own power plants based on merit order[16] and resorted to power purchases only when internal generation was costlier.

We are of the opinion that the Board could not achieve the optimum utilisation of available capacity of its hydro as well as thermal projects and lost out on making use of commercial opportunities by delaying decision of undertaking RMU works.

PROJECT MANAGEMENT

Project Formulation

3.33 Preparation of accurate and realistic Draft Project Reports (DPR) is a critical activity in planning stage of the project. Feasibility studies of potential Hydro Electric Projects were made, projects having scope for further investigation were identified and Preliminary Investigation Reports (PIR) were prepared. On its approval by Deputy Chief Engineer, sanction for conducting detailed investigation was given by Chief Engineer, based on which the DPR was prepared.

[16] **Merit Order: System of prioritising generation / purchase of power, based on cost of generation/ cost of import.**

Due to lack of foresight, the Board had to incur wasteful expenditure of ` 3.58 core on 23 abandoned projects.

3.34 We observed that the Board had not standardised any policy guidelines and methodology for selection of projects. Because of this, projects cleared for detailed investigation were abandoned during the course of investigation due to the changes in the ideas of top management. During the period of review, 23 projects under investigation were dropped due to lack of foresight on the part of the Management as the projects involved contentious inter-state issues and acquisition of forest land and only 13 projects were taken up. The wasteful expenditure incurred on the survey and investigation of these abandoned projects amounted to ` 3.58 crore.

3.35 Budgetary controls were not being exercised over investigation activity. Further, no time bound milestones were fixed for completion of each activity of project investigation except in the case of prioritised projects. Due to lack of effective control and monitoring by top management, project investigation was often inordinately delayed. For instance-

- Three projects (Achancoil, Vakkalar and Chilikkalar) in Achancoil river basin were proposed during 1999. It took seven years for completion of investigation of the Project and to finalise (August 2006) the DPR of Achancoil. The DPR of Vakkalar was finalised in December 2007 and of Chilikkalar was yet to be finalised (October 2010).

- Marmala SHEP (4.5 MW) was proposed (September 1997) for implementation with Chinese assistance. Due to conflicting views about the viability of different proposals decision was delayed. Fresh surveys were undertaken and Detailed Investigation Report was finalised only in April 2010 with delay of nearly 10 years.

- The Anakkampoil (7.5 MW), Kandappanchal (3.75 MW) and Pathamkayam (4 MW) projects were separately investigated in the Chaliar river basin (1994 onwards) and project reports prepared in December 2007, February 2008 and June 2008 respectively. All the three schemes were planned for implementation during 11th Plan Period. Later, it was decided (December 2008) that Projects in the same river basin could be developed together for optimum utilisation of head and resources. Investigation of the cluster project has not been completed (August 2010) even after the lapse of 19 months.

- Feasibility studies of Koodam HE Project were conducted during 1999. However, no further action was taken until February 2007 when it was included in the list of schemes to be commissioned before 2011. But the DPR was approved only in December 2009.

- The Vadakkepuzha Diversion Scheme implemented (July 2003) at a cost of ` 2.66 crore contributed additional revenue of ` 13.77 crore by pumping 46.86 MCM of water into Idukki reservoir from Vadakkepuzha reservoir. As second part of Vadakkepuzha Diversion Scheme, a diversion channel from Pothumattom stream was constructed (July 2006) through which additional inflow was obtained in Vadakkepuzha reservoir during monsoon season. The low storage capacity of

Vadakkepuzha reservoir and intermittent failure of pumping operations, however, caused heavy spillages through the overflow path of the temporary bund of the reservoir during every monsoon. Thus the benefit of the scheme was not fully derived. In order to prevent the spillage, a proposal to construct a pipeline from outlet of Pothumattom channel to Idukki reservoir was made (December 2007) based on which a feasibility report was finalised (June 2008) envisaging construction cost of ` 48 lakh with which additional power generation worth ` 51 lakh was achievable every year. Detailed investigation was ordered in June 2009.

We observed that the pipeline scheme was conceivable at the time of construction (July 2006) of diversion channel itself and the avoidable delay of three years (July 2006- June 2009) in finalising the proposal thereto had caused potential revenue loss of ` 1.53 crore (` 51 lakh x 3) already.

- The Pallivasal Extension Scheme (PES) and Sengulam Augmentation Scheme (SAS) targeted for commissioning during 11th Plan were investigated and taken up for implementation prior to 2000-01. With the commissioning of PES (December 2012) and SAS (January 2013) as targeted, the inflow of water would increase by 33.91 M^3/sec[17] into downstream Sengulam Reservoir. As the maximum requirement of water for existing Sengulam Station is only 17.92 M^3/sec and its reservoir was having storage capacity of only 0.7 MCM, the excess inflow into Sengulam Reservoir would result in spillage of water. However, the requirement of capacity enhancement for Sengulam station, along with the PES and SAS was realised by Board only in June 2008. Consequently action was initiated (September 2008) to complete the investigation and implement the Scheme. As per management's projections, time gap between the commissioning of the existing projects and the newly proposed project will be a minimum of two years resulting in generation loss of 348.984 MU of potential value ` 132.61 crore as reckoned on the basis of projected annual generation of the proposed projects.

We observed that the project investigation was not planned at the appropriate time with a view to exploit the maximum potential and optimum utilisation of resources. Further, merits and demerits of different alternatives of project proposals were not collectively examined at the formulation stage and the most feasible option and substantive value addition often emerged during the advanced stages of project.

Management contended (August 2010) that the Board's investigation systems evolved over the last five decades were foolproof and sufficient. We are of the opinion that there exists scope for review and refinement of the system as evidenced by the lapses in investigation detected and reported by Board's own expert committees, in the different cases.

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[17] **PES-13.95 M^3/sec and SAS 19.96 M^3/sec.**

Project Implementation

3.36 Project management includes timely acquisition of land, effective actions to resolve bottlenecks, obtain necessary clearances from authorities, proper scheduling of various activities etc. Time and cost overruns were noticed due to absence of co-ordinating mechanism throughout the implementation of the projects during review period as discussed in succeeding paragraphs.

3.37 The following table indicates the scheduled and actual dates of completion of the power stations, date of commissioning of power stations and the time over run.

Time over run

	Malankara	Lower Meenmutty	Neriamangalam Extension Scheme	Kuttiady Tail Race	Kuttiady Additional Extension Scheme
Time of completion as per DPR	2 years	2 years	2 years	2 years & 9 months	3 years
Date of commencement	December 1999	February 2003	July 2003	February 1990	November 2003
Date of completion	October 2005	March 2006	May 2008	October 2009	Work in progress
Date of commissioning	October 2005	March 2006	May 2008	-do-	Work in progress
Time overrun	47 months	14 months	35 months	17 years	Work in progress

It would be seen from the above that none of the five projects implemented during 2005-10 was completed in time and slippages at various stages of implementation were due to delay in land acquisition, geological surprises, delay on the part of contract agencies in work execution.

The estimated cost of power projects completed during review period, actual expenditure, cost escalation and percentage increase in cost are tabulated below:

	Malankara	Lower Meenmutty	Neriamangalam Extension Scheme	Kuttiady Tail Race
Cost as per DPR (` crore)	41.13	11.26	47.76	17.71
Cost as per contract (` crore)	27.44	12.38	35.06	12.48
Actual cost (Booked till 31.3.09) (Provisional)	33.67	21.33	38.37	14.88
Cost overrun (` crore)	6.23	8.95	3.31	2.40
Percentage increase as compared to contract cost	22.70	72.29	9.44	19.23

There was cost overrun ranging from 9.44 *per cent* to 72.29 *per cent* in respect of completed projects and reasons as analysed in audit were as under:

- Delay in organising the project works.
- Lack of effective controls over work execution.
- Extra cost due to excess inputs.
- Execution of additional items of work.

Delays in land acquisition

The State Government did not review procedure for land acquisition for hydro electric projects despite stipulation in NEP.

3.38 Before tendering of any project construction works, it is imperative that land acquisition should be completed. The Board formulated policy guidelines in this regard only in June 2007. The new policy was also not followed for any of the projects executed thereafter. Consequently, schedule of implementation of projects that involved land acquisition was adversely affected due to delay in acquisition proceedings. The main reasons for the delay were lack of policy guidelines from Government for fixing compensation and the procedural delay on the part of State Revenue / Forest Departments in facilitating the acquisition. Because of this, compensation payable for revenue / forest land under encroachment by private parties could not be decided which delayed the works. Major deficiencies noticed in land acquisition for projects are discussed below.

Decision to acquire land disregarding the tunnel option resulted in loss of energy and cost saving of ` 17.60 crore.

3.39 The Draft Investigation Report of Kuttiadi Additional Extension Scheme (KAES) had indicated the option of tunneling along the penstock route to avoid land acquisition for surface penstock. Yet, the DPR was prepared (1998) incorporating provision for surface penstock, on the ground that steel lined pressure shafts were expensive. The Environmental Management Cell (EMC) of the Board, however, refuted (April / May 1999) this view and supported tunnel option due to reduction in land requirement, minimum energy loss and overall reduction in project cost by ` 17.60 crore. The proposal in project report prevailed upon that in DIR and EMC report and land acquisition process was commenced with, in 1999 which was completed only by October 2006, following disputes over acquisition of 1.65 ha of forest land under encroachment. The dispute had to be resolved by the Board, paying land value of ` 31.16 lakh to Forest Department as well as compensation of ` 10.70 lakh to encroachers. The time overrun in the project work on this account was 34 months. The consequential cost escalation claim (` 12 crore) of project contractors, recommended by Project Manager for settlement at ` 8 crore was under scrutiny of Legal Cell of the Board (May 2010).

The Chairman, KSEB had also observed (January 2008) that the Scheme suffered from improper design of water conductor system, as the adoption of exposed penstock instead of tunnel resulted in considerable delay in land acquisition in most critical section of penstock route causing slippage of schedules.

We observed that the decision to act upon the proposal to construct surface penstock was taken without fully investigating into hurdles and obstacles involved in land acquisition.

3.40 The project works of Pallivasal Extenstion Schme were awarded (January 2007) and the work commenced (March 2007) but the land (9.19 ha) acquisition proceedings were commenced only in April 2007.

The land acquired included 2.4559 ha of Government land encroached by private parties. As the existing rules in Government did not permit payment of compensation for acquisition of non-patta land, the Board had to pay ex- gratia for the same. Thus, the land acquisition cost of the project actually incurred amounted to ` 7.10 crore against ` 75 lakh provided for in the project report. The inordinate delay in the land acquisition caused prolonged interruptions in civil works of the project also.

3.41 When the issue of payment of compensation for non-patta land at Pallivasal became controversial the Board requested Government for approval of similar compensation payments for other ongoing projects in the same or nearby areas viz., Thottiyar, Mankualm, Sengulam Augmentation Scheme, Sengulam Tail Race SHEP and Perumthenaruvi SHEP. Government sanctioned (November 2009) payment of compensation in the form of ex gratia to unauthorised occupants of Government revenue land and forest land[18].

3.42 In respect of Thottiyar project, acquisition proceedings for 26.33 ha of land were commenced in July 2007 but land acquisition was not completed by January 2009 when the project work was commenced. As of March 2010, 4.67 ha of land only could be acquired. Though the forest clearance was received for 3.8 ha of forest land, the same is pending for 1 ha till May 2010. The progress of project (March 2010) was only 0.88 *per cent* during the first 14 months as against the target period of completion of 40 months.

In Mankulam Project, the Board had to face public agitation on the issue of settlement of compensation claims and due to this no progress could be achieved in the execution of the project. In respect of Perumthenaruvi Project, Board could not find out and acquire the required extent of private land for surrender to the Forest Department for compensatory afforestation even after two years' time (August 2008-August 2010) resulting in slippage of equal extent of time in implementation of the project.

For Chathankottunada HE project, the Board granted financial assistance (` 28.97 lakh) in lieu of rehabilitation package to 11 beneficiaries at rates envisaged in the draft Rehabilitation and Resettlement Bill.

Thus, the absence of policy guidelines from State Government or its own common policy framework, the Board had to resort to different terms of settlement for different projects in resolving land acquisition proceedings.

18

Project	Government land	Forest land
Thottiyar HEP	7.753 ha	1.1726 ha
Mankulam HEP	23.96 ha	5.00 ha
Sengulam Augmentation Scheme	3.4876 ha	--
Sengulam Tail Race SHEP	1.4605 ha	--
Perumthenaruvi SHEP	0.417 ha	1.00 ha

Delay in obtaining Forest/ Environmental Clearance

3.43 The procedural delays and uncertainty involved in obtaining Forest/ Environmental Clearances have also upset the project implementation schedules of the Board. As submission of approved DPRs and Environmental Impact Assessment Reports, as the case may be, was a prerequisite for applying for these clearances, lot of manpower costs and other expenses were also borne by the Board without any assurance of getting clearance. The status of 11th Plan projects that required forest / environmental clearances is given in ***Annexure 16.***

As could be seen in the Annexure, non-receipt of forest/ environmental clearance was the major reason for slippage of Athirappally Project from both 10th Plan and 11th Plan and the delay in receipt of forest / environmental clearances had substantially altered the implementation schedules of other projects as well. Apart from the delay in receiving clearances, further delay involved in removal of trees from the transferred areas also contributed to overall time overrun in completion of projects.

Cost/ Time over run due to inadequacies in investigation and designs

3.44 As envisaged in DPR, the tail race channel of Kuttiady Additional Extension Scheme (KAES) with a maximum flow of 21.38 m^3/sec was to discharge into Kakkayam thodu, a stream that flowed from the upper reaches and it required deepening of the stream (discharge capacity 10 m^3/sec) to accommodate the tail water flow. During execution, the diversion of the stream from the upstream level was found necessary due to inverse slope of the tail race pit, great velocity of the flow in the stream, and possibility of accumulation of debris at tail race which may also enter the machine pits of KAES during monsoon.

The Board agreed (August 2010) that decision to divert the stream was taken as a very essential item of work and it was also treated as an extra item of work as per the terms of the agreement necessitating payment (September 2008) of ` 80.54 lakh against the estimated value of work of ` 32.27 lakh, resulting in extra expenditure of ` 48.27 lakh due to omission to incorporate an easily foreseeable item.

3.45 The Kuttiar Diversion Scheme taken up (1991) for implementation envisaged diversion of water from Kuttiar stream to Idukki reservoir for additional power generation. The work involving construction of a concrete weir and unlined diversion tunnel awarded (June 1991) with date of completion by March 1994 at an estimated cost of ` 2.52 crore (based on 1989 Schedule of rates) was terminated (March 2001) due to very slow progress in execution. The contractor sued (2002) the Board against the termination order and rearrangement of work got delayed upto April 2003. A new contractor was awarded the work at a revised estimated cost of ` 8.79 crore (based on 1999 schedule of rates). The works came to a standstill (March 2006) following allegations against sanctioning of several extra items / excess quantities and agitation of local people demanding construction of a motorable bridge across Kuttiar stream. The enquiry conducted by Vigilance Wing of Board brought out lapses in project investigation which did not foresee all the components of project works. This necessitated execution of several extra items of work, costing ` 1.72 crore and excess quantities of work amounting to ` 1.50 crore. The Technical Committee of the Board, which looked into the facts of the case also observed (February 2008) that proper geological exploration was not conducted at detailed investigation stage and the lapses led to revision in designs.

The time overrun of four years and cost overrun of ` 3.22 crore was mainly attributable to deficiencies in project investigation.

Discrepancies in DPR

3.46 The Draft Project Reports are the essential plan documents to visualize and foresee all the fundamental features and requirements of project execution and should contain accurate design parameters of generators, water conveyance systems and power house, failing which the Project was bound to confront unforeseen obstacles during the course of execution. Deficiencies in DPR resulted in substantial time and cost overruns in the case of following projects under execution, as part of the 11th Plan projects.

3.47 A DPR made in October 1994 for setting up a SHEP with installed capacity of 5 MW at Ranni- Perinad (cost ` 8.47 crore) was revised (cost ` 19.94 crore) in September 2004 due to lapse of time and setting up of a SHEP upstream of project location. The project works tendered (September 2005) could not be finalised as only one bidder was prequalified. The work was re-tendered (January 2008) and finally awarded (October 2008) at contract cost of ` 30.84 crore with a completion period of 24 months.

After execution (February 2009) of agreement, the contractor intimated (February 2009) the difference between the 'net head'[19] actually available and that indicated in DPR. Re-examination of data (March 2009) led to refixation (November 2009) of net head and the Board had to agree with the design changes proposed by the contractors. To attain the same, the depth of excavation and size of power house was materially altered. The additional cost on account of excess quantities of work necessitated due to the alteration was estimated (August 2010) at ` 4.99 crore.

Lapses in the preparation of DPR and tendering led to additional civil works resulting in committed extra expenditure of ` 4.99 crore.

The Board replied (August 2010) that no projects can be completed without modification during execution. Moreover, the Board recorded (March 2009) that while considering the rated head, the increase in tail water level during machine operation was not considered.

3.48 The Adyanpara SHEP (3.75 MW) envisaged utilisation of yield of Kanjirampuzha river in Chaliyar basin for power generation. The work was

[19] **Difference in elevation between head water level and tail water level.**

awarded (May 2007) for an estimated cost of ` 21.33 crore which included civil works of ` 11.17 crore stipulating completion date as September 2009.

During execution, several items of extra works were found necessary for successful completion which were left out in the DPR. Following disputes over admissibility of extra items, the contractor discontinued the work in January 2008. The DPR was re-examined by the Board and revised contract amount was estimated at ` 26.18 crore. Further an option for incorporating a tunnel was examined and it was decided (September 2008) to invite separate tenders for tunnel work and to allow existing contractors to complete the rest of the works. Moreover, due to dispute with the contractor over the rates, the Board terminated (August 2009) the work and retendered it at the risk and cost of the contractor. The contractors, approached (August 2009) the Hon'ble High Court of Kerala against the termination order and thereby the project works were held up. Legal proceedings were in progress (August 2010).

Thus, the project planned for completion by October 2009, was still pending due to apparent deficiencies in investigation and design for which responsibility was being fixed by the Board.

Management stated (August 2010) that an enquiry was held (July-December 2008) by Vigilance Wing of the Board to find out the deficiencies in investigation and design of Adyanpara SHEP. Based on the findings in the preliminary report detailed enquiry was ordered (August 2009) to be conducted.

Contract Management

3.49 Contract Management is the process of managing various stages of the contract in an effective, efficient and economic manner. Board had not laid down policy guidelines on benchmark project cost for inviting global tenders / turnkey contracts and on having separate or combined contracts for civil and electromechanical works of hydro electric projects. The projects tendered between 2005-10 were mainly for joint execution of civil and electromechanical parts by consortiums of contractors. The KAES and Athirappally HEP were, however, tendered on 'turnkey basis'.

The Board concluded (August 2009) that the consortium route was less competitive due to the fact that only few parties were interested in consortium formation and the Board may go for separate bidding for civil and electromechanical works. Four project works were tendered using the new route during subsequent period.

We observed ***(Annexure 17)*** that the tender evaluation and finalisation of work order had been a time consuming process in the Board. Test check of 10 projects[20] executed/ planned for execution during the 11th plan disclosed that the time gap between date of tender and date of award of work ranged upto 28

[20] **Lower Meenmutty, Pallivasal Extension Scheme, Neriamangalam Extension Scheme, Ranni- Perinad, Thottiyar, Chathankottunada, Adyanpara, Poozhithode, Vilangad and Peechi.**

months, the average being 13 months mainly due to procedural delay in evaluation of bids and their finalisation at the Board's level.

This delayed award of work is bound to affect the pricing structure of the bids and Board will be always at a disadvantage in getting the price clauses enforced as the cost of construction material is dynamic in present business environment.

3.50 Some of the major observations in respect of contracts test checked in Audit are discussed below.

A compensation claim of ` 6.06 crore was preferred by the Board on Steel Industrials Kerala Limited (SILK) for the generation loss sustained due to delay in attending to the repairs of Malankara machines. Considering the fact that generation loss could not be recovered legally and in the absence of provisions in the agreement besides precarious financial position of SILK, the Government of Kerala directed (November 2009) the Board to drop the demand to which the Board acceded (December 2009).

We observed that SILK had only acted as an intermediary agency and almost all the items of work were arranged on sub contract basis. However, SILK was allowed to arrange repairs by providing unreasonably longer period of time. Despite the poor performance of contract by SILK in Malankara and Peppara HE Project, the Board had since awarded (April 2010) the work of Peechi SHEP to SILK as a consortium leader. The concessions given to SILK by virtue of being a PSU only indirectly aided the private agencies to whom the works were entrusted by SILK.

Non-achievement of Guaranteed Performance

3.51 The Neriamangalam Extension Scheme, envisaged utilisation of excess inflow into Kallarkutty reservoir, that used to spill out causing loss of potential generation. The DPR projected (January 2000) a completion time of two years but the project was awarded (April 2003) allowing completion time of 36 months. The contractors delayed the work execution and therefore, the Board formally extended the completion time initially upto May 2007 and again upto September 2007 subject to levy of penalty. The completion of work was delayed further and therefore, the machine could be synchronised only by July 2008 after a lapse of two years from original scheduled completion as per award of work. The machine developed frequent technical problems that resulted in prolonged outages (July 2008-December 2009) of 7747.40 hours against total available hours of 13176.67 (58.80 *per cent*). This also included 326.35 hours of outage during 2008 monsoon season when there was spillage of water from the dam reservoir. The outages caused generation loss of 164.66 MU (at 85 *per cent* PLF) during monsoon period resulting in irrecoverable loss of ` 3.10 crore.

We observed that the contractors could establish continuous test run of 72 hours and got (September 2008) a provisional acceptance certificate from the Board on condition that all the problems in the machine would be sorted out within 30 days. The contractors, however, did not turn up to rectify the defects and to furnish a performance guarantee. But for the bank guarantee against retention money of ` 5.80 crore, no security was available with the Board to enforce the performance guarantee.

Thus, from above cases, it can be seen that the Board failed to enforce effective action to recover the consequential losses due to delay in completion of work or to obtain the performance guarantee to guard against generation losses which is a normal precondition.

Input Efficiency

Efficiency of fuel procurement systems and fuel efficiency of machines of the two Diesel Generating stations were reviewed in audit and deficiencies noticed in fuel management at these stations are discussed below:

Loss of Generation due to inadequate fuel stock

3.52 Fuel supplies for the thermal stations were obtained from Indian Oil Corporation (BDPP) and Bharat Petroleum Corporation Limited (KDPP) against long term contracts. No stock levels were fixed for fuel stock and procurement was made on the basis of monthly generation plans. Due to unsteady nature of generation plans on account of fluctuations in power prices in open market, the stock levels held, were disproportionately high and low, on different occasions. The depleted stock position of fuel had often adversely affected the power generation by both the stations. For instance, Machine # 2 of BDPP was under shut down for want of fuel from 31/03/07 to 17/05/07. The estimated short generation of power on account of the shut down was 2.75 MU. Similarly, the average generation at KDPP was only 0.2408 MU per day during the period 22/06/09 to 30/06/09 and the monthly average was 0.752 MU/day against the anticipated generation at the rate of 1.5 MU/day.

Shortage of fuel when cost of generation was lower resulted in loss of generation of 20 MU valued at ` 10 crore/ month.

During the year 2009-10 when fuel prices had decreased considerably the cost of BDPP power was cheaper than the purchase price of power by the Board. The station, however, faced acute shortage of fuel due to insufficient supplies from Indian Oil Corporation ie, the average supply was only 3000 MT/month against 8000 MT/month required. As worked out by Board, loss of generation was to the tune of 20 MU /month due to short availability of fuel; equivalent to loss of ` 10 crore per month.

Board stated (August 2010) that the short supplies on above occasions were due to logistical problems of oil companies which had since been overcome.

Consumption of fuel in excess of norms

3.53 The BDPP utilises HSD and LSHS as fuel. HSD was used as start-up fuel and switch over to LSHS was made when the machines attained 35 *per cent* of rated load. The specific fuel consumption norms for LSHS and HSD were 190.03 gm/KWH and 211.99 ml/KWH respectively. Fuel consumption during the five years 2005-10 was in excess of norms for both LSHS and HSD resulting in extra expenditure of ` 20.65 crore ***(Annexure 18)***.

Consumption of fuel in excess of norms in two diesel power plants during 2005-10 resulted in extra expenditure of ` 60.36 crore.

Consumption of LSHS at KDPP was also higher than the norms (194.40 gm/ kwh). Moreover, it showed an increasing trend since 2007-08. As against the consumption rate of 204.27 gm/KWH and 204.01 gm/KWH recorded for the years 2005-06 and 2006-07 respectively, the consumption for the three years from 2007-08 to 2009-10 was in the order of 205.59 gm, 205.83 gm and 206.29 gm respectively per KWH of power generated. The cost of fuel consumed in excess of norms amounted to ` 39.71 crore (***Annexure 18***). The management noted (May 2009) the excess consumption and the Member (Generation) had directed (May 2009) Deputy Chief Engineer, KDPP to examine reasons for low output.

Management stated (August 2010) that fuel consumption standards guaranteed by machine manufacturers was based on theoretical/ laboratory conditions with fuel having specific calorific values. As the fuel available in India was not having the stipulated calorific values, the fuel efficiency tends to decrease. Frequent stops and starts, wear and tear of machines, variations in grid frequency and loss of fuel while filtering were stated as other contributory causes.

Manpower management

3.54 Deployment of staff in the generation wing was made by the Board as per sanctioned strength fixed on conventional basis without reference to actual field requirements on any scientific basis. When compared with sanctioned strength, there was shortage of 366 employees. A need based assessment of staff strength was also made during this period. We, however, noticed that, in certain cadres, there was excess staff strength available in some of the field offices, while shortages in very same cadres were reported from certain other offices indicating avoidable imbalances in staff strength.

The position of actual manpower and man power required as per CEA recommendation, for the four years upto 2009-10 is given below:

Sl. No	Particulars		2006-07	2007-08	2008-09	2009-10
Manpower as per CEA norms (in numbers)						
1	(a)Technical	(i)Thermal	84	84	84	84
		(ii)Hydro	2829	2837	2886	2891
		(iii)Total	2913	2921	2970	2975
	(b)Non-technical	(i)Thermal	40	40	40	40
		(ii)Hydro	481	482	491	491
		(iii)Total	521	522	531	531
	Actual manpower					
2	(a)Technical	(i)Thermal	104	101	105	125
		(ii)Hydro	602	596	668	744
		(iii)Total	706	697	773	869
	(b)Non-technical	(i)Thermal	41	31	26	24
		(ii)Hydro	174	165	166	145
		(iii)Total	215	196	192	169

	Excess(+)/deficit(-)					
3	(a)Technical	(i)Thermal	20	17	21	41
		(ii)Hydro	-2227	-2241	-2218	-2147
	(b)Non-technical	(i)Thermal	1	-9	-14	-16
		(ii)Hydro	-307	-317	-325	-346
4	Expenditure on salaries in Generation activity (` crore)		32.65	31.72	49.1	Not available
5	Excess expenditure on excess manpower in thermal stations (` crore)		0.69	0.59	1.05	Not applicable

Above table shows that men in position was more than the normal strength assessed as per CEA norms in thermal stations and the resultant excess expenditure for the three years up to 2008-09 worked out to ` 2.33 crore.

Rational assessment of man power in hydel stations with reference to norms, was not possible, in view of the fact that the hours of operation varied substantially from station to station in accordance with generation potential and system requirements. Management stated (August 2010) that reorganised staff pattern of Generation Wing was under implementation stage.

Manpower requirements of Civil Wing for project works were not assessed/ reassessed on the basis of works on hand. As number of projects suffered long delay during implementation, the services of officials posted at the project site were underutilised. One such instance noticed in Audit was that of Division III of the Pallivasal project which was assigned with the supervision of the civil work of power house and incurred establishment expense of ` 45.09 lakh (2008-09) accounting for 34.40 *per cent* of the value of works (` 1.31 crore) carried out. Similarly, a full fledged project office was in existence since 1999 for 10 years for the Athirappally Project which is yet to be started (August 2010) for want of final clearance from Ministry of Environment. The average establishment cost incurred at the Division was ` 89 lakh per annum.

Management stated (August 2010) that the staff strength was also deployed for managing the litigation related jobs and also for investigation of Anakkayam HEP. Our findings from cost benefit angle indicated that the need of a full fledged office at project site for all these years was not there for the above jobs which were of relatively recent origin.

Output Efficiency

Shortfall in generation

3.55 The targets for generation of power for hydel stations for each year were fixed by the Board and approved by the CEA. The targets were fixed based on the estimated power potential from the average inflow for the previous ten-year period. As the actual generation potential solely depended upon the inflow received during the year, variations were expected to occur due to vagaries of monsoon. Thus, favourable variations were recorded during 2005-08 and shortfall from targets during 2008-10 when targets were fixed at a higher level as given below.

Year	Target (MU)	Actual (MU)	Variation (MU)
2005-06	5444	7413.30	(+)1969.30
2006-07	6292	7496.60	(+)1204.60
2007-08	6749	8327.28	(+)1578.28
2008-09	7008	5839.26	(-)1168.74
2009-10	6769	6646.27	(-)122.73

3.56 The year-wise details of energy to be generated as per design, actual generation, plant load factor (PLF) as per design and actual plant load factor in respect of 23 power projects commissioned up to March 2010 are as given in ***Annexure 19.***

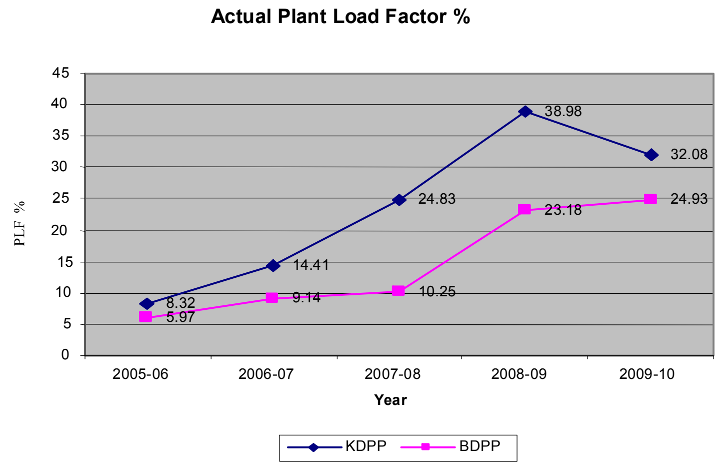
It could be seen from the Annexure that the actual generation and actual PLF achieved were higher than the targets as per design only in respect of Kuttiyadi and Neriamangalam stations during the entire period of 2005-10.

- The designed output of Kakkad was 50 MW and the actual maximum delivery was only 41 MW because of high pressure or head loss occurred in the pressure shaft and tunnel, due to design deficiencies of the water conducting system.
- The Malankara station also could not achieve the designed output on combined operation of its machines as there was capacity limitation for the water intake pipe to the turbine unit laid by Irrigation Department, due to design deficiency.

The Board is on record pointing to design deficiencies in above projects. Reasons for short generation at Pallivasal HEP are discussed in paragraph 3.67.

Low Plant Load Factor (PLF)

3.57 Plant Load Factor (PLF) refers to the ratio between the actual generation and the maximum possible generation at installed capacity. According to norms fixed by Central Electricity Regulatory Commission (CERC), the PLF for thermal power generating stations (TS) should be 80 *per cent*, against which the national average ranged from 73.70 to 78.60 *per cent* during the review period. The PLF of the two thermal power stations of the Board was as depicted in the following line graph:



The PLF of these stations was relatively very low since they were being operated as peak load stations for reasons of economy.

3.58 The details of maximum possible generation at installed capacity, actual generation and corresponding Plant Load Factor achieved in respect of each of the hydel generating units for the five years 2005-10 are given in ***Annexure 19***. The reasons for the low PLF, as observed in audit were:

- Low plant availability.
- Low capacity utilisation.
- Major shut downs and delays in repairs and maintenance.

These are discussed in the following paragraphs

Management also attributed (August 2010) the low PLF to substantial variations in demand during peak and off peak hours due to peculiar nature of system load in Kerala Power Grid, which necessitated installation of high capacity machines without having round the clock requirement of full capacity utilisation.

Low plant availability

As against the CERC norm of 80 per cent, plant availability of 13 major HEPs, 11 SHEPs and two Thermal Stations during the years 2005-10 was 76.36, 37.16 and 46.47 per cent respectively.

3.59 Plant availability means the ratio of actual hours operated to maximum possible hours available during certain period. As against the CERC norm of 80 *per cent* plant availability during 2004 – 2009 and 85 *per cent* during 2010 – 2014, the average plant availability of power stations of the Board was 76.36 *per cent* for 13 major HEPs, 37.16 *per cent* for 11 SHEPs and 46.47 *per cent* for two TS during the five years 2005-10 as given below.

Table I – Major HEPs

Particulars	2005-06	2006-07	2007-08	2008-09	2009-10	Period Total
Total Hours Available	327014.25	333888.58	331314.83	309756.28	313049.81	1615023.75
Operated Hours	258682.53	263152.95	261010.30	205418.79	244932.73	1233197.30
Planned S/d (in hrs)	55858.47	60247.99	54677.60	61483.42	50604.74	282872.22
Forced S/d (in hrs)	12473.25	10487.64	15626.93	42854.07	17512.34	98954.23
Availability Factor	79.10	78.81	78.78	66.32	78.24	76.36

Table II – SHEPs

Particulars	2005-06	2006-07	2007-08	2008-09	2009-10	Period Total
Total Hours Available	139043.73	167595.00	169884.35	211738.72	217667.19	905928.99
Operated Hours	57452.60	73217.57	70505.97	70824.80	64635.11	336636.05
Planned S/d (in hrs)	1787.68	9146.57	39190.55	32445.92	47309.50	129880.22
Forced S/d (in hrs)	79803.45	85230.86	60187.83	108468.00	105722.58	439412.72
Availability Factor	41.32	43.69	41.50	33.45	29.69	37.16

Table III – Thermal Stations

Particulars	2005-06	2006-07	2007-08	2008-09	2009-10	Period Total
Total Hours Available	39245.57	40133.54	61695.95	81177.87	74938.23	297191.16
Operated Hours	9827.07	16371.57	25644.22	45397.08	40878.10	138118.04
Planned S/d (in hrs)	19934.07	17270.00	18633.25	20035.42	19706.73	95579.47
Forced S/d (in hrs)	9484.43	6491.97	17418.48	15745.37	14353.40	63493.65
Availability Factor	25.04	40.79	41.57	55.92	54.55	46.47

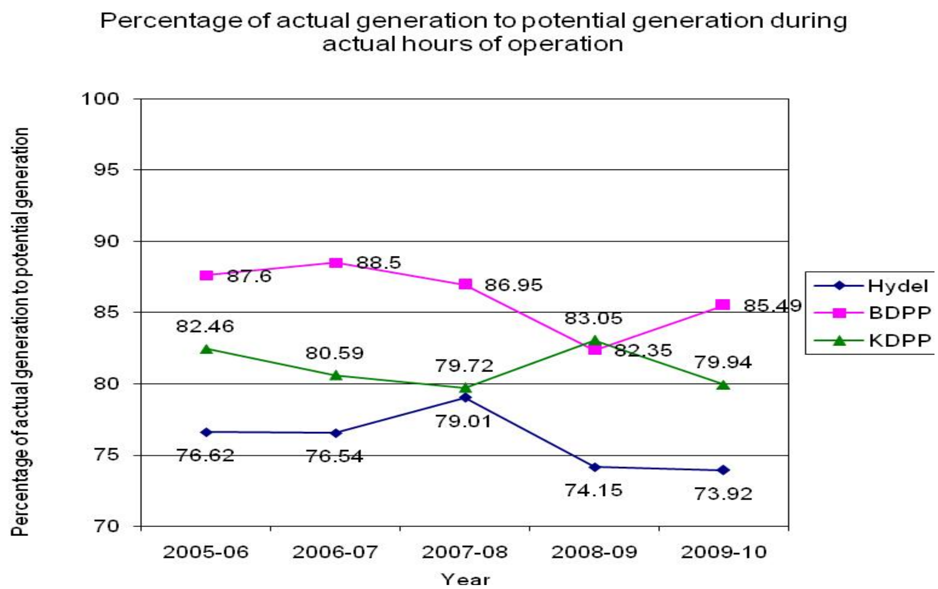
We observed that:

- Low plant availability at major HEPs was due to longer durations of outages caused by penstock accident at Panniar, explosion of machine #4 at Moozhiyar and prolonged spells of repairs and maintenance (including RMU at Neriamangalam and Moozhiyar) due to age factor.
- Lower machine availability at SHEPs was due to technical snags of machines as well as water conductor systems.
- Plant availability of thermal stations was very low due to postponement of repairs and maintenance due to cost considerations.

The Board stated (August 2010) that generation from thermal stations is decided based on requirements after considering all other sources.

Low Capacity Utilisation

3.60 Capacity utilisation means the ratio of actual generation to possible generation during actual hours of operation. Based on national average PLF of 76.50 *per cent* and plant availability at 80 to 85 *per cent,* the standard capacity utilisation factor works out to 90.30 *per cent* for thermal and 85.97 *per cent* for hydel. We observed that 11.50 to 20.28 *per cent* of the installed capacity of Thermal Stations and 20.99 to 26.08 *per cent* of the installed capacity of Hydel Stations remained unutilised. The percentage of actual generation to potential generation during actual hours of operation is given in the following line graph.



We observed that the following were the main reasons for the low utilisation of available capacity during 2005-10:-

- Running of units with partial load.
- Reduction in output at Pallivasal, Kakkad and Malankara HEPs due to limitations in water conductor system.

- Capacity limitations of hydel reservoirs, and low storage position in years of poor monsoons.
- Operation of Idukki HEP machines at reduced loads to maintain flexibility in the system.
- Decline in efficiency of BDPP machines.

Outages

3.61 Outages refer to the period for which the plant remained closed for attending planned/ forced maintenance. We observed:

- In respect of major HEPs, the total number of hours lost due to planned outages varied between 50604.74 hours and 61483.42 hours per annum during the review period i.e., between 16.17 *per cent* and 19.85 *per cent* of total available hours. Planned outages of SHEPs widely varied between 1.29 *per cent* and 23.07 *per cent* of available hours. The relatively higher levels of outages were attributable to age factor necessitating increased maintenance requirements for major HEPs and teething troubles of newly commissioned SHEPs.
- The forced outages of major HEPs during 2005-10 were in the range of 12473.25 hours (2005-06) to 42854.07 hours (2008-09) and varied between 3.81 *per cent* and 13.83 *per cent* of available hours. In the case of SHEPs, forced outages were in the range of 35.43 *per cent* (2007-08)

to 57.39 *per cent* (2005-06) of available hours. These outages were mainly because of accidents at Panniar and Moozhiyar HEPs and deficiency of water for small HEPs most of which were run of the river projects.

3.62 None of the ten independent SHEPs have given satisfactory performance, due to non-stabilisation of operation of the machines as well as water conductor systems. The output of these stations was substantially lower than the potential output envisaged in the Project Report, for all the five years (2005-10), resulting in overall shortfall of 195.42 MU.

3.63 The planned and forced outages of the two Thermal Stations ranged from 24.68 *per cent* to 50.79 *per cent* and 16.18 *per cent* to 28.23 *per cent* respectively during 2005-10 as shown below. The reason for the outages was non-availability of spares, as and when needed.

Particulars	2005-06	2006-07	2007-08	2008-09	2009-10
Total machine hours available	39245.57	40133.54	61695.95	81177.87	74938.23
Planned Outages (in hours)	19934.07 (50.79)	17270.00 (43.03)	18633.25 (30.20)	20035.42 (24.68)	19706.73 (26.30)
Forced Outages (in hours)	9484.43 (24.17)	6491.97 (16.18)	17418.48 (28.23)	15745.37 (19.40)	14353.40 (19.15)

Management stated (August 2010) that spares for the machines were not being stocked in consideration of the high cost involved. Considering the generation loss consequent to non-availability of critical spares in time, the reply furnished was not adequately convincing. The Board may consider undertaking a periodical exercise to replenish stock of spares considering cost benefit effects.

Auxiliary consumption of power

3.64 Energy consumed by power stations themselves for running their equipments and common services is called auxiliary consumption. CEA has fixed an auxiliary consumption norm of 0.50 *per cent* of generation for hydel stations and 3 *per cent* for thermal stations (combined cycle type) against which the auxiliary consumption of the Board for the five years 2005-10 was as given below:-

	2005-06	**2006-07**	**2007-08**	**2008-09**	**2009-10**
Hydel Stations	0.41	0.44	0.42	0.46	0.32
Thermal Stations	4.35	3.43	2.89	2.63	2.93

Auxiliary consumption at Madupetty, Panniar and Sholayar stations was not metered for the last few years and was, therefore, accounted on estimated basis. The auxiliary consumption at TS was higher than norms during 2005-07 since the levels of generation operation was very low during that period.

Repairs & Maintenance

3.65 To ensure long term sustainable levels of performance, it is important to adhere to periodic maintenance schedules. The efficiency and availability of equipment is dependent on the strict adherence to annual maintenance (A/M) and equipment overhauling schedules. Non-adherence to schedule carries a risk of the equipment consuming more fuel oil and a higher risk of forced outages which necessitate undertaking R&M works. These factors lead to increase in the cost of power generation due to reduced availability of equipments which affect the total power generated.

Schedules of A/M of power stations were fixed by the Board and each of the machines was shutdown for maintenance after obtaining prior permission. The schedules were drawn in line with the specific generation policy for each station. Accordingly, preventive maintenance of machines of Stations having storage reservoir was undertaken during monsoon months and the maintenance of run of the river projects planned for summer months. The normally permitted time for A/M was 15 days to one month for different machines. However, deviations from set schedules were noticed on account of unexpected outages of other machines at same or other stations, breakdowns during unscheduled periods and other system constraints. We noticed:

- The average time taken for annual maintenance of renovated machines (6 Nos) of Pallivasal Station ranged up to 36 days against the stipulated time of 15 days. Similarly, the duration of annual maintenance of Sengulam machines was 34 to 52 days against normal time of 30 days. The time taken was higher in view of the fact that all the machines had undergone RMU works during the year 2000- 02.

- The A/M of machines of Neriamangalam and Sabarigiri Stations, recommissioned during 2005-09, was not properly carried out after recommissioning. Time gap of 15 to 23 months was observed in arranging the A/M of these machines after completion of RMU works (***Annexure 20***). No reasons were on record for the long time gap in A/M efforts.

- A/M of Idamalayar machines was also carried out inconsistently. The time gap between two maintenances of machine# 1 ranged between five months to 14 months and for machine #2 between eight months to 17 months during 2005-10. The changes in schedules were mostly on account of forced shut down necessitated due to technical snags before the due dates of A/M.

- The A/M of Sholayar machines was also undertaken at irregular intervals. The A/M of machine # 1 was not carried out from August 2006 to January 2008. The actual duration of A/M of unit #3 was 45 days on an average for the three years upto 2009-10.

- The average duration of A/M of Poringalkuthu machines was also in the range of 33 to 43 days due to high rate of maintenance needs.

Post Renovation & Modernisation Status

3.66 Renovation, Modernisation and Uprating (RMU) works of hydel stations were to be planned when the life of the existing units crossed 30 to 35 years, as per CEA Guidelines. The RMU works involved identification of the problems of units, preparation of techno economic viability reports, preparation of detailed project reports (DPR) to lay down benefits to be achieved from these works.

3.67 We observed :-

- The renovation and modernisation work of the Pallivasal station carried out (2000-02) envisaged replacement and upgradation of existing plant for increase in the station output. On renovation (June 2002) the machines, however, were giving an output of only 32.50 MW on combined operation as against the rated output of 37.50 MW, although the units were giving rated output when operated individually. The Board attributed the short performance to the fact that the water conductor systems (60 years old) that carry water from storage reservoir to power station were not renovated along with the machines. Loss of generation (2005-09) on account of this was 58.925 MU of potential revenue worth ` 18.21 crore at 85 *per cent* rated capacity. Further, the runner buckets of Units 4, 5 and 6 replaced by the RMU contractors had been frequently developing pits and cracks, ever since recommissioning (2002). Apart from getting the runners repaired at the cost of RMU contractors during guarantee period (2002 to 2005), no effective action to evolve a lasting solution to the problem, was insisted by Board before settling their accounts. The Board suffered a loss of ` 3.86 crore on account of generation loss due to machine outages for want of serviceable runner during the review period. Action for procurement of a spare runner costing ` 94 lakh was initiated (August 2010) by Management to overcome the problem.

- When machine availability is critical during the monsoon period, RMU works of Neriamangalam Machine 2 and 3 were undertaken in 2005-06 and 2006-07 respectively. The loss of generation was 82.18 MU of potential worth ` 25.83 crore. Though the time required for RMU works was 6 – 8 months, the works could not be carried out during non-monsoon period due to delay in commencement of work and consequent non-completion of works within the stipulated time.

- RMU works of all the 6 machines of Sabarigiri station were carried out by M/s VA Tech Austria between the period July 2003 to December 2009. There was time overrun ranging between 126 days and 616 days for six machines which adversely affected the generation plan of the Board. The quality of works carried out was also unsatisfactory.

Machine #5, recommissioned (May 2006) after RMU had to be shut down (July 2006) for 127 days following an accident. Machine No.4 recommissioned in February 2007 exploded in May 2008, resulting in total loss of the unit, major repairs to Unit #3 and partial damages to other Units. Investigation conducted by CEA attributed the cause to manufacturing defects. Board estimated and initiated legal action for recovery of loss of ` 51.10 crore from M/s VA Tech.

Financial Management

3.68 Efficient fund management is a tool for decision making for optimum utilisation of available resources and borrowings at favourable terms at appropriate time. The power sector companies should, therefore, streamline their systems and procedures to ensure that:

- Funds are not invested in idle inventory,
- Outstanding advances are adjusted / recovered promptly,
- Funds are not borrowed in advance of actual need, and
- Swapping high cost debt with low cost debt is availed expeditiously.

The main sources of funds were realisations from sale of power, subsidy from State / Central Governments, loans from State Government/Banks/Financial Institutions (FI) etc. These funds were mainly utilised to meet payment of power purchase bills, debt servicing, employee and administrative costs, and system improvement works of capital and revenue nature.

Details of sources and utilisation of resources on actual basis for the years 2005-06 to 2009-10 are given below:

S.No.	Particulars	2005-06	2006-07	2007-08	2008-09
Sources					
1.	Net Profit/(loss)	101.26	217.42	217.42	217.42
2.	Add: adjustments	498.29	879.89	914.27	108.14
3.	Funds from operations (1+2)	599.55	1097.31	1131.69	325.56
4.	Decrease in working capital	593.43	0.00	0.00	1096.29
5.	Cash deficit (10-(3+4))	0.00	0.00	0.00	0.00
6.	**Total (3+4+5)**	**1192.98**	**1097.31**	**1131.69**	**1421.85**
Utilisation					
7.	Capital expenditure	463.59	514.48	364.88	644.50
8.	Increase in working capital	0.00	56.60	240.29	0.00
9.	Cash surplus (3+4)-(7+8)	729.39	526.23	526.52	777.35
10.	**Total**	**1192.98**	**1097.31**	**1131.69**	**1421.85**

The surplus cash position was mainly on account of reduced levels of capital expenditure as a result of slow progress of targeted project works and absence of new project works.

The Board had been meeting the project fund requirements mainly from internal generations and short term borrowings except in case of term loan (` 158.40 crore) taken for KAES from REC.

Delay in decision making over financial tie-up

3.69 In case of KAES, the lowest offer of M/s. BHEL – L&T Consortium was found (June 2001) acceptable provided the party withdrew their demand for deviations from payment terms of the Board. Even though the withdrawal was communicated (June 2001) by the Consortium, the Board finally decided (August 2003) that the financial package offered carried very high interest rates when compared with the prevailing market rates and interest subsidy under Accelerated Generation and Supply Programme. The contract was finally awarded to BHEL L&T Consortium in August 2003 at the cost of ` 168.28 crore. As a result of the delay of over two years in decision making without valid reason the Board had to allow BHEL – L&T Consortium escalation of 7.5 *per cent* amounting to ` 11.94 crore with consequential delay of two years in completion of the project.

Delay in decision making led to escalation of financing cost to the tune of ` 11.94 crore and delay of two years in completion of project.

Drawal of high interest bearing loan funds without requirement

3.70 A term loan of ` 176 crore from Rural Electrification Corporation (REC) was got sanctioned (March 2005) by Board for KAES, which carried interest at the rate of 8 per annum. with reset option at the end of every three years. The loan was to be availed of on reimbursement basis. REC recovered upfront fee of ` 17.60 lakh from the initial instalment. In September 2008, when an amount of ` 31.07 crore (net of upfront fee) was already drawn, and the rate of interest stood enhanced to 12.75 *per cent* as per reset option, the Board availed of fresh instalment of ` 85.45 crore, when its fund position was quite comfortable to meet the project commitments and the Financial Adviser objected to the drawal on the ground that the rate of interest was quite high. The Board was also keeping its surplus funds in short term deposit bearing interest of only 9.02 to 9.29 *per cent*, all along the period of drawal and utilisation of loan funds. Further instalments of ` 4.30 crore and ` 6.92 crore were also drawn during September 2009 and March 2010 respectively when the internal fund position was still better, and the Financial Adviser did not endorse the proposal for additional drawal. REC turned down (December 2009) request of the Board (November 2009) to short close the loan without prepayment premium in the absence of enabling provisions in contract agreement. Drawal of high interest bearing loan funds without genuine requirement thus resulted in avoidable extra expenditure of ` 2.88 crore for the project implementation.

We also observed that the funding proposals for projects were originated by Planning Wing and the Finance Wing had exercised only limited control or no control at all in the matter of drawal of loan funds for project finance.

Drawal of payments by contractor in excess of due amounts

3.71 The agreements executed with the contract agency that executed RMU works of Sabarigiri Station and the Neriamangalam Extension Project, provided for payments for supplies and services through irrevocable letters of credit(LC). The terms of LC were such that payments were to be released by Bankers against certificates of receipts of materials at site, to be issued by the Board within 21 days and in case the certificates were not issued within the said period the Bankers were at liberty to pay the entire invoice amount as claimed by the contractors.

Majority of the invoices issued by the contractors did not reach the project offices of the Board within the stipulated time of 21 days as a result of which the contractors could obtain full payments against their claims, on expiry of stipulated time. These claims were made by the contractors without making all applicable deductions including statutory deductions and hence there was excess drawal of ` 1.48 crore against 22 passed invoices in the case of Sabarigiri Project and ` 63.84 lakh against 13 invoices for the Neriamangalam Project between the period October 2004 to December 2008.

Adoption of liberal payment terms without safeguarding the financial interests of the Board coupled with inadequacy of internal systems to ensure timely compliance with payment terms in contract agreement resulted in the over payments.

Non-closure of Project Accounts

3.72 Information on actual cost of completion was not forthcoming for any of the projects commissioned during 10^{th} Plan/ 11^{th} Plan. The Account Closing Units functioning at different sites in respect of five[21] projects which were commissioned between April 1987 and October 1999 were not able to finalise and close the project accounts so far (May 2010).

Management stated (August 2010) that closing of accounts was often delayed due to litigation and vigilance enquiries. The reasons attributed were not valid since it was possible to finalise the accounts making adequate provisions and disclosures for issues under litigation / vigilance enquiries.

Higher cost of construction of Small HE Projects

3.73 In accordance with the KSERC (Power Procurement from Renewable Sources) Regulations 2006, a uniform capital cost of ` 4.88 crore per MW could be treated as reasonable for SHEPs. Test check of DPRs of nine[22] SHEPs included in the $11^{th}$ Plan showed that the cost per MW was more than the prescribed limit by ` 0.11 crore to ` 4.35 crore (***Annexure 21***).The causes of variations were not analysed and the Board has no inbuilt system for analysing such issues of the project management.

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[21] **Idamalayar , Madupetty, Poringalkuthu Left Bank Extension Scheme, Kakkad and Lower Periyar.**
[22] **Adyanpara, Sengulam Tail Race, Anakkampoil, Kandappanchal, Chathankottunada II, Perunthenaruvi, Poozhithode, Ranni- Perinad and Barapole,**

Thus Board could not effectively monitor the physical progress of the work through financial controls. Though the financial management of the Board improved during the review period, the internal control systems were not adequately effective.

Tariff Fixation

3.74 In accordance with KSERC (Tariff) Regulations, 2003, the Board was to file before the Commission its Annual Revenue Requirement (ARR) and the Expected Revenue from Charges (ERC) for each financial year not later than four months before commencement of financial year unless revenue gap could be met by any other means. KSERC was to allow tariff revision to bridge the gap in accordance with KSERC (Terms and Conditions of Tariff for Retail Sale of Electricity Regulations, 2004). The status of filing of ARR & ERCs by the Board and their disposal by KSERC for the period under review were as given below:

3.75 KSERC allowed to recover revenue gap of ₹ 904.89 crore out of ₹ 3079.11 crore claimed by the SEB in five ARR applications filed during review period. The reasons for disallowing expenses to be claimed through tariff fixation from customers were as follows:

(a) higher employee cost including terminal benefits should be justified on the basis of production norms;
(b) consumers deposit should be utilised for meeting working capital requirement to control interest on borrowings, depreciation, etc.;
(c) Electricity duty was to be borne by Licensee.

Revenue shortfall of ₹ 239 crore for the period from January 2006 to November 2007 in pursuance of direction of State Government and order of KSERC (January 2006) allowing a rebate of ₹ 0.20 per unit from tariff applicable to domestic and commercial consumers remained unrecovered as State Government declined to release subsidy in monthly instalments to compensate the shortfall as directed by KSERC.

Dam Safety Aspects

3.76 A separate wing named 'Research and Dam Safety Organisation' (RDSO) was in existence in the Board to look after the security and safety of Dams and Power Houses, and to protect the landed properties of Board in Project areas. Scrutiny in audit disclosed the following shortcomings in the functioning of the organisation.

- The Wing had not undertaken research oriented dam safety activities during the period of review for want of adequate manpower.
- Although Dam Break Analysis was a prerequisite to the formation of Emergency Action Plan which was a mandatory exercise for facing any

eventuality of a dam failure, it was not systematically carried out for any of the Dams of the Board. In its absence, documented disaster management systems have not also been put in place. As a result, duties and responsibilities were not properly assigned with field personnel so as to ensure that there was adequate preparedness to take necessary relief/ remedial measures in the event of any calamity/ disaster.

- Safety concerns expressed by Central/State Intelligence/Vigilance Organisations were also not being addressed properly. Adequate security was not provided for Dams and other vital installations and armed security was not provided except for few of the major stations.
- The average value of Dam Safety works executed by the RDSO during 2005-09 was only ` 1.05 crore per annum. Test check disclosed that its employee cost for 2008-09 was ` 3.38 crore which was 320 *per cent* of the annual average value of works executed.

Monitoring by Top Management

3.77 Board had evolved regular monitoring systems through which the top management kept itself informed of the operational and financial performances in broad parameters. State's power position was reviewed in power position meetings held every month at Chief Engineer level, also attended by Board's technical members for generation and transmission. The generation strategy for each month was evolved in these meetings with reference to storage position in Hydel reservoirs. Similar monitoring systems were also existing for monitoring of other operational and financial issues which were also systematically reviewed at the level of Board members through quarterly meetings. Important issues related to project execution were also discussed upon at Board level and collective decisions were taken in consideration of recommendations of field officers.

Conclusions

- **The generation capacity requirement for the State as on 31 March 2010 was assessed at 2998 MW against which the capacity available was only 2563.25 MW. The capacity additions made in the State over a period of five years 2005-10 was only 124.30 MW whereas the growth in demand during the same period was 546 MW.**
- **Capacity addition plans of the Board were unrealistic. As against the addition of 610.15 MW planned for 11th Five Year Plan, the likely addition, as estimated in audit would only be 135.05 MW (22.13 *per cent* of projection).**
- **Out of five projects viz., KAES (100 MW), Athirappally (163 MW), Pallivasal (60 MW), Thottiyar (40 MW) and Mankulam (40 MW) included in the NE Plan towards capacity addition during 11th Plan only the first scheme is being commissioned during the Plan period which actually spilled over from 10th Plan.**
- **Power potential from renewable (non-conventional) sources was not adequately developed by the State, even after obtaining liberal financial assistance from Central Government for different schemes of MNRE.**

The Board could not render any assistance to the designated State Agency (ANERT) formed for the purpose of implementation of its developmental schemes.

- **Forest/ Environmental clearances and acquisition of necessary land were the major hurdles faced by the Board in implementing new power projects. Timely assistance from State Government was not forthcoming in the matter of resolving issues connected with forest clearances and land acquisition.**
- **Capacity constraints and financial problems prevented the Board from undertaking overdue R&M works of its older stations in time. Maintenance needs of Diesel Power Stations were also not properly attended to due to delay in decision making on cost benefit considerations.**
- **RMU works of Pallivasal and Sabarigiri Stations already undertaken were not fully successful.**
- **Deficiencies in contract management also contributed to time and cost overruns.**
- **PLF of thermal power plants of the Board was very low due to curtailed operation. Outages of all the power stations were also high. Performance standards of small hydel projects were low.**
- **The performance results of the small HE projects were discouraging. None of them achieved the generation capacity projected in their DPRs during any of the years of review period.**
- **Decisions on project finance were taken without giving due consideration to the opinion of Finance Wing.**

Recommendations

- **The Board should evolve an action plan on priority basis to expedite the implementation of 11th Plan projects and avoid slippages. Policy guidelines from Government in matters of forest clearances, land acquisition and rehabilitation of people affected by projects would be helpful to the Board in its efforts to meet the targets for capacity addition.**
- **Project investigation systems have to be strengthened by incorporating collective decision making in the initial stages itself to avoid inadequacies in designs and geological surprises at later stages.**
- **The Board should establish proper system for project monitoring enabling the flow of management information to the top management on time to take decisions on project management.**
- **The post implementation technical problems developed in most of the power stations recently established/ renovated made it obvious that the performance standards of contract agencies engaged by the Board were wanting in many respects. This also highlighted the need for more stringent pre-qualification norms while short listing the contract agencies.**
- **Preventive maintenance schedules of the power stations have to be adhered to with more regularity and consistency. Scope for curtailment**

of period of shut down for annual maintenance and possibility of standardisation have to be examined.

- **Cost benefit aspects of operation of Thermal Stations have to be examined more closely with updated and accurate cost data and possibility to optimise the utilisation examined with a view to contain the operational cost.**
- **System of maintenance of project accounts should be strengthened to avoid undue delay in closure of accounts. System of post implementation financial analysis of project expenses has to be introduced. Evaluation of time and cost overruns has also to be systematically carried out and the findings utilised for making more realistic projections in DPRs for future projects.**
- **The Finance Wing should be more actively involved in decision making on project finance.**
- **Deficiencies in Dam Safety – Security Systems have to be remedied on priority basis.**

Chapter IV

4. TRANSACTION AUDIT OBSERVATIONS

Important audit findings emerging from test check of transactions made by the State Government Companies / Corporations have been included in this Chapter.

Government Companies

Kerala State Beverages (Manufacturing & Marketing) Corporation Limited

4.1 Avoidable payment of interest

Failure of the Company in remitting the prescribed amount of advance income tax based on income of the previous 11.5 months as recommended by COPU resulted in avoidable payment of interest of ` 2.95 crore.

As per Section 234 B and C of the Income Tax (IT) Act, 1961, a corporate assessee has to pay 90 *per cent* of the tax in advance when the amount of tax payable exceeds five thousand rupees per annum. The advance tax is payable in four quarterly instalments between June and March months of the corresponding financial year. Failure to pay at least *90 per cent* of the tax in advance by March attracts interest at the rate of one *per cent* per month (section 234 B of the Act ibid). Similarly for failure to pay instalments of advance tax by specified dates, interest is chargeable at the rate of one *per cent* per month (section 234 C of the Act ibid).

The Company is established for the monopoly purchase and sale of Indian Made Foreign Liquor and beer in the State of Kerala and is liable to pay advance tax on its assessed income under the provisions (section 208) of the Act ibid.

The assessed income of the Company, the advance tax payable on such income and the advance tax actually paid during the last three assessment years ended 2007-08 were as follows:

Assessment year	Total income	Tax payable on total income	Advance tax payable[1]	Advance tax paid
	(` in core)			
2005-06	23.48	8.60	7.74	2.92
2006-07	51.34	17.28	15.55	5.10
2007-08	64.42	21.68	19.51	16.93

[1] **90 *per cent* of tax payable**.

The Company could not remit the required amount of advance tax in any of the years and percentage of advance tax actually paid by the Company ranged between 32.80 (2006-07) and 86.78 (2007-2008). The Company was also not diligent in remitting the quarterly instalments of advance income tax as per provisions of section 234 (C) of the IT Act. Consequently, the Company was liable to pay interest of ` 3.93[2] crore under section 234 (B) and 234 (C) of the Income Tax Act. Out of the penal interest of ` 3.93 crore, the Company has remitted (April 2006 - December 2007) ` 2.95 crore along with self-assessment tax. The Company has appealed against the assessment of income tax which was pending (September 2010) decision.

We noticed (May 2010) that the Company had been assessing the quantum of advance tax on the basis of budgeted profit rather than working out approximate income based on income of the previous 11.5 months which had already been recommended by the Committee on Public Undertakings (COPU)[3]. This was mainly because the Company did not have an effective system to monitor monthly / quarterly sales so as to meet statutory obligations. Thus the Company could not assess and remit the required amount of advance tax, thereby necessitating payment of penal interest of ` 2.95 crore.

Government replied (June 2010) that the practice of the Company was to estimate its income based on the income estimated for a year at the beginning of the year and pay advance income tax thereon. Based on Audit observation and compliance with the recommendations, the Company is now computing profit every month and paying advance income tax accordingly**.**

The Company is now paying advance income tax assessing the profit every month, but the fact remained that the Company did not comply with the recommendations (February 2004) of COPU in assessing the income tax and necessitated payment of penal interest during 2005-08.

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Assessment Year	Interest u/s 234 (B)	Interest u/s 234 (C)	Total
	(` in crore)		
2005-06	**0.90**	**0.28**	**1.18**
2006-07	**--**	**1.72**	**1.72**
2007-08	**0.39**	**0.64**	**1.03**
Total			**3.93**

[3] **Recommendations of COPU on para 4.1.2.2 appeared in Report of C&AG (Commercial), Government of Kerala 2000.**

Roads and Bridges Development Corporation of Kerala Limited

4.2 Blocking of funds and unproductive interest

Deficiencies in planning, execution and management of contract for construction of Railway Over Bridges resulted in blocking of funds of ` 31.42 crore besides payment of unproductive interest of ` 13.31 crore and cost overrun of ` 16.17 crore.

The Company is engaged in the construction of highways, over bridges and roads on behalf of the Government of Kerala (GoK) and other Government agencies. The GoK entrusted (April 2000-February 2003) the Company with construction of 50 Railway Over Bridges (ROBs) in lieu of level crossings. Out of this, 19 ROBs were under Memorandum of Understanding (MOU) with Railways and five ROBs were entrusted by the GoK (non-MOU). In the case of MOU works, the entire work (bridge as well as approach road portion) had to be carried out by the Company whereas for non-MOU works approach road portion only had to be carried out by the Company.

The MOU signed between the GoK and Railways, provided that the cost of ROBs will be shared equally between GoK and Railways. The prior approval of the Railways was to be obtained for commencing the Railway portion work and for designs of the ROB.

The Company took up (May 2001-November 2003), the construction of 24 ROBs (19 MOU, 5 non-MOU) and completed (June 2003-June 2009) 15 ROBs (14 MOU, 1 non-MOU) incurring an expenditure of ` 97.65 crore (March 2010) against the estimated cost of ` 59.76 crore resulting in cost overrun of ` 37.89 crore. One[4] ROB was completed in February 2010 and civil work of remaining eight[5] ROBs was yet to be completed (May 2010).

Deficiencies noticed in planning, execution and contract management of nine projects (including one completed in February 2010) are discussed below:

Planning, Execution and Contract Management

The Company did not have a definite plan of action for making available the land required for ROB, awarding of civil work, shifting of utilities, obtaining requisite approval for design and structure of ROB from Railways and other designated authorities. KITCO[6] was appointed as consultants for carrying out the civil works who were responsible for conducting preliminary investigations, preparation of land acquisition and shifting of utilities plan, preparation of drawings, designs and estimates, tendering, cost evaluation of bids and recommendation, supervision of work and checking of bills for passing. Based on the tender evaluation, the civil works were awarded by the Company with a completion period of 12 months. As the completion period of one ROB was

[4] **Nandi Bazaar.**
[5] **Palakkad Town, Ponnuruni, Koratty Angadi, Vallikunnu, Athani, Kadukkamkunnu, Bekal and Pullepady.**
[6] **A joint venture company owned by IDBI, Govt. of Kerala and banks.**

very short, it was the duty of the Company / Government to make available requisite land free of encumbrances before the commencement of work.

We observed (June 2010) inordinate delay by Revenue Department in making available the requisite land. Non-availability of land and hasty decision to award works before acquiring required land (including shifting of electric, telephone and water supply utilities) affected the smooth execution of works. As a consequence of this, three[7] works were retendered and eight[8] works remained incomplete (September 2010). Failure to complete land acquisition proceedings within the allotted time, led to conversion of notifications for land acquisition de nova in two[9] cases. In eight[10] out of nine ROBs, the work was awarded before acquiring land and the delay in acquisition ranged between 15 months to eight years. In the case of three[11] ROBs there was delay in shifting utilities by two to seven years **(*Annexure 22*).**

MOU with Railways invariably stated that no construction activity should be commenced before obtaining sanction from Railways. We observed that there was no effective mechanism to follow up the matter with Railways for getting the necessary approvals in time. In respect of two[12] works there was delay in getting approval from Railways ranging from six to eight years. In the case of four[13] non-MOU works even though the over bridge portion was to be carried out by Railways, the contracts were awarded for works including Railway portion also by oversight resulting in subsequent stoppage of works, abandonment, etc., causing compensation claims and loss of profit. This was due to lack of coordination with Railways for expediting execution of their portion also simultaneously. The work-wise delay, causes of delay and status of work are given in ***Annexure 22.***

Financial Management

The Government issued (April 2000) orders entrusting work of ROBs with the Company on cost sharing basis with Railways and adequate budgetary support was not made available. Therefore, the Company was constrained to avail term loan from HUDCO (` 54 crore) at 13.75 *per cent* and through issue of bonds (` 25 crore) at 12.25 *per cent*. The repayment of the loan was proposed to be met out of contribution from Railways and budgetary support. As the reimbursement from Railways did not come in time due to delayed completion of works and there was no other available source of income, the Government allowed the Company to collect user fee for bridges for a period of 15 years from the date of direct toll collection agreement, in the case of eight incomplete projects. This also did not fructify due to delay in completion of ROBs. The Company was not even able to repay the HUDCO loan and bonds causing additional interest burden.

[7] **Nandi Bazar, Koratty Angadi and Pullepady.**
[8] **Palakkad Town, Ponnurunni, Vallikunnu, Athani, Kadukkamkunnu, Bekal, Koratty Angadi and Pullepady.**
[9] **Vallikkunnu and Palakkad Town.**
[10] **Nandi Bazar, Palakkad Town, Ponnurunni, Koratty Angadi, Athani, Kadukkamkunnu, Bekal and Pullepady.**
[11] **Koratty Angadi, Kadukkamkunnu and Bekal.**
[12] **Nandi Bazar and Koratty Angadi.**
[13] **Athani, Kadukkamkunnu, Bekal and Pullepady.**

Slow progress in implementation of projects resulted in enormous increase in cost of civil works, borrowing cost and overheads. In two cases[14] the Company had to undertake balance works at 156 *per cent* and 140 *per cent* more than original rate involving additional commitment of ` 4.08 crore.

Thus, deficiencies in planning, execution and contract management, absence of effective follow up with Railways and inadequate budgetary support from Government resulted in (March 2009)[15] cost overrun of ` 16.17 crore **(*Annexure 23*)**. As the entire activities were financed through borrowed funds, the progress of work was very poor which resulted in blocking of funds of ` 31.42 crore and unproductive interest of ` 13.31 crore[16] on the nine[17] projects including one project completed in February 2010 (April 2007-March 2010) **(*Annexure 24*).** As a consequence of persistent delays in finalisation of accounts of the Company, receipt of funds from Railways (20 *per cent* of 50 *per cent* share) was also delayed. This delay further compounded by delay in completion of works, the working of the Company was severely affected, resulting in accumulated losses of ` 34.30 crore (March 2009).

Management stated (August 2010) that the woks of ROBs were entrusted to the Company on condition that the funds for land acquisition would be provided by the Government. Since funds for land acquisition were not received and a portion of land was already available, the Company had proceeded with tendering of work on the expectation that balance land could also be acquired as works progressed. Further, due to involvement of several Governmental agencies in land acquisition, shifting of utilities and obtaining approval from Railways, the expected co-ordination could not be achieved. Although there were delays in completion of ROBs, tendering of work before completion of land acquisition when rates were lower, has proved beneficial to the Company.

The reply of the management was contrary to facts since delay in land acquisition has subsequently necessitated retendering and enhancement of rates resulting in time overrun and overall cost overrun of ` 16.17 crore. The management should have ensured the availability of land before inviting tenders for the works. The social cost associated with delayed completion of ROBs was beyond quantification.

We suggest that the Government should evolve a mechanism, on the lines of single window clearance system, for fast track acquisition of land and provision of budgetary support for ROB projects.

The matter was reported to Government (June 2010); its reply is awaited (October 2010).

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[14] Koratty Angadi and Athani.
[15] The Company has not worked out the estimated cost of the ongoing works on completion.
[16] Calculated based on the expenditure incurred upto March 2007.
[17] Nandi Bazar, Palakkad Town, Ponnurunni, Koratty Angadi, Vallikunnu, Athani, Kadukkamkunnu, Bekal and Pullepady.

Kerala State Civil Supplies Corporation Limited

4.3 Undue benefit to private mills

Decision of the Company to allot OMSS wheat to bulk roller flour mills in contravention of GOI directives deprived the targeted population availability of wheat at ` 14.95 per kg which resulted in undue benefit of ` 6.02 crore to private mills.

Government of India (GOI) released (October 2009) 40,660 MT of wheat to Kerala under Open Market Sales Scheme (Domestic)[18] for sale during November to December 2009 with a view to containing rise in food prices. The wheat was released to the State Government at the rate of ` 12957.40 per metric ton (MT) and the Government was to ensure that the retail prices did not exceed ` 14957.40 per MT (release price of ` 12957.40 per MT plus a maximum of ` 2000 per MT towards handling and transportation cost). As per the allotment, State Government was to lift the allocated quantity of wheat from the godowns of Food Corporation of India (FCI) and distribute the same through Government or semi-Government organisations. Besides, the State Government was entitled to sell wheat to small processors (with monthly consumption of wheat upto 30 MT) of wheat.

Kerala State Civil Supplies Corporation Limited (Company) was entrusted with the responsibility of procurement of wheat from FCI. Even though, the Company expressed (11 November 2009) reservations about the marketability of wheat, the entire quantity of 40,660 MT was allotted (November 2009) to the Company for distribution. Following a meeting convened (November 2009) by Secretary, Food and Commissioner of Civil Supplies, the Company was directed (November 2009) to sell the wheat to willing merchants after charging 50 paise per kilo gram towards administrative overheads. Accordingly, the Company invited (November 2009) expression of interest from private mills and based on response the entire wheat was allotted to 68 private mills in six districts at the rate of `13592[19] per MT. The quantity of allotment ranged between 10 MT to 5500 MT. All the private mills remitted the full amount for the entire quantity allotted up front and the Company in turn remitted the price of 35,550 MT wheat to the FCI. FCI began issue of wheat under OMSS from 30 November 2009. The private mills lifted (November – December 2009) 23541 MT of wheat when the FCI stopped (9 December 2009) further release of wheat on the ground that the Company had flouted the GOI directive by allotting OMSS wheat to bulk roller flour mills.

We noticed (December 2009) that the release of wheat under OMSS was primarily intended to be distributed among retail consumers. The Company, however, under the guise of allotment of OMSS wheat to 68 retail merchants,

[18] Government of India introduced the Open Market Sales Scheme (Domestic) [OMSS(D)] for wheat with effect from October 1993. The main objectives of conducting OMSS by FCI was to contain and control inflationary tendencies in the economy, generate storage space in the surplus States to enable FCI to accommodate freshly procured food grains etc.

[19] `12957. 40 / MT plus ` 500 towards handling charge of the Company and VAT there on.

had allotted the entire quantity to bulk consumers (roller flour mills) at subsidised rate applicable to retail supply. As per GOI directives, allotment of wheat under OMSS (D) to bulk consumers ought to have been priced at ` 16032.10[20] per MT instead of ` 13457.40[21] per MT actually charged.

This act of the Company to allot OMSS wheat in bulk to roller flour mills in contravention of GOI directives deprived of the targeted population availability of wheat at ` 14.95 per kg which resulted in undue benefit of ` 6.02[22] crore on 23380.67 MT of OMSS wheat sold to 42 private mills (excluding mills having milling capacity of 30 MT per day) in deviation from the declared objective of the Company.

Government stated (May 2010) that based on the proceedings of Commissioner of Civil Supplies, the Company allotted wheat to bulk consumers, subject to the condition that the wheat will be utilised in Kerala, resulting in increased availability at economical price and reduced cost of wheat to the consumers. The final retail price was to be fixed at issue price plus ` 1.50 per Kg and actual expenses of value addition. The mills were expected to file weekly returns to Director of Civil Supplies / Company giving quantity consumed / sold, selling rate etc. The returns filed by the millers suggest that the wheat has reached the end consumers of Kerala. It was also reported that the Chairman and Managing Director had been directed to recover the amount from those whom the wheat was allotted violating the Government of India guidelines.

On verification of reply of the Government, we observed that the mills were submitting weekly returns indicating quantity of wheat in stock, sold, balance, average selling price of wheat products, viz. maida, sooji, atta, bran flakes, bran fine, etc. Even though, the Department was collecting the returns from the mills regularly, there was no mechanism to watch, whether the wheat products are sold within Kerala. As per stock statements made available by Director of Civil Supplies, in respect of ESSEM Traders, Perinthalmanna to whom 100 MT of wheat was issued, 57.270 MT was seen to be issued to two mills / traders in Coimbatore (Tamil Nadu). Similarly, in respect of PKR Modern Rice Mill, Thenkurrissi, who lifted 1000 MT of wheat, 516.92 MT was sold to Mills outside the State in December 2009. Similar details in respect of other Mills were not available. Further FCI reported (April 2010) to the Secretary, Food and Civil Supplies that as per the daily market prices reported by the State Government there was not much reduction in whole sale / retail price of wheat in Kerala. Therefore, the reply of the Government will not hold good.

Out of the amount deposited by the Company FCI adjusted (July 2010) ` 7.73 crore towards the difference in price in respect of mills who had not lifted allotted quantity in full and ` 7.80 crore was refunded. The differential amount of OMSS (D) amounting to ` 3.07 crore was due from 31 mills which had already lifted entire quantity allotted.

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[20] **As per OMSS scheme for bulk consumers.**
[21] **Excluding VAT.**
[22] **23380.67 MT X (` 16032.10 / MT - ` 13457. 40 / MT).**

As the differential balance amount due from mills has been adjusted by FCI from the advance, the Company is contractually liable to the mills for reimbursing the amount as per the binding agreement by way of expression of interest. The lifting of wheat quota, therefore, did not serve the intended purpose of containing the retail price of wheat in the State and distributed wheat did not reach the intended consumers/retailers.

We suggest that in future when wheat intended for distribution to retail consumers under the OMSS or other GOI scheme is given to Government/ Semi-Government agencies for ultimate distribution, it should be ensured that it is actually reaching the ultimate consumers. The orders of Governments should be followed in right spirit.

The Kerala Minerals and Metals Limited

4.4 Avoidable Expenditure

Failure of the Company to reduce contract demand for power, following the abandonment of expansion project resulted in avoidable expenditure of ` 1.19 crore.

The Company is engaged in production and sale of titanium dioxide pigment (TDP). With a view to enhancing the annual production capacity of TDP from 22000 MT to 100000 MT, the Company took up (2004-2007) implementation of an expansion scheme involving eight projects (in three phases) at a cost of ` 760 crore. The expansion project increased future power requirement and in order to meet this, the Company enhanced (August 2004) the contract demand for power from 12500 KVA (12.5 MVA) to 16000 KVA (16 MVA). An agreement (August 2004) to draw energy at a voltage of 110 KV was also executed with Kerala State Electricity Board (KSEB). According to agreement, the Company was to pay for energy supplied at the EHT tariff for 110 KV consumers at prevailing schedule of tariff issued (November 2007) by Kerala State Electricity Regulatory Commission, the demand charge payable for supply of power at 110 KV was ` 245 per KVA on the highest of recorded maximum demand or 75 *per cent* of the contract demand.

In the Report of the Comptroller and Auditor General of India (Commercial) for the year ended 31 March 2009 it was reported *(paragraph 4.1)* that the Company had shelved[23] (February 2007, March 2008) the expansion project due to enormous escalation in cost and had incurred a wasteful expenditure of ` 58.57 crore consequent thereto.

Even though the expansion project was abandoned by March 2008, the Company continued to draw power with a contract demand of 16000 KVA (16 MVA) instead of reverting to 12500 KVA (12.5 MVA). The recorded maximum demand of the Company ranged between 8671 KVA to 11273 KVA during July

[23] **Mineral Separation Plant, Synthetic Rutile Plant, Oxygen Plant and Desalination Plant in February 2007 and four other Projects in March 2008.**

2008 – August 2010 and as a result the Company had been paying demand charges for 75 *per cent* of the contract demand. Consequently, the Company had to incur avoidable expenditure of `1.19 crore from July 2008[24] to August 2010 **(*Annexure 25*).**

We noticed (February 2010) that as per the provisions of the agreement with KSEB, the Company was entitled to decrease the contract demand by giving three month's notice. Despite this, the Company did not reduce the contract demand from 16000 KVA (16 MVA) to 12500 KVA (12.5 MVA), the contract demand prevalent before conceptualisation of the expansion scheme.

This inaction of two years to reduce contract demand for power, following the abandonment of expansion project resulted in avoidable expenditure of ` 1.19 crore.

Management stated (June 2010) that although the Company had requested (April 2010) KSEB for reducing the contract demand to 12.5 MVA, action is yet to be taken by KSEB to reduce the contracted demand. The fact remained that the Company initiated action to reduce the contract demand only at the instance of Audit. No further progress was noticed in getting the contracted demand reduced (September 2010) by the Company.

The matter was reported to Government (May 2010); its reply is awaited (October 2010).

Kerala Transport Development Finance Corporation Limited

4.5 Avoidable expenditure on finance charges

Non-transfer of funds from current account to interest bearing cash credit / overdraft account resulted in loss of an opportunity of saving finance charges amounting to ` 0.68 crore.

The Company was formed with the objective of financing Kerala State Road Transport Corporation and other transport undertakings and operators in Kerala. The Company had been availing credit facility in the form of fund based working capital limit / cash credit (CC) / overdraft (OD) to the extent of ` 45 crore, ` 30 crore and ` 20 crore respectively from SBT[25] (March 2007) State Bank of Hyderabad (July 2006) and DLB[26] (April 2007). The interest rate charged by the banks for the credit availed, ranged between 10.50 *per cent* and 14 *per cent*. The Company during April 2007 to March 2010 paid an aggregate amount of ` 15.64 crore as interest for the CC / OD availed. While availing the facility of CC / OD at the above interest rates, the Company was also operating

[24] Calculated based on the application for reduction in contract demand (April 2010) and 3 months' notice period required as per agreement.
[25] State Bank of Travancore (SBT).
[26] Dhanalakshmi Bank Limited (DLB).

current accounts with different branches of six[27] banks without fetching any interest on the balances held.

As per statements of transactions of the banks, the Company held balances in all the current accounts and the monthly minimum balance held during the period April 2007 to February 2010 ranged between ` 0.73 crore and ` 4.06 crore.

The Company, however, failed to monitor its funds requirement and balances held in current account vis-à-vis CC / OD accounts on a daily basis and reduce finance charges through transfer of funds from non-interest-fetching current account to interest-bearing CC / OD account. Had directions been given by the Company to transfer balance above minimum required balances in these non-interest fetching current accounts to CC / OD accounts of the respective banks, there would have been a minimum saving of finance charges amounting to ` 0.68 crore[28] (April 2007- March 2010).

The inadequate monitoring of the fund requirements and non-transfer of funds from current accounts to interest bearing CC/ OD accounts in six banks resulted in loss of opportunity of saving finance charges amounting to ` 0.68 crore (***Annexure 26***).

Management stated (July 2010) that the standing instructions had been given to all banks to automatically transfer the amount lying in respective current accounts over and above minimum balance fixed daily to cash credit account effective from 21/06/2010. Government endorsed (August 2010) the views of management.

Kerala State Backward Classes Development Corporation Limited

4.6 Avoidable committed liability

Failure of the Company to register as a Service Tax Assessee and consequent non-collection / non-remittance of Service Tax on processing fee collected from loanees resulted in avoidable committed liability for Service Tax and interest amounting to ` 0.39 crore.

The Company was formed (1995) with the main objective to promote comprehensive development of backward classes and minority communities in the State by rendering financial assistance in the form of low cost loans to set up self-employment ventures and to undertake other welfare activities. The Company was registered as a non Banking Financial Company (NBFC) in May 2003 and as per provisions of Section 65(105) (zm) of Finance Act 1994, any service provided or to be provided to any person by a NBFC in relation to banking and other financial service is a ‘taxable service’. Section 65(12) (ix) of

[27] State Bank of Travancore, State Bank of India, Industrial Development Bank of India, Housing Development Finance Corporation, Dhanalakshmi Bank Limited and IndusInd Bank.

[28] Interest has been worked out after allowing a minimum balance of ` 15 lakh in the case of SBT, Vazhuthacaud and ` 5 lakh in the case of other banks.

the Act ibid further provides that banking and other financial service shall include lending. Therefore, taxable portion in a lending transaction would be the documentation charges, processing fees and servicing charges collected from loanees. Failure or delay in remittance of service tax would attract penal interest at the rate of 13 *per cent* per annum. The tax on banking and other financial services was introduced with effect from 16/07/2001.

The Company has been lending money to its beneficiaries after collecting processing fee at the rate of 0.50 *per cent* since October 2000 up to 31 March 2006 and 0.75 *per cent* thereafter on loan disbursed except for micro credit[29]. During 2004-09, the Company has disbursed a total loan of ` 386.08 crore to the beneficiaries and collected processing fee of ` 2.69 crore. The applicable service tax payable on the processing fee thus collected worked out to ` 31.63 lakh.

We noticed (October 2009) that although the Company was liable to pay service tax on processing fees collected from loanees, the Company neither registered itself as a Service Tax Assessee with Central Excise Department nor collected and paid service tax amounting to ` 31.63[30] lakh till August 2010. Thus, failure of the Company to register itself as a Service Tax Assessee and consequent non-collection / non-remittance of Service Tax on processing fee collected from loanees resulted in avoidable committed liability for payment of Service Tax (` 31.63 lakh[31]) and interest (` 7.85 lakh) amounting to ` 39.48 lakh ***(Annexure 27)***.

The Company received (January 2010) a demand notice from Central Excise Department for payment of service tax of ` 30.75 lakh (tentative) on processing fee collected during 2004-05 to 2008-09.

The Government replied (May 2010) that Government of India (GOI) had been approached for exemption of the Company from payment of service tax and the response from GOI is awaited (October 2010).

Malabar Cements Limited

4.7 Avoidable loss

Failure of the Company to accept dry fly ash supplied by a contractor led to stoppage of supply, subsequent encashment of bank guarantee and consequent loss of ` 14.49 crore.

The Company is engaged in the manufacture and sale of ordinary portland / portland pozzolana cement (PC / PPC). Dry fly ash (pozzolanic material) is one of the major raw materials in the manufacture of PPC which can be used (15 to 35 *per cent*) in lieu of costlier clinker. In order to ensure regular supply of dry fly ash, the Company entered into (November 2004) a contract with ARK Wood

[29] **Processing fee at the rate of 0.25 *per cent* of loan amount subject to a maximum of ` 10000/- was collected against micro credit.**
[30] **Worked out for the period April 2004 to March 2009.**
[31] **Calculated @ 13 *per cent* for the period 2004-05 to 2008-09.**

& Metals (P) Ltd. (ARK) Coimbatore for a period of nine years (November 2004 to November 2013). The terms of the contract provided that ARK would supply to the Company an average 600 MTs of dry fly ash daily (15000 MT per month) at ` 130[32] per MT. The base rate of ` 130 per MT was subject to annual increase. In addition maintenance cost, electricity charges, water charges and taxes and duties which at that time were nil were reimbursable by the Company. The fly ash was to be supplied from the silo allotted by Tamil Nadu Electricity Board (TNEB) at their Tuticorin Thermal Power Station (TTPS).

As per the provisions of the contract, ARK was to deposit ` 5 lakh (Demand Draft / Bank Guarantee) as security deposit against non-performance of the contract / premature termination of the contract while the Company reserved the right to premature termination of the contract on payment of compensation of ` 50 lakh to ARK, to be secured by a Bank Guarantee. Accordingly, the Company furnished (December 2004) a bank guarantee for ` 50 lakh and ARK furnished a bank guarantee for ` 5 lakh. The contract, however, did not contain damages clause which could safeguard its financial interest against non-supply of dry fly ash by ARK.

The relationship between the Company and the contractor became strained since August 2006, due to reduction in off take, delay in making payments and withholding of electricity charges (` 11.27 lakh) payable as per the terms of contract. The Company also expressed its reservations to ARK for non-furnishing the split up details of the quantities of dry fly ash lifted by them from TTPS and the electricity required. On the other hand, due to low off take of fly ash by the Company, TNEB reduced (December 2007) the allotment by 50 *per cent*. This caused erratic supply initially and ultimately resulted in non-supply (September 2008) by ARK. However, ARK encashed (September 2008) the bank guarantee of ` 50 lakh furnished by the Company attributing delay in release of payment, lower off take and non-payment of power charges. The Bank debited (December 2008) an amount of ` 52.45 lakh to the account of the Company (` 50 lakh towards bank guarantee plus ` 2.45 lakh towards interest). The Company's complaint (February 2009) before the Banking Ombudsman against the action of the Bank in admitting invocation of bank guarantee by ARK was turned down (March 2009) by the Ombudsman on finding that the action of the Bank was in order. In the absence of supply of dry fly ash by ARK, the Company was forced to source dry fly ash from other suppliers which was inadequate to meet its requirements resulting in a loss of ` 14.13 crore[33] (April 2007- May 2010) due to use of costlier clinker in lieu of fly ash.

We noticed that the Company, failed to accept the quantity offered by the supplier in full since September 2006 and delayed payment to the contractor, which resulted in stoppage of supply by the contractor and subsequent encashment of bank guarantee containing compensation clause favourable to the

32 Service charges (` 60 per MT) + Silo operation and maintenance cost (` 25 per MT) and investment cost and other incidentals (` 45 per MT).

33 Worked out based on the difference between variable cost of clinker and landed cost of dry fly ash. Loss accepted by the company i.e ` 2.61 crore (2007-08), ` 4.57 crore (2008-09), at ` 600 per MT calculated on the total requirement – quantity received from other sources during 2009-10 and 2010-11 (upto May 2010).

contractor, resulting in a loss of ` 36.18 lakh[34]. Consequent to the stoppage of supply of fly ash, the Company had to source the material from other sources, which was inadequate to meet its requirements and resulted in loss of ` 14.13 crore (April 2007-May 2010) due to use of costlier clinker in lieu of dry fly ash. In the absence of provisions in the agreement to recover damages for non-supply of dry fly ash, chances of recovery of loss from the contractor were also remote.

Management replied (March / June 2010) that the Company was immensely benefited by the regular supply of dry fly ash so that the Company had to agree for a disproportionate amount of bank guarantee towards performance of the contract. The reply does not hold good as the bank guarantee included disproportionate compensation clause proved disadvantageous to the Company and the cost of alternate clinker used in absence of supply of fly ash was high leading to huge loss to the Company. Further the Company could not safeguard its financial interest for non-supply of fly ash by ARK.

The matter was reported to Government (May 2010); its reply is awaited (October 2010).

Kerala State Coconut Development Corporation Limited

Inadequate arrangement for safeguarding movable and immovable assets

4.8 The Company, incorporated in October 1975 with the main objective of development of coconut industry by providing technical facilities, became non-functional since 1998 on account of continuous / huge losses. The Company has finalised its accounts up to 1995-96 and as per the latest accounts the Company had total assets of ` 2.97 crore (immovable assets: `1.03 crore; movable assets: ` 0.15 crore and current assets, loans and advances: ` 1.79 crore).

Even though the Company is non-functional it still has to ensure that accounts are maintained and the permanent assets are safeguarded through periodic physical verification, arrangements for watch and ward of the assets, and adequate insurance cover. The deficiencies noticed in this regard are summarised as under:

Inadequate maintenance of asset records

The Company needs to maintain 'assets records` for each of the assets with details of the assets showing their location, original cost, accumulated depreciation, technical and engineering specifications of machinery, identification number, etc. We noticed that the Company did not maintain adequate and up-to-date records depicting these vital information. The original Asset Register was also not available with the Company. As a result, even

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[34] **` 52.45 lakh as reduced by ` 11.27 lakh payable to ARK towards electricity charges and ` 5 lakh held on bank guarantee.**

though the equipments and spares available in the units were physically verified during September 2009, the loss of assets, if any, could not be assessed.

Even though land admeasuring 20.86[35] acres was in possession of the Company as at the end of March 2010, the Company held valid title deed only in respect of 3.59 acres of land (Edappally) and for the rest of the area the Company had only land tax receipts.

Physical verification of assets

As per the policy laid down by the Company, all movable and immovable assets were to be physically verified at least once in a year, by an officer authorised by the Managing Director and the report of discrepancies in the value of assets submitted to the top management for further appropriate action.

We noticed (June 2010) that the Company had conducted physical verification of the assets only once during the period from 2001 to September 2009. Thus, in the absence of earlier records discrepancies and encroachment if any, on the land/building could not be ascertained by the Company.

Disuse of assets

The Company needs to make adequate arrangements for proper maintenance and upkeep of the assets not in use. The Company did not conduct a need based review of the assets so as to decide possible utility of these assets in future or for their timely disposal resulting in theft of 49 items (including 60 HP Expeller Motors – 2 No, 75 HP Expeller Motors – 3 No, Compressor motor – 1 No. etc) from Mammom unit in September 2003. There is also a risk of assets becoming obsolete due to disuse / lack of maintenance.

In view of this, it is recommended that the Company may:

- Maintain complete and up-to-date records of all movable and immovable assets;
- Periodically reconcile the discrepancies in the figures of the assets ;
- Conduct physical verification of assets at regular time intervals;
- Make adequate security arrangements for immovable properties so as to prevent possibilities of encroachments;
- Make adequate arrangement for upkeep / maintenance of disused assets and periodically review the position for their future utility;
- Obtain regular and adequate insurance cover for all the assets against risks;
- Clear back log in finalisation of accounts since 1996-97; and
- Dispose of movable assets valuing ` 0.15 crore.

[35] **Edappally: 3.59 acres, Elathoor:1.48 acres, Thiruvangoor:10.79 acres and Mammom: 5 acres.**

Government/ Management replied (August / June 2010) that the list of movable and immovable assets had been prepared and their physical verification would be conducted as per the laid down policy. Besides, action is being taken for giving adequate insurance coverage for all the assets and adequate arrangements are there to prevent encroachment. The Company has accepted the facts that the original asset register is not available and hence the original cost of the assets, depreciation and technical specifications of machinery etc., cannot be identified.

Thus in the absence of original record of assets, all future exercises would be futile. It has also been appraised that the accounts of the Company upto 2007-08 have been approved by the Board and handed over to the Statutory Auditors for auditing**.**

Statutory Corporations

Kerala State Electricity Board

4.9 Avoidable loss of revenue

Providing incorrect estimated figures of consumptions instead of actuals in respect of EHT / HT / LT consumers for fixation of tariff to KSERC resulted in avoidable loss of revenue of ` 2.52 crore during July 2008-September 2008 and also earned unintended revenue of ` 12.67 crore during October 2008-April 2009.

Based on a petition filed (July 2008) by the Board to overcome the critical power situation prevailing in the State, Kerala State Electricity Regulatory Commission (KSERC) sanctioned (July 2008) restriction of power consumption of HT / EHT consumers with effect from 25 July 2008 to 75 *per cent* on monthly basis, calculated reckoning average monthly consumption from 1 April 2007 to 31 March 2008. Any consumption over and above the quota so fixed shall be charged at the actual cost of additional purchase required, calculated on a monthly basis and rates for additional usage of preceding month should be got approved by the Commission before 5th of each month. It was further clarified (August 2008) by the Commission that cost of power for excess consumption shall be calculated by taking weighted average rate of all stations which provide power in merit order operation[36] (including Unscheduled Interchange (UI) and power purchased from traders). Subsequently, the Commission approved (October 2008) introduction of power restriction to LT consumers also with effect from 15/10/2008 and the restriction on power for both LT and HT / EHT was reduced to 20 *per cent*. The restriction was withdrawn with effect from 1 May 2009.

As the tariff rate for additional consumption was worked out based on weighted average cost of supplies from all thermal power stations received on merit order

[36] **In the order of higher rated purchases from thermal power stations.**

operation, the more the figure of actual consumption given by the Board lesser would be the rate approved by the KSERC and vice versa.

We observed that even though actual figures of consumption by EHT / HT consumers were available, the Board while submitting proposals to KSERC for fixation of rates for consumption in excess of quota adopted estimated consumption by EHT / HT consumers (July 2008-September 2008) which were on the higher side which resulted in revenue loss of ` 2.52 crore (***Annexure 28***).

Board stated (May 2010) that the actual status of excess consumption was known only after raising the invoices for excess consumption. Therefore, the Board proposed to fix the rate for excess consumption based on the estimated figures. It was further stated that rates as per actual figures compiled subsequently, for the period October 2008 to April 2009 were less than the estimates and therefore, Board made excess collection of ` 10.15 crore.

The reply will not hold good, as the actual figures of consumption of EHT / HT consumers was available with the Board at the time of giving monthly proposals to KSERC and estimated figures of monthly excess consumption given to KSERC during the period October 2008 – April 2009, when quota system was applicable to LT consumption, were lesser than actuals, ranging from 4.71 *per cent* to 52.43 *per cent* (excluding April 2009). This resulted in fixation of higher rates than actually required under merit order system, leading to excess collection from EHT / HT (` 5.09 crore) and LT (` 7.58 crore) consumers, amounting to ` 12.67 crore (***Annexure 28 and 29***). The fact remained that adoption of incorrect estimated figures which were lesser to the actual consumption provided to KSERC for EHT / HT / LT consumers (October 2008 – March 2009) resulted in unintended revenue of ` 12.67 crore to Board. Thus, the Board made overall net additional revenue of ` 10.15 crore.

The matter was reported to Government in April 2010; their reply is awaited (September 2010).

4.10 Loss of Savings

Lack of system for ascertaining prevailing market prices and non-synchronisation of fresh tender during the delivery period of additional quantity resulted in loss of savings of ` 1.10 crore.

The terms and conditions of purchase orders for procurement of substation equipments, line material, spares, etc., issued by the Board contained a stipulation that supplier should provide an additional quantity of 25 *per cent* in excess of quantity ordered, at the same rates, terms and conditions if called upon to do so. Purchase orders issued for such additional quantity, stipulated that prices will be refixed if fall in prices occur in the next tender during the delivery schedule fixed for the additional quantities. The intention of the Board in including such a clause was that, in the event of reduction in prices during the scheduled delivery period, the savings should accrue to the Board's account. During test check, we noticed (April 2010) that the Board did not ensure that fresh tenders are invited during the delivery period of additional quantity to avail the benefit of falling prices.

The Board issued 11 purchase orders for additional quantities during 2007-09. In six cases, there was an increase in prices and the same was paid as per the conditions on price specified in the original purchase order. Out of the remaining five cases, where there was reduction in prices the Board could not avail the reduced prices in two cases because the tenders were invited immediately after the period of supply of additional quantities. In three cases although the tenders had been invited during the currency of the delivery period, these were opened only after the delivery period thereby impeding the possibility of refixation of price as indicated below:

Sl No	Purchase order No, date and name of supplier	Material	Date of completion of supply	Date of next tender	Date of opening of tender	Saving forgone (` in lakh)
1	TCM/49/2008-09/1371 dated 4.7.07 Traco Cable Company Ltd, Kochi	ACSR Dog conductor	13 August 2007	20 August 2007	25 January 2008	10.97
2	TCM/69/2008-09/1801 dated 18.7.08 SBEE, Cables India Limited, Bangalore	1100 V Grade control cables of different sizes	1 September 2008	31 October 2008	20 March 2009	39.82
3	TCM/108/2008-09/2570 dated 29.08.2008 Megwin Switchgear (P) Limited, Salem	11 KV 10 panel (4 sets) with spares	27 October 2008	23 September 2008	02 February 2009	18.66
4	TCM/78/2008.09/25750 dated 28.07.08 Areva T&D India Limited, Chennai	110KV, SF6 Circuit Breakers excluding erection &commissioning	3 October 2008	17 September 2008	30 January 2009	28.53
5	TCM 127/2008-09/2863 dated: 15.09.2008 G.R Power Switchgear Limited, Hyderabad	110 KV Insulator with structure	4 January 2009	4 December 2008	15 April 2009	11.59
	Total					**109.57**

The schedule of tendering for next purchase was not synchronized with the delivery of quantity as per the additional order for 25 *per cent* so as to ascertain the prices and invoke the refixation clause; thereby the opportunity for savings amounting to ` 1.10 crore was lost.

Management stated (July 2010) that according to purchase procedure, purchase plan is prepared for a year based on requirements, by preparing a priority list for inviting tenders based on the availability of materials, taking into consideration stock, pipeline quantity, tenders under process and 25 *per cent* additional quantity to be given etc., with the approval of purchase committee. Hence it is practically very difficult to arrange a fresh tender within the delivery schedule of additional quantity in order to make use of the provision for refixation. Government endorsed (August 2010) the views of Management.

The reply will not hold good as the Board had included the provision for refixation of prices, with the intention of making the savings due to reduction in prices, during the intervening period, knowing very well the purchase procedure hitherto followed. In the instant cases, the date of next tender was within seven and 60 days of delivery date in serial numbers 1 and 2 and serial numbers 3 to 5 was within the delivery period. The Board was very well in a position to synchronise the timing of fresh tender with the delivery period of additional quantity in these cases and lost an opportunity for savings amounting to ` 1.10 crore.

We suggest that Board should synchronise their procedure for purchase of additional quantity in such a manner that the benefit of reduction in prices could be reaped.

4.11 Short realisation of electricity charges

Failure to include penal provision for excess consumption in respect of two licensees in the tariff revision proposals submitted to the Kerala State Electricity Regulatory Commission resulted in revenue loss of ` 0.48 crore.

The Kerala State Electricity Board (Board) engaged in the generation / purchase and distribution of power, had to obtain prior approval of the Kerala State Electricity Regulatory Commission (KSERC) for implementing tariff revision in terms of section 61 of The Electricity Act, 2003. The revised tariff shall be applicable to all its consumers superceding all previous tariff regulations / rules and agreements entered into with them by the Board / Government in this respect. Based on the proposal of the Board, KSERC approved (November 2007) tariff revision to all its consumers with effect from 1 December 2007.

As per the tariff notification, the billing demand for High Tension (HT) or Extra High Tension (EHT) consumers shall be the recorded maximum demand for the month or 75 *per cent* of contract demand (as per the agreement) whichever is higher. When the actual maximum demand in a month exceeds the contract demand as per the agreement, the excess demand shall be charged at a rate of 150 *per cent* of the demand charges applicable.

We observed (June 2009) that, there was no provision in the schedule of tariff and conditions for bulk supply to licensees who avail energy through HT or EHT systems at their terminal for charging penal rate for consumption in excess of contract demand. According to the monthly invoices of Board, the power consumption by three licensees viz., Thrissur Municipality (contract demand 8000 KVA), Electricity Department, Pondicherry (contract demand 3300 KVA up to May 2009 and 5500 KVA from June 2009) and Karnataka Electricity

Board[37], Madikery (contract demand 100 KVA) was in excess of their contract demand. The excess consumption of power ranged between 38 KVA and 12626 KVA (Thrissur Municipality) 80 KVA and 2553 KVA (Electricity Department, Pondicherry) and 6 KVA and 139 KVA (Karnataka Electricity Board, Madikery) during December 2007 to September 2009 but was invoiced at normal tariff rates only. This resulted in short collection of electricity charges from two licensees operated from outside the State (Electricity Department, Pondicherry and Karnataka Electricity Board, Madikery) amounting to ` 0.48 crore for the period December 2007 to July 2010 (***Annexure 30***).

Board, in interim reply, stated (June 2009) that penalty will be charged if such a condition is incorporated in the agreement executed between the licensees and the Board. Since the copies of the agreement executed between the licensees and the Board was not available with them as these licensees were old ones, they were not in a position to charge penalty for the demand in excess of contract demand.

The Board has been working on loss and the deficit is treated as Revenue gap / Regulatory asset in its accounts since 2006-07, which should be recovered in a time bound manner. Despite this, the Board did not consider charging penalty for excess consumption by licensees while furnishing tariff revision proposal to KSERC foregoing opportunity to improve its financial position. Further, the preferential treatment of licensees would ultimately result in putting burden on other consumers while implementing tariff revision. KSERC also could not consider this vital issue like in the case of other HT / EHT consumers due to the flawed tariff proposal of the Board.

We suggest that the Government / Board should take necessary action to enter into fresh agreement to abide by the schedule of tariff and terms and conditions for retail supply by KSEB.

The matter was reported to Government / Board (May 2010); their replies are awaited (October 2010).

General

4.12 Follow-up action on Audit Reports

Explanatory notes[38] outstanding

4.12.1 The Audit Reports of the CAG represent the culmination of the process of scrutiny starting with initial inspection of accounts and records maintained in the various Government Companies and Statutory Corporations. It is, therefore, necessary that they elicit appropriate and timely response from the executive**.** Finance Department, Government of Kerala issued (April 2005) instructions to all Administrative Departments to submit explanatory notes indicating a

[37] Now Bangalore Electricity Supply Company Limited.

[38] Explanatory notes refer to the explanations furnished by Administrative Departments to the Legislature Secretariat, on reviews / paragraphs contained in Audit Reports placed before the Legislature.

corrective / remedial action taken or proposed to be taken on paragraphs and reviews included in the Audit Reports within two months of their presentation to the Legislature, without waiting for any notice or call from the Committee on Public Undertakings (COPU).

The Audit Reports for the years up to 2008-09 have been presented to the State Legislature but ten departments did not furnish explanatory notes on 53 out of 138 paragraphs / reviews relating to the Audit Reports for the year 2004-05 to 2008-09 as of September 2010.

Compliance to Reports of Committee on Public Undertakings (COPU) outstanding

4.12.2 As per the Handbook of Instructions for Speedy Settlement of Audit Objections issued by the State Government the replies to paragraphs are required to be furnished within two months from the presentation of the Reports by COPU to the State Legislature. Action Taken Notes (ATNs) to 341 paragraphs pertaining to 89 Reports of the COPU presented to the State Legislature between July 2000 and July 2010 had not been received as of September 2010 as shown below:

Year of the COPU Report	Total number of Reports involved	No. of paragraphs where ATNs not received
1998-2000	2	13
2001	2	6
2001-2004	10	47
2004-2006	18	54
2006-2008	28	118
2008-2011	29	103
Total	**89**	**341**

Response to inspection reports, draft paragraphs and reviews

4.12.3 Audit observations made during audit and not settled on the spot are communicated to the heads of the PSUs and the concerned departments of the State Government through Inspection Reports (IRs). The heads of PSUs are required to furnish replies to the IRs through the respective heads of departments within a period of six weeks. IRs issued up to March 2010 pertaining to 79 PSUs disclosed that 2,212 paragraphs relating to 462 IRs remained outstanding at the end of September 2010. Of these, 53 IRs containing 403 paragraphs had not been replied to for one to four years. Department-wise break-up of IRs and paragraphs outstanding as on 30 September 2010 is given in ***Annexure 31***.

Similarly draft paragraphs and reviews on the working of PSUs are forwarded to the Principal Secretary / Secretary of the administrative department concerned demi-officially seeking confirmation of facts and figures and their comments thereon within a period of six weeks. It was, however, observed that five draft paragraphs and two draft reviews forwarded to various departments during April-July 2010 as detailed in ***Annexure 32*** had not been replied to so far (September 2010).

It is recommended that the Government should ensure that (a) procedure exists for action against the officials who fail to send replies to IRs / draft paragraphs / reviews and ATNs on recommendations of COPU as per the prescribed time schedule, (b) action is taken to recover loss / outstanding advances / overpayment in a time bound schedule, and (c) the system of responding to audit observations is revamped.

Thiruvananthapuram **(K S SUBRAMANIAN)**
The **Accountant General (Civil and Commercial Audit), Kerala**

Countersigned

New Delhi **(VINOD RAI)**
The **Comptroller and Auditor General of India**

Annexure I

Statement showing particulars of up-to-date capital, loans outstanding and manpower as on 31 March 2010 in respect of Government Companies and Statutory Corporations

(Referred to in paragraph 1.7)

(Figures in columns 5 (a) to 6 (d) are ` in crore)

Sl.No.	Sector & Name of the company/ Corporation	Name of the Department	Month and Year of incorporation	Paid-up capital*				Loans** outstanding at the close of 2009-10				Debt equity ratio for 2009-10 (Previous year)	Manpower (No. of employee) (as on 31.3.2010)
				State Government	Central Government	Others	Total	State Government	Central Government	Others	Total		
(1)	(2)	(3)	(4)	5(a)	5(b)	5(c)	5(d)	6 (a)	6(b)	6 (c)	6 (d)	(7)	(8)
A. Working Government Companies													
AGRICULTURE & ALLIED													
1	Kerala Agro-Machinery Corporation Limited (KAMCO)	Agriculture	March 1973	1.61	…	…	1.61	…	…	…	…	…	680
2	Kerala Forest Development Corporation Limited (KFDC)	Forest	January 1975	7.02	0.93	…	7.95	1.19	…	1.15	2.34	0.29:1 (0.32:1)	823
3	Kerala Livestock Development Board Limited (KLDB)	Agriculture	November 1975	7.33	…	….	7.33	…	…	…	…	…	211
4	Kerala State Horticultural Products Development Corporation Limited (Horticorp)	Agriculture	March 1989	6.03	…	…	6.03	…	…	3.50	3.50	0.58:1 (0.59:1)	…
5	Kerala State Poultry Development Corporation Limited (KEPCO)	Animal Husbandry	December 1989	1.97 (1.62)	…	…	1.97 (1.62)	…	…	…	…	…	25

Sl.No.	Sector & Name of the company/ Corporation	Name of the Department	Month and Year of incorporation	Paid-up capital*				Loans** outstanding at the close of 2009-10				Debt equity ratio for 2009-10 (Previous year)	Manpower (No. of employee) (as on 31.3.2010)
				State Government	Central Government	Others	Total	State Government	Central Government	Others	Total		
(1)	(2)	(3)	(4)	5(a)	5(b)	5(c)	5(d)	6 (a)	6(b)	6 (c)	6 (d)	(7)	(8)
6	Meat Products of India Limited (MPIL)	Animal Husbandry	March 1973	1.36	…	0.45	1.81	0.13	0.20	…	0.33	0.18:1 (0.28:1)	91
7	Oil Palm India Limited (OPIL)	Agriculture	November 1977	6.80	4.99	…	11.79	…	…	…	…	…	907
8	The Kerala Agro-Industries Corporation Limited (KAICO)	Agriculture	March 1968	3.05	1.69	….	4.74	5.86	…	0.04	5.90	1.24:1 (1.05:1)	74
9	The Kerala State Cashew Development Corporation Limited (KSCDCL)	Industries	July 1969	200.64 (83.85)	…	…	200.64 (83.85)	170.01	…	…	170.01	0.85:1 (0.81:1)	18874
10	The Kerala State Coir Corporation Limited (KSCCL)	Industries	July 1969	8.05	…	…	8.05	1.43	…	…	1.43	0.18:1 (0.18:1)	177
11	The Plantation Corporation of Kerala Limited (PCKL)	Agriculture	November 1962	5.57	…	…	5.57	…	…	…	…	…	2583
12	The Rehabilitation Plantations Limited (RPL)	Labour and Rehabilitation	May 1976	2.06	1.33	…	3.39	…	…	…	…	…	…
13	The State Farming Corporation of Kerala Limited (SFCK)	Agriculture	April 1972	8.43	…	0.61	9.04	0.22	…	…	0.22	0.02:1 (0.02:1)	936
Sector-wise total				**259.92 (85.47)**	**8.94**	**1.06**	**269.92 (85.47)**	**178.84**	**0.20**	**4.69**	**183.73**	**0.68:1 (0.65:1)**	**25381**
FINANCE													
14	Handicrafts Development Corporation of Kerala Limited (HDCKL)	Industries	November 1968	2.16	0.61	…	2.77	2.17	…	…	2.17	0.78:1 (0.43:1)	…

Sl.No.	Sector & Name of the company/ Corporation	Name of the Department	Month and Year of incorporation	Paid-up capital*				Loans** outstanding at the close of 2009-10				Debt equity ratio for 2009-10 (Previous year)	Manpower (No. of employee) (as on 31.3.2010)
				State Government	Central Government	Others	Total	State Government	Central Government	Others	Total		
(1)	(2)	(3)	(4)	5(a)	5(b)	5(c)	5(d)	6 (a)	6(b)	6 (c)	6 (d)	(7)	(8)
15	Kerala Artisans' Development Corporation Limited (KADCO)	Industries	October 1981	4.07 (2.11)	…	…	4.07 (2.11)	0.51	0.87		1.38	0.34:1 (0.44:1)	19
16	Kerala School Teachers and Non-teaching Staff Welfare Corporation Limited (KSTNSWCL)	General Education	August 1984	0.50	…	…	0.50	…	…	0.31	0.31	0.62:1 (0.62:1)	4
17	Kerala Small Industries Development Corporation Limited (SIDCO)	Industries	November 1975	23.29 (0.20)	…	….	23.29 (0.20)	2.06	….	1.13	3.19	0.14:1 (0.14:1)	517
18	Kerala State Development Corporation for Christian Converts from Scheduled Castes & the Recommended Communities Limited (KSDCCCSCRCL)	SC and ST Development	December 1980	33.19 (3.00)	…	….	33.19 (3.00)	….	…	…	…	…	24
19	Kerala State Development Corporation for Scheduled Castes and Scheduled Tribes Limited (KSDCSCSTL)	SC and ST Development	December 1972	54.36 (5.92)	45.16	….	99.52 (5.92)	…	…	9.28	9.28	0.09 :1 (0.11:1)	150
20	Kerala State Film Development Corporation Limited (KSFDCL)	Cultural Affairs	July 1975	20.82 (0.65)	…	…	20.82 (0.65)	5.07	…	1.37	6.44	0.31:1 (0.32:1)	218
21	Kerala State Handicapped Persons' Welfare Corporation Limited (KSHPWCL)	Social Welfare	September 1979	2.20 (0.20)	…	…	2.20 (0.20)	2.63	…	…	2.63	1.20:1 (1.20:1)	58

Sl.No.	Sector & Name of the company/ Corporation	Name of the Department	Month and Year of incorporation	Paid-up capital*				Loans** outstanding at the close of 2009-10				Debt equity ratio for 2009-10 (Previous year)	Manpower (No. of employee) (as on 31.3.2010)
				State Government	Central Government	Others	Total	State Government	Central Government	Others	Total		
(1)	(2)	(3)	(4)	5(a)	5(b)	5(c)	5(d)	6 (a)	6(b)	6 (c)	6 (d)	(7)	(8)
22	Kerala State Handloom Development Corporation Limited (Hanveev)	Industries	June 1968	18.03	…	0.05	18.08	14.09	…	…	14.09	0.78:1 (0.92:1)	330
23	Kerala State Palmyrah Products Development and Workers' Welfare Corporation Limited (KELPALM)	Industries	November 1985	0.87	…	…	0.87	0.73	…	…	0.73	0.84:1 (0.29:1)	22
24	Kerala State Women's Development Corporation Limited (KSWDCL)	Social Welfare	February 1988	6.58 (0.66)	0.49		7.07 (0.66)	0.05	…	…	0.05	0.01:1 (1.97:1)	37
25	Kerala Transport Development Finance Corporation Limited (KTDFC)	Transport	February 1991	43.83	…	…	43.83	…	….	….	…	…	54
26	Kerala Urban & Rural Development Finance Corporation Limited (KURDFC)	Local Self Government	January 1970	0.51	…	0.45	0.96	3.27	…	….	3.27	3.41:1 (3.24:1)	16
27	The Kerala State Backward Classes Development Corporation Limited (KSBCDC)	SC and ST Development	February 1995	68.96	…	….	68.96	…	…	23.85	23.85	0.35:1 (3.69:1)	250
28	The Kerala State Financial Enterprises Limited (KSFE)	Taxes	November 1969	20.00	….	….	20.00	…	…	…	…	…	…
29	Kerala Venture Capital Fund Private Limited (KVCFPL)	Finance	September 1999	…	…	0.10	0.10	…	…	…	…	…	…

Sl.No.	Sector & Name of the company/ Corporation	Name of the Department	Month and Year of incorporation	Paid-up capital*				Loans** outstanding at the close of 2009-10				Debt equity ratio for 2009-10 (Previous year)	Manpower (No. of employee) (as on 31.3.2010)
				State Government	Central Government	Others	Total	State Government	Central Government	Others	Total		
(1)	(2)	(3)	(4)	5(a)	5(b)	5(c)	5(d)	6 (a)	6(b)	6 (c)	6 (d)	(7)	(8)
30	Kerala Venture Capital Trustee Private Limited (KVCTPL)	Finance	September 1999	…	…	0.01	0.01	…	…	…	…	…	…
Sector-wise total				**299.37 (12.74)**	**46.26**	**0.61**	**346.24 (12.74)**	**30.58**	**0.87**	**35.94**	**67.39**	**0.19:1 (0.91:1)**	**1699**
INFRASTRUCTURE													
31	Kerala Police Housing and Construction Corporation Limited (KPHCCL)	Home	July 1990	0.27	…	…	0.27	….	…	…	0.00	(5.67:1)	…
32	Kerala State Construction Corporation Limited (KSCCL)	Public Works	March 1975	0.88	…	…	0.88	2.05	…	…	2.05	2.33:1 (2.33:1)	156
33	Kerala State Industrial Development Corporation Limited (KSIDC)	Industries	July 1961	301.24 (2.00)	…	…	301.24 (2.00)	1.00	…	4.81	5.81	0.02:1	…
34	Roads and Bridges Development Corporation of Kerala Limited (RBDCK)	Public Works	September 1999	49.43 (40.00)	…	…	49.43 (40.00)	…	…	71.79	71.79	1.45:1 (11.10:1)	…
35	The Kerala Land Development Corporation Limited (KLDCL)	Agriculture	December 1972	6.71	0.34	…	7.05	1.87	…	…	1.87	0.27:1 (0.25:1)	117
36	Kerala State Information Technology Infrastructure Limited (KSITIL)	Information Technology	January 2008	40.10 (15.00)	…	…	40.10 (15.00)	…	…	…	…	…	5

Sl.No.	Sector & Name of the company/ Corporation	Name of the Department	Month and Year of incorporation	Paid-up capital*				Loans** outstanding at the close of 2009-10				Debt equity ratio for 2009-10 (Previous year)	Manpower (No. of employee) (as on 31.3.2010)
				State Government	Central Government	Others	Total	State Government	Central Government	Others	Total		
(1)	(2)	(3)	(4)	5(a)	5(b)	5(c)	5(d)	6 (a)	6(b)	6 (c)	6 (d)	(7)	(8)
37	Kinfra Export Promotion Industrial Parks Limited (KEPIP)	Industries	October 1994	…	…	0.25	0.25	…	…	4.99	4.99	19.96:1 (24.44:1)	
38	Kinfra Film and Video Park (KFVP)	Industries	June 2000	…	…	1.50	1.50	…	…	…	…	…	1
39	Kinfra International Apparel Parks Limited (KIAP)	Industries	August 1995	…	…	0.25	0.25	…	…	…	…	…	6
40	Marine Products Infrastructure Development Corporation Limited (MPIDCL)	Fisheries	March 1999	2.50	2.5	…	5.00	…	…	…	…	…	…
Sector-wise total				**401.13 (57.00)**	**2.84**	**2.00**	**405.97 (57.00)**	**4.92**	**…**	**81.59**	**86.51**	**0.21:1 (0.33:1)**	**285**
MANUFACTURING													
41	Autokast Limited (Autokast)	Industries	May 1984	19.97 (1.00)	…	…	19.97 (1.00)	53.59	…	0.15	53.74	2.69:1 (2.48:1)	270
42	Foam Mattings (India) Limited (FOMIL)	Industries	December 1978	5.15	…	…	5.15	…	…	…	…	…	….
43	Forest Industries (Travancore) Limited (FIT)	Industries	August 1946	0.29	…	0.09	0.38	0.75	…	0.19	0.94	2.47:1 (2.47:1)	100
44	Kanjikode Electronics and Electricals Limited (KEEL)	Industries	March 1996	0.10	…	…	0.10	…	…	…	…	…	20
45	Keltron Component Complex Limited (KCCL)	Industries	October 1974	…	…	5.53	5.53	7.30	0.15	3.86	11.31	2.05:1 (2.05:1)	…
46	Keltron Crystals Limited (KCL) √	Industries	October 1974	…	…	1.34	1.34	…	…	4.00	4.00	2.99:1 (2.99:1)	…

Sl.No.	Sector & Name of the company/ Corporation	Name of the Department	Month and Year of incorporation	Paid-up capital*				Loans** outstanding at the close of 2009-10				Debt equity ratio for 2009-10 (Previous year)	Manpower (No. of employee) (as on 31.3.2010)
				State Government	Central Government	Others	Total	State Government	Central Government	Others	Total		
(1)	(2)	(3)	(4)	5(a)	5(b)	5(c)	5(d)	6 (a)	6(b)	6 (c)	6 (d)	(7)	(8)
47	Keltron Electro Ceramics Limited (KECL)	Industries	April 1974	3.18	…	…	3.18	…	…	1.35	1.35	0.42:1 (0.42:1)	71
48	Keltron Magnetics Limited (KML)√	Industries	March 1975	…	…	0.25	0.25	…	…	…	…	…	…
49	Keltron Resistors Limited (KRL)√	Industries	April 1975	…	…	1.60	1.60	…	…	0.92	0.92	0.58:1 (0.58:1)	…
50	Kerala Automobiles Limited (KAL)	Industries	March 1978	10.23	…	…	10.23	5.49	…	1.95	7.44	0.73:1 (0.50:1)	260
51	Kerala Clays and Ceramic Products Limited (KCCPL)	Industries	June 1984	1.32	…	….	1.32	…	…	…	…	…	307
52	Kerala Electrical and Allied Engineering Company Limited (KEL)	Industries	June 1964	87.15 (18.77)	…	….	87.15 (18.77)	15.81	…	0.29	16.10	0.18:1 (0.23:1)	947
53	Kerala Feeds Limited (KFL)	Animal Husbandry	October 1995	21.09	….	6.32	27.41	…	….	…	…	…	188
54	Kerala State Bamboo Corporation Limited (KSBCL)	Industries	March 1971	7.99 (1.30)	…	…	7.99 (1.30)	5.00	…	4.48	9.48	1.19:1 (0.43:1)	325
55	Kerala State Beverages (Manufacturing and Marketing) Corporation Limited (BEVCO)	Taxes	February 1984	1.03	…	…	1.03	…	…	…	…	…	…
56	Kerala State Drugs and Pharmaceuticals Limited (KSDPL)	Industries	December 1971	17.58 (1.50)	…		17.58 (1.50)	43.79	…	1.74	45.53	2.59:1 (6:1)	211
57	Kerala State Electronics Development Corporation Limited (KELTRON)	Industries	September 1972	115.16 (11.80)	…	….	115.16 (11.80)	154.55	…	…	154.55	1.34:1 (1.26:1)	1279

Sl.No.	Sector & Name of the company/ Corporation	Name of the Department	Month and Year of incorporation	Paid-up capital*				Loans** outstanding at the close of 2009-10				Debt equity ratio for 2009-10 (Previous year)	Manpower (No. of employee) (as on 31.3.2010)
				State Government	Central Government	Others	Total	State Government	Central Government	Others	Total		
(1)	(2)	(3)	(4)	5(a)	5(b)	5(c)	5(d)	6 (a)	6(b)	6 (c)	6 (d)	(7)	(8)
58	Kerala State Mineral Development Corporation Limited (KEMDEL)	Industries	June 1992	1.76	…	…	1.76	…	…	…	…	…	5
59	Kerala State Textile Corporation Limited (KSTCL)	Industries	March 1972	58.22 (39.84)	…	0.25	58.47 (39.84)	4.49	…		4.49	0.08:1 (0.05:1)	760
60	Malabar Cements Limited (MCL)	Industries	April 1978	26.00	…	…	26.00	…	…	…	…	(0.77:1)	957
61	Sitaram Textiles Limited (STL)	Industries	February 1975	5.94	…	….	5.94	15.00	…	0.38	15.38	2.59:1 (2.59:1)	…
62	Steel and Industrial Forgings Limited (SIFL)	Industries	June 1983	15.93	…	…	15.93	3.00	…	0.01	3.01	0.19:1 (0.40:1)	278
63	Steel Complex Limited (SCL)	Industries	December 1969	3.00	…	4.00	7.00	…	…	…	0.00	(7.21:1)	160
64	Steel Industrials Kerala Limited (SILK)	Industries	January 1975	36.56	…	…	36.56	15.20	…	0.95	16.15	0.44:1 (0.83:1)	139
65	The Kerala Ceramics Limited (Kerala Ceramics)	Industries	November 1963	6.07 (5.04)	…	5.14 (4.26)	11.21 (9.30)	10.55	…	0.70	11.25	1:1 (0.21:1)	174
66	The Kerala Minerals and Metals Limited (KMML)	Industries	February1972	30.93	…	…	30.93	….	…	…	…	…	1638
67	The Metal Industries Limited (MIL)	Industries	March 1928	1.87	…	0.07	1.94	1.54	…	0.01	1.55	0.80:1 (0.19:1)	61
68	The Pharmaceutical Corporation (Indian Medicines) Kerala Limited (OUSHADI)	Health	September 1975	12.67 (1.80)	…	…	12.67 (1.80)	…	…	….	…	…	616
69	The Travancore Cements Limited (TCL)	Industries	October 1946	0.26	…	0.24	0.50	1.26	….	…	1.26	2.52:1 (2.52:1)	466

Sl.No.	Sector & Name of the company/ Corporation	Name of the Department	Month and Year of incorporation	Paid-up capital*				Loans** outstanding at the close of 2009-10				Debt equity ratio for 2009-10 (Previous year)	Manpower (No. of employee) (as on 31.3.2010)
				State Government	Central Government	Others	Total	State Government	Central Government	Others	Total		
(1)	(2)	(3)	(4)	5(a)	5(b)	5(c)	5(d)	6 (a)	6(b)	6 (c)	6 (d)	(7)	(8)
70	The Travancore Sugars and Chemicals Limited (TSCL)	Taxes	June 1937	1.01	…	0.30	1.31	0.10	…	0.04	0.14	0.11:1 (0.14:1)	102
71	The Travancore-Cochin Chemicals Limited (TCCL)	Industries	November 1951	16.91	…	4.40	21.31	3.73	…	42.67	46.40	2.18:1 (1.95:1)	721
72	Traco Cable Company Limited (TRACO)	Industries	February 1960	35.87 (23.06)	…	0.20	36.07 (23.06)	8.47	…	…	8.47	0.23:1 (0.42:1)	617
73	Transformers and Electricals Kerala Limited (TELK)	Industries	December 1963	23.45	19.16	0.36	42.97	…	…	…	…	…	779
74	Travancore Titanium Products Limited (TTPL)	Industries	December 1946	9.43 (8.00)	…	0.34	9.77 (8.00)	…	…	38.53	38.53	3.94:1 (25.42:1)	1004
75	United Electrical Industries Limited (UEIL)	Industries	October 1950	3.88	…	0.11	3.99	7.91	…	…	7.91	1.98:1 (1.33:1)	131
76	Malabar Distilleries Limited (MDL)	Taxes	June 2009	0.01	…	…	0.01	…	…	…	…	…	…
Sector-wise total				**580.01 (112.11)**	**19.16**	**30.54 (4.26)**	**629.71 (116.37)**	**357.53**	**0.15**	**102.22**	**459.90**	**0.73:1 (0.89:1)**	**12586**
POWER													
77	Kerala State Power and Infrastructure Finance Corporation Limited (KSPIFCL)	Power	March 1998	15.83	…	10.82	26.65	…	….	….	…	…	10
78	KINESCO Power and Utilities Private Limited (KINESCO)	Industries	September 2008	…	…	0.36 (0.26)	0.36 (0.26)	…	…	…	…	(0.10:1)	2
Sector-wise total				**15.83**	**…**	**11.18 (0.26)**	**27.01 (0.26)**	**…**	**…**	**…**	**…**	**(0.10:1)**	**12**

Sl.No.	Sector & Name of the company/ Corporation	Name of the Department	Month and Year of incorporation	Paid-up capital*				Loans** outstanding at the close of 2009-10				Debt equity ratio for 2009-10 (Previous year)	Manpower (No. of employee) (as on 31.3.2010)
				State Government	Central Government	Others	Total	State Government	Central Government	Others	Total		
(1)	(2)	(3)	(4)	5(a)	5(b)	5(c)	5(d)	6 (a)	6(b)	6 (c)	6 (d)	(7)	(8)
SERVICE													
79	Bekal Resorts Development Corporation Limited (BRDCL)	Tourism	July 1995	47.21 (6.22)	…	…	47.21 (6.22)	….	…	…	…	…	17
80	Indian Institute of Information Technology and Management - Kerala (IIITM-K)	Information Technology	September 2000	NIL∇	…	…	…	…	…	…	…	…	47
81	Kerala Medical Services Corporation Limited (KMSCL)	Health and Family Welfare	December 2007	0.01	…	…	0.01	…	…	…	…	…	83
82	Kerala Shipping and Inland Navigation Corporation Limited (KSINCL)	Coastal Shipping & Inland Navigation	December 1975	27.21 (6.00)	…	0.03	27.24 (6.00)	…	…	…	…	…	221
83	Kerala State Ex-Servicemen Development Rehabilitation Corporation Limited (KEXCON)	General Admn	December 2001	0.50 (0.50)	…	…	0.50 (0.50)	…	…	…	…	…	13
84	Kerala State Industrial Enterprises Limited (KSIE)	Industries	January 1973	1.20	…	…	1.20	…	…	…	…	…	71
85	Kerala State Maritime Development Corporation Limited (KSMDCL)	Fisheries	December 1994	9.60	…	…	9.60	…	…	…	…	…	…

∇ **Share capital is ` 2,000 only.**

Sl.No.	Sector & Name of the company/ Corporation	Name of the Department	Month and Year of incorporation	Paid-up capital*				Loans** outstanding at the close of 2009-10				Debt equity ratio for 2009-10 (Previous year)	Manpower (No. of employee) (as on 31.3.2010)
				State Government	Central Government	Others	Total	State Government	Central Government	Others	Total		
(1)	(2)	(3)	(4)	5(a)	5(b)	5(c)	5(d)	6 (a)	6(b)	6 (c)	6 (d)	(7)	(8)
86	Kerala Tourism Development Corporation Limited (KTDC)	Tourism	December 1965	71.70	…	…	71.70	2.04	….	….	2.04	0.03:1 (0.07:1)	627
87	Overseas Development and Employment Promotion Consultants Limited (ODEPCL)	Labour and Rehabilitation	October 1977	0.66	…	…	0.66	…	…	…	…	…	13
88	The Kerala State Civil Supplies Corporation Limited (SUPPLYCO)	Food and Civil Supplies	June 1974	8.56	…	…	8.56	133.46	…	…	133.46	15.59:1 (15.59:1)	3250
89	Tourist Resorts (Kerala) Limited (TRKL)	Tourism	August 1989	24.20	…	4.02	28.22	…	…	…	…	…	13
90	Vizhinjam International Seaport Limited (VISL)	Ports	December 2004	34.20 (22.20)	….	….	34.20 (22.20)	…	…	…	…	…	14
91	Kerala State Coastal Area Development Corporation Limited (KSCADCL)	Fisheries & Ports	December 2008	0.10 (0.09)	…	…	0.10 (0.09)	…`	…	…	…	…	…
Sector-wise total				**225.15 (35.01)**	**…**	**4.05**	**229.20 (35.01)**	**135.50**	**…**	**…**	**135.50**	**0.01:1 (0.57:1)**	**4369**
Total A (All sector-wise working Government Companies				**1781.41 (302.33)**	**77.20**	**49.44 (4.52)**	**1908.05 (306.85)**	**707.37**	**1.22**	**224.44**	**933.03**	**0.49:1 (0.69:1)**	**44332**

Sl.No.	Sector & Name of the company/ Corporation	Name of the Department	Month and Year of incorporation	Paid-up capital*				Loans** outstanding at the close of 2009-10				Debt equity ratio for 2009-10 (Previous year)	Manpower (No. of employee) (as on 31.3.2010)
				State Government	Central Government	Others	Total	State Government	Central Government	Others	Total		
(1)	(2)	(3)	(4)	5(a)	5(b)	5(c)	5(d)	6 (a)	6(b)	6 (c)	6 (d)	(7)	(8)
B. Working Statutory Corporations													
AGRICULTURE & ALLIED													
1	Kerala State Warehousing Corporation (KSWC)	Agriculture	February 1959	5.25 (0.50)	…	4.75	10.00 (0.50)	0.50	….	….	0.50	0.05:1 (0.05:1)	483
Sector-wise total				**5.25 (0.50)**	**…**	**4.75**	**10.00 (0.50)**	**0.50**	**…**	**…**	**0.50**	**0.05:1 (0.05:1)**	**483**
FINANCE													
2	Kerala Financial Corporation (KFC)	Finance	December 1953	197.83 (130.00)	…	6.23	204.06 (130.00)	…	…	576.52	576.52	2.83:1 (2.52:1)	266
Sector-wise total				**197.83 (130.00)**	**…**	**6.23**	**204.06 (130.00)**	**…**	**…**	**576.52**	**576.52**	**2.83:1 (2.52:1)**	**266**
INFRASTRUCTURE													
3	Kerala Industrial Infrastructure Development Corporation (KINFRA)	Industries	February 1993	…	…	….	…	35.00	…	…	35.00	…	45
Sector-wise total				**…**	**…**	**…**	**…**	**35.00**	**…**	**…**	**35.00**	**…**	**45**
POWER													
4	Kerala State Electricity Board (KSEB)	Power	April 1957	1553.00	…	…	1553.00	…	…	1345.18	1345.18	0.87:1 (0.71:1)	28043
Sector-wise total				**1553.00**	**…**	**…**	**1553.00**	**…**	**…**	**1345.18**	**1345.18**	**0.87:1 (0.71:1**	**28043**

Sl.No.	Sector & Name of the company/ Corporation	Name of the Department	Month and Year of incorporation	Paid-up capital*				Loans** outstanding at the close of 2009-10				Debt equity ratio for 2009-10 (Previous year)	Manpower (No. of employee) (as on 31.3.2010)
				State Government	Central Government	Others	Total	State Government	Central Government	Others	Total		
(1)	(2)	(3)	(4)	5(a)	5(b)	5(c)	5(d)	6 (a)	6(b)	6 (c)	6 (d)	(7)	(8)
SERVICE													
5	Kerala State Road Transport Corporation (KSRTC)	Transport	March 1965	422.82	23.21	…	446.03	190.50	….	701.20	891.70	2:1 (4.59:1)	36848
Sector-wise total				**422.82**	**23.21**	**…**	**446.03**	**190.50**	**…**	**701.20**	**891.70**	**2:1 (4.59:1)**	**36848**
Total B (All sector-wise working Statutory Corporations)				**2178.90 (130.50)**	**23.21**	**10.98**	**2213.09 (130.50)**	**226.00**	**…**	**2622.90**	**2848.90**	**2.86:1 (1.29:1)**	**65685**
Grand Total (A+B)				**3960.31 (432.83)**	**100.41**	**60.42 (4.52)**	**4121.14 (437.35)**	**933.37**	**1.22**	**2847.34**	**3781.93**	**0.61:1 (1:1)**	**110017**
C. Non-working Government Companies													
AGRICULTURE & ALLIED													
1	Kerala State Coconut Development Corporation Limited (KSCDCL)	Agriculture	October 1975	2.85	…	…	2.85	…	…	…	…	(2.35:1)	…
Sector-wise total				**2.85**	**…**	**…**	**2.85**	**…**	**…**	**…**	**…**	**(1.18:1)**	**…**
INFRASTRUCTURE													
2	Kerala Irrigation Infrastructure Development Corporation Limited (KIIDCL)	Irrigation	August 2000	0.21	...	…	0.21	…	…	…	…	…	…
Sector-wise total				**0.21**	**...**	**…**	**0.21**	**…**	**…**	**…**	**…**	**…**	**…**

Sl.No.	Sector & Name of the company/ Corporation	Name of the Department	Month and Year of incorporation	Paid-up capital*				Loans** outstanding at the close of 2009-10				Debt equity ratio for 2009-10 (Previous year)	Manpower (No. of employee) (as on 31.3.2010)
				State Government	Central Government	Others	Total	State Government	Central Government	Others	Total		
(1)	(2)	(3)	(4)	5(a)	5(b)	5(c)	5(d)	6 (a)	6(b)	6 (c)	6 (d)	(7)	(8)
MANUFACTURING													
3	The Kerala Premo Pipe Factory Limited (KPPFL)	Local Admn	September 1961	1.31	…	…	1.31	…	…	0.25	0.25	0.19:1 (0.19:1)	
4	The Chalakudy Refractories Limited (CRL)	Industries	March 1969	1.59	…	…	1.59	…	…	1.03	1.03	0.65:1 (0.31:1)	
5	Kerala Garments Limited (KGL)	Industries	July 1974	…	…	0.48	0.48	1.68	…	0.20	1.88	3.92:1 (3.92:1)	…
6	Kerala Special Refractories Limited (KSRL)	Industries	November 1985	2.91	…	…	2.91	1.07	…	…	1.07	0.37:1 (0.37:1)	1
7	The Kerala Asbestos Cement Pipe Factory Limited (KACPFL)	Local Admn	March 1984	0.06	…	…	0.06	…	…	…	…	…	…
8	Kerala Construction Components Limited (KCCL)	Industries	December 1957	0.27		0.01	0.28	0.93	…	0.72	1.65	5.89:1 (2.59:1)	…
9	Scooters Kerala Limited (SKL)	Industries	November 1976	4.72	…	…	4.72	1.80	…	1.39	3.19	0.68:1 (0.68:1)	…
10	Kerala State Engineering Works Limited (KSEWL)	Public Works	March 1978	0.46	…	…	0.46	1.24	…	…	1.24	2.70:1 (2.70:1)	…
11	SIDECO Mohan Kerala Limited (SMKL)	Industries	August 1980	…	….	0.09	0.09	…	…	0.31	0.31	3.44:1 (3.44:1)	…
12	The Metropolitan Engineering Company Limited (MECL)	Industries	January 1945	2.49	…	…	2.49	2.38	4.17	…	6.55	2.63:1 (2.63:1)	…
13	Keltron Counters Limited (KCL)	Industries	July 1964	…	…	4.90	4.90	…	…	5.05	5.05	1.03:1 (1.03:1)	…

Sl.No.	Sector & Name of the company/ Corporation	Name of the Department	Month and Year of incorporation	Paid-up capital*				Loans** outstanding at the close of 2009-10				Debt equity ratio for 2009-10 (Previous year)	Manpower (No. of employee) (as on 31.3.2010)
				State Government	Central Government	Others	Total	State Government	Central Government	Others	Total		
(1)	(2)	(3)	(4)	5(a)	5(b)	5(c)	5(d)	6 (a)	6(b)	6 (c)	6 (d)	(7)	(8)
14	Keltron Power Devices Limited (KPDL)	Industries	January 1976	…	…	4.10	4.10	…	…	6.38	6.38	1.56:1 (1.56:1)	…
15	SIDKEL Televisions Limited (SIDKEL)	Industries	March 1984	…	…	0.44	0.44	0.02	…	1.29	1.31	2.98:1 (2.98:1)	…
16	Astral Watches Limited (AWL)	Industries	February 1978	…	….	0.95	0.95	…	…	1.60	1.60	1.68:1 (1.68:1)	…
17	Keltron Rectifiers Limited (KRL)	Industries	March 1976	…	…	6.63	6.63	1.65	…	7.02	8.67	1.31:1 (1.31:1)	…
18	Trivandrum Spinning Mills Limited (TSML)	Industries	November 1963	7.73	…	…	7.73	6.87	…	0.30	7.17	0.93:1 (0.93:1)	…
19	Travancore Plywood Industries Limited (TPIL)	Industries	November 1963	1.06 (0.58)	…	…	1.06 (0.58)	22.32	…	4.55	26.87	25.35:1 (6.78:1)	19
20	Trivandrum Rubber Works Limited (TRWL)	Agriculture	November 1963	1.76 (0.21)	…	0.59	2.35 (0.21)	7.22	…	2.42	9.64	4.10:1 (1.70:1)	…
21	Kerala State Wood Industries Limited (KSWIL)	Industries	September 1981	0.75	…	…	0.75	…	…	…	…	…	…
22	Kerala Soaps and Oils Limited (KSOL)	Industries	November 1963	3.00 (1.14)	…	…	3.00 (1.14)	…	…	…	…	…	…
23	Kerala State Detergents and Chemicals Limited (KSDCL)	Industries	June 1976	1.55	…	…	1.55	8.96	…	10.72	19.68	12.70:1 (7.74:1)	…
24	Kerala State Salicylates and Chemicals Limited (KSSCL)	Industries	November 1984	6.28	…	…	6.28	11.03	…	4.45	15.48	2.46:1 (2.40:1)	5
25	Kunnathara Textiles Limited (KTL)			0.22	…	0.48	0.70	…	…	…	…	…	…

Sl.No.	Sector & Name of the company/ Corporation	Name of the Department	Month and Year of incorporation	Paid-up capital♦				Loans** outstanding at the close of 2009-10				Debt equity ratio for 2009-10 (Previous year)	Manpower (No. of employee) (as on 31.3.2010)
				State Government	Central Government	Others	Total	State Government	Central Government	Others	Total		
(1)	(2)	(3)	(4)	5(a)	5(b)	5(c)	5(d)	6 (a)	6(b)	6 (c)	6 (d)	(7)	(8)
26	Vanchinad Leathers Limited (VLL)			…	0.19	0.18	0.37	…	…	…	…	…	…
Sector-wise total				**36.16 (1.93)**	**0.19**	**18.85**	**55.20 (1.93)**	**67.17**	**4.17**	**47.68**	**119.02**	**2.16:1 (2.61:1)**	**25**
SERVICE													
27	Kerala State Industrial Products Trading Corporation Limited (KSIPTCL)	Industries	August 1976	0.34	…	…	0.34	…	…	…	…	…	…
Sector-wise total				**0.34**	**…**	**…**	**0.34**	**…**	**…**	**…**	**…**	**…**	**…**
Total C (All sector-wise non-working Government Companies)				**39.56 (1.93)**	**0.19**	**18.85**	**58.60 (1.93)**	**67.17**	**4.17**	**47.68**	**119.02**	**2.03:1 (2.45:1)**	**25**
D. Non-working Statutory Corporations					NIL								
Grand Total (A+B+C+D)				**3999.87 (434.76)**	**100.60**	**79.27 (4.52)**	**4179.74 (439.28)**	**1000.54**	**5.39**	**2895.02**	**3900.95**	**0.93:1 (1.03:1)**	**110042**

Above includes Section 619 B companies at Sr. No A-29,30,37,38,39,40,63,78; C-25 and 26.
♦ Paid up capital includes share application money which is shown in brackets in column 5 (a) to 5 (d)
****Loans outstanding at the close of 2009-10 represent long term loans only.**
√ Keltron Crystals Limited, Keltron Magnetics Limited and Keltron Resistors Limited have been merged with Keltron Component Complex Limited.

Annexure 2

Summarised financial results of Government companies and Statutory corporations for the latest year for which accounts were finalised

(Referred to in paragraph 1.14)

(Figures in column 5 (a) to (6) and (8) to (10) are ` in crore)

Sl. No.	Sector and name of the company/ corporation	Period of Accounts	Year in which finalised	Net Profit (+)/ Loss (-)				Turnover	Impact of Accounts Comments#	Paid up Capital	Accumulated Profit / Loss (-)	Capital[@] employed	Return[$] on capital employed	Percentage return on capital employed
				Net Profit/ Loss before Interest & Depreciation	Interest	Deprecia -tion	Net profit/ Loss							
(1)	(2)	(3)	(4)	5(a)	5 (b)	5 (c)	5 (d)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
A. Working Government Companies														
AGRICULTURE & ALLIED														
1	KAMCO	2009-10	2010-11	9.60		0.80	8.80	136.42	-4.50	1.61	74.46	88.38	8.80	9.96
2	KFDC	2008-09	2009-10	1.87	0.16	0.76	0.95	13.72	3.93	7.95	1.53	42.12	1.11	2.63
3	KLDB	2005-06	2008-09	2.44	. . .	1.29	1.15	9.81	-0.04	7.33	3.30	29.68	1.15	3.87
4	Horticorp	2003-04	2009-10	-0.08	0.01	0.20	-0.29	6.99	. . .	5.18	-4.99	4.40	-0.28	-6.36
5	KEPCO	2005-06	2009-10	-0.97	…	0.20	-1.17	1.90	-0.14	1.97	-4.86	1.82	-1.17	-64.29
6	MPIL	2005-06	2010-11	-0.43	0.06	0.09	-0.58	4.08	-0.59	1.81	-8.04	1.14	-0.52	-45.61
7	OPIL	2009-10	2010-11	5.44	…	1.18	4.26	22.24	…	11.79	25.56	64.92	4.26	6.56
8	KAICO	2004-05	2009-10	0.04	0.49	0.05	-0.50	25.43	…	4.74	-16.97	-0.61	-0.01	…
9	KSCDCL	2005-06	2008-09	-93.91	31.20	0.30	-125.41	93.08	-1.11	200.64	-614.12	-73.87	-94.21	…
10	KSCCL	2008-09	2010-11	0.69	0.25	0.05	0.39	33.93	-0.06	8.05	-12.93	31.99	0.47	1.47
11	PCKL	2009-10	2010-11	34.82	0.02	1.14	33.66	91.12	0.38	5.57	56.81	43.03	33.68	78.27
12	RPL	2009-10	2010-11	14.75	…	0.72	14.03	17.40	…	3.39	90.05	97.60	14.03	14.38
13	SFCK	2009-10	2010-11	10.82	0.03	0.67	10.12	32.31	-0.25	9.04	32.26	44.15	10.15	22.99
Sector-wise total				**-14.92**	**32.22**	**7.45**	**-54.59**	**488.43**	**-2.38**	**269.07**	**-377.94**	**374.75**	**-22.54**	**-6.01**
FINANCE														
14	HDCKL	2004-05	2010-11	0.15	0.53	0.12	-0.50	4.36	-0.77	2.77	-9.46	-0.60	0.03	-5.00
15	KADCO	2003-04	2009-10	0.06	0.19	0.01	-0.14	2.05		2.53	-2.69	1.03	0.05	4.85

Sl. No.	Sector and name of the company/ corporation	Period of Accounts	Year in which finalised	Net Profit (+)/ Loss (-)				Turnover	Impact of Accounts Comments#	Paid up Capital	Accumulated Profit / Loss (-)	Capital[@] employed	Return[$] on capital employed	Percentage return on capital employed
				Net Profit/ Loss before Interest & Depreciation	Interest	Deprecia-tion	Net profit/ Loss							
(1)	(2)	(3)	(4)	5(a)	5 (b)	5 (c)	5 (d)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
16	KSTNSWCL	2005-06	2009-10	0.24	0.01	…	0.23	0.35	…	0.50	-0.91	-0.30	0.24	-80.00
17	SIDCO	2005-06	2009-10	-1.55	0.77	0.11	-2.43	51.14	-0.82	22.14	-44.61	-11.87	-1.66	…
18	KSDCCCSCRCL	1998-99	2009-10	-0.03	0.06	0.01	-0.10	0.31	-0.04	3.68	-1.90	6.67	-0.04	-0.60
19	KSDCSCSTL	2007-08	2009-10	-31.16	0.27	0.09	-31.52	5.35	-0.08	73.03	-31.45	82.86	-31.25	-37.71
20	KSFDCL	2004-05	2010-11	0.36	0.51	0.79	-0.94	4.96	-3.47	18.32	-23.29	3.95	-0.43	-10.89
21	KSHPWCL	1998-99	2009-10	0.01	…	0.03	-0.02	1.19	-0.04	1.74	-0.23	3.12	-0.02	-0.64
22	HANVEEV	2007-08	2009-10	-2.13	1.95	0.11	-4.19	13.44	-3.25	14.22	-36.32	-8.62	-2.24	…
23	KEPLAM	2006-07	2009-10	-0.01	0.01	0.04	-0.06	0.08	…	0.87	-0.48	0.70	-0.05	-7.14
24	KSWDCL	1997-98	2010-11	0.52	0.25	0.03	0.24	0.85	…	3.88	0.50	10.80	0.49	4.53
25	KTDFC	2007-08	2010-11	43.41	43.25	0.78	-0.62	48.39	-1.72	43.83	12.59	484.62	42.63	8.80
26	KURDFC	2008-09	2010-11	8.60	8.14	0.18	0.28	9.85	-0.27	0.96	2.25	73.54	8.42	11.31
27	KSBCDC	2005-06	2010-11	9.52	3.32	0.13	6.07	15.37	-6.65	46.06	48.27	219.03	9.39	4.29
28	KSFE	2008-09	2010-11	191.10	175.96	2.66	12.48	402.14	0.04	20.00	114.43	2178.94	188.44	8.65
29	KVCFPL	2008-09	2009-10	-0.04	…	0.01	-0.05	…	…	0.10	0.30	0.40	-0.05	-12.50
30	KVCTPL	2008-09	2009-10	…	…	..	…	…	…	0.01	…	0.01	…	..
Sector-wise total				**219.05**	**235.22**	**5.10**	**-21.27**	**559.83**	**-17.07**	**254.64**	**27.00**	**3044.28**	**213.95**	**7.03**
INFRASTRUCTURE														
31	KPHCCL	2006-07	2009-10	1.36	1.45	0.04	-0.13	48.46	-2.65	0.27	-0.24	19.71	1.32	6.65
32	KSCCL	2008-09	2009-10	-0.88	0.17	0.02	-1.07	1.05	…	0.88	-26.21	-19.49	-0.90	…
33	KSIDC	2008-09	2010-11	8.59	0.71	0.19	7.69	30.97	-0.54	299.24	63.15	364.06	8.40	2.31
34	RBDCK	2009-10	2010-11	6.76	2.73	4.92	-0.89	5.34	-3.31	49.43	-35.19	180.65	1.84	1.02
35	KLDCL	2005-06	2009-10	-1.31	…	0.04	-1.35	0.43	-2.30	7.05	-16.29	-6.70	-1.35	…
36	KSITIL	2008-09	2010-11	0.02	…	…	0.02	0.01	0.15	30.1	0.02	40.12	0.02	0.05

Sl. No.	Sector and name of the company/ corporation	Period of Accounts	Year in which finalised	Net Profit (+)/ Loss (-)				Turnover	Impact of Accounts Comments#	Paid up Capital	Accumulated Profit / Loss (-)	Capital@ employed	Return$ on capital employed	Percentage return on capital employed
				Net Profit/ Loss before Interest & Depreciation	Interest	Deprecia-tion	Net profit/ Loss							
(1)	(2)	(3)	(4)	5(a)	5 (b)	5 (c)	5 (d)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
37	KEPIP	2008-09	2009-10	5.75	…	1.51	4.24	17.32	-0.47	0.25	9.58	39.66	4.24	10.69
38	KFVP	2009-10	2010-11	0.41	…	0.35	0.06	0.63	…	1.50	-0.96	25.77	0.06	0.23
39	KIAP	2008-09	2009-10	1.43	…	1.19	0.24	1.43	…	0.25	-0.41	36.11	0.24	0.66
40	MPIDCL	2009-10	2010-11	0.37	…	…	0.37	…	-0.02	5.00	2.24	6.37	0.37	5.81
Sector-wise total				**22.50**	**5.06**	**8.26**	**9.18**	**105.64**	**-9.14**	**393.97**	**-4.31**	**686.26**	**14.24**	**2.08**
MANUFACTURING														
41	Autokast	2008-09	2009-10	-2.35	2.19	0.29	-4.83	14.10	-0.45	19.97	-101.39	-28.26	-2.64	…
42	FOMIL	2006-07	2009-10	0.41	0.01	0.32	0.08	4.31	…	5.15	3.65	9.66	0.09	0.93
43	FIT	2006-07	2009-10	0.47	0.35	0.03	0.09	5.91	-0.43	0.38	0.74	2.99	0.44	14.72
44	KEEL	2008-09	2009-10	-0.06	…	0.01	-0.07	0.67	…	0.10	0.07	0.48	-0.07	-14.58
45	KCCL	2007-08	2008-09	1.17	1.4	0.28	-0.51	21.59	-2.62	5.53	-13.15	17.68	0.89	5.03
46	KCL	2007-08	2008-09	0.57	…	0.14	0.43	0.46	-0.77	1.34	-19.44	-12.76	-0.43	…
47	KECL	2009-10	2010-11	-1.13	0.17	0.18	-1.48	5.02	-0.09	3.18	-5.06	3.00	-1.31	-43.67
48	KML	2007-08	2008-09	0.83	…	…	0.83	5.20	-0.11	0.25	-3.53	-2.90	0.83	…
49	KRL	2007-08	2008-09	0.02	0.05	0.05	-0.08	1.62	…	1.60	-3.36	0.47	-0.03	-6.38
50	KAL	2006-07	2009-10	-0.32	0.47	0.17	-0.96	34.19	…	10.23	-3.17	13.83	-0.49	-3.54
51	KCCPL	2009-10	2010-11	1.64	…	0.31	1.33	6.41	…	1.32	6.50	7.74	1.33	17.18
52	KEL	2006-07	2010-11	1.41	3.85	1.22	-3.66	71.41	-4.99	71.38	-94.43	29.85	0.19	0.64
53	KFL	2009-10	2010-11	7.71	…	2.44	5.27	227.47	…	27.41	6.88	48.05	5.27	10.97
54	KSBCL	2005-06	2009-10	-2.05	0.11	0.10	-2.26	9.23	…	6.75	-9.66	1.32	-2.15	-162.88
55	BEVCO	2008-09	2010-11	110.23	0.02	0.54	109.67	1710.10	…	1.03	187.72	249.99	109.69	43.88
56	KSDPL	2002-03	2010-11	-4.20	3.75	0.22	-8.17	4.28	-0.59	7.58	-56.91	-20.72	-4.42	…
57	KELTRON	2008-09	2010-11	3.26	6.86	1.07	-4.67	150.84	-51.63	115.16	-207.07	106.94	2.19	2.05
58	KEMDEL	2008-08	2009-10	Commercial activities not commenced						1.76	…	0.92	…	…
59	KSTCL	2008-09	2009-10	-3.07	0.92	0.84	-4.83	31.62	-0.07	57.97	-55.21	22.46	-3.91	-17.41

Sl. No.	Sector and name of the company/ corporation	Period of Accounts	Year in which finalised	Net Profit (+)/ Loss (-)				Turnover	Impact of Accounts Comments#	Paid up Capital	Accumulated Profit / Loss (-)	Capital[@] employed	Return[$] on capital employed	Percentage return on capital employed
				Net Profit/ Loss before Interest & Depreciation	Interest	Deprecia-tion	Net profit/ Loss							
(1)	(2)	(3)	(4)	5(a)	5 (b)	5 (c)	5 (d)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
60	MCL	2009-10	2010-11	24.86	0.5	5.66	18.70	189.41	-1.96	26.01	126.42	196.48	19.20	9.77
61	STL	2008-09	2009-10	0.05	1.37	0.23	-1.55	7.45	-3.90	5.94	-45.05	-21.86	-0.18	…
62	SIFL	2009-10	2010-11	7.00	0.48	0.74	5.78	60.02	…	15.93	18.63	42.64	6.26	14.68
63	SCL	2009-10	2010-11	53.50	3.52	0.15	49.83	31.51	-1.07	7.00	-4.97	6.85	53.35	778.83
64	SILK	2008-09	2009-10	15.17	0.54	0.14	14.49	18.51	-1.86	36.56	-37.35	22.03	15.03	68.23
65	Kerala Ceramics	2006-07	2010-11	0.50	1.16	0.03	-0.69	9.69	-0.18	11.21	-38.79	-24.79	0.47	-1.90
66	KMML	2009-10	2010-11	73.29	0.20	12.46	60.63	483.98	-40.74	30.93	451.74	494.34	60.83	12.31
67	MIL	2008-09	2009-10	0.46	0.07	0.01	0.38	3.91	-0.72	1.94	-1.64	3.67	0.45	12.26
68	OUSHADI	2008-09	2010-11	2.53	0.03	0.78	1.72	32.26	…	6.87	8.95	16.21	1.75	10.80
69	TCL	2008-09	2009-10	-0.09	0.58	0.10	-0.77	32.76	-3.51	0.50	-3.23	1.70	-0.19	-11.18
70	TSCL	2008-09	2009-10	0.28	…	0.05	0.23	9.35	…	1.32	-3.16	-0.11	0.23	-209.09
71	TCCL	2009-10	2010-11	13.18	6.31	9.37	-2.50	107.52	…	21.31	-13.15	69.28	3.81	5.50
72	TRACO	2007-08	2010-11	2.64	5.16	0.64	-3.16	32.16	0.31	36.07	-40.89	15.36	2.00	13.02
73	TELK	2008-09	2009-10	34.06	2.14	0.73	31.19	218.02	…	42.97	20.00	80.38	33.33	41.47
74	TTPL	2006-07	2010-11	-1.62	0.36	1.47	-3.45	100.96	-0.59	1.77	38.5	49.33	-3.09	6.26
75	UEIL	2008-09	2009-10	1.01	0.55	0.08	0.38	42.94	-2.22	3.99	-1.37	12.54	0.93	7.42
76	MDL	2009-10	2010-11	…	…	…	…	…	…	0.01	…	-3.69	…	…
Sector-wise total				**341.36**	**43.12**	**40.85**	**257.39**	**3684.88**	**-118.19**	**588.42**	**107.82**	**1411.10**	**300.51**	**21.30**
POWER														
77	KSPIFCL	2009-10	2010-11	30.12	27.54	0.19	2.39	30.36	…	26.65	7.65	365.82	29.93	8.18
78	KINESCO	2009-10	2010-11	-0.22	…	0.11	-0.33	2.92	-0.02	0.36	-0.40	0.27	-0.33	-122.22
	Sector-wise total			**29.90**	**27.54**	**0.30**	**2.06**	**33.28**	**-0.02**	**27.01**	**7.25**	**366.09**	**29.60**	**8.09**
SERVICE														
79	BRDCL	2009-10	2010-11	1.34	…	1.35	-0.01	2.43	-2.79	47.21	-1.86	47.93	-0.01	0.02

Sl. No.	Sector and name of the company/ corporation	Period of Accounts	Year in which finalised	Net Profit (+)/ Loss (-)				Turnover	Impact of Accounts Comments#	Paid up Capital	Accumulated Profit / Loss (-)	Capital[@] employed	Return[$] on capital employed	Percentage return on capital employed
				Net Profit/ Loss before Interest & Depreciation	Interest	Deprecia-tion	Net profit/ Loss							
(1)	(2)	(3)	(4)	5(a)	5 (b)	5 (c)	5 (d)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
80	IIITM-K	2007-08	2009-10	-0.83	…	…	-0.83	0.79	…	NIL[α]	-5.25	2.68	-0.83	-30.97
81	KMSCL		Accounts not finalised											
82	KSINCL	2006-07	2009-10	-2.22	0.04	0.41	-2.67	5.75	-1.00	15.24	-2.26	13.2	-2.63	-19.92
83	KEXCON	2009-10	2010-11	0.47	…	…	0.47	0.79	…	0.50	1.41	1.91	0.47	24.61
84	KSIE	2008-09	2009-10	4.24	0.01	0.46	3.77	16.97	-0.04	1.20	19.14	21.20	3.78	17.83
85	KSMDCL	2006-07	2009-10	-0.90	…	0.37	-1.27	0.47	…	9.16	-9.38	-0.22	-1.27	…
86	KTDC	2009-10	2010-11	4.24	0.46	3.51	0.27	63.35	…	71.70	-22.06	51.93	0.73	1.41
87	ODEPCL	2008-09	2009-10	0.38	0.01	0.01	0.36	5.64	…	0.66	0.69	1.82	0.37	20.33
88	SUUPLYCO	2006-07	2010-11	-15.10	1.86	2.61	-19.57	1001.60	-87.48	8.56	-594.95	-423.76	-17.71	…
89	TRKL	2008-09	2010-11	0.18	…	0.07	0.11	0.61	…	28.20	3.88	15.45	0.11	0.71
90	VISL	2007-08	2009-10	0.02	…	0.03	-0.01	…	…	8.50	-0.10	13.64	-0.01	-0.07
91	KSCADCL		Commercial activities not commenced											
Sector-wise total				**-8.18**	**2.38**	**8.82**	**-19.38**	**1098.40**	**-91.31**	**190.93**	**-610.74**	**-254.22**	**-17.00**	
Total A (All sector wise working Government Companies)				**589.71**	**345.54**	**70.78**	**173.39**	**5970.46**	**-238.11**	**1724.04**	**-850.92**	**5628.26**	**518.76**	**9.22**
B. Working Statutory Corporations														
AGRICULTURE & ALLIED														
1	KSWC	2006-07	2009-10	-0.49	0.01	0.26	-0.76	5.02	…	9.00	-7.14	4.82	-0.75	-15.56
Sector-wise total				**-0.49**	**0.01**	**0.26**	**-0.76**	**5.02**	**…**	**9.00**	**-7.14**	**4.82**	**-0.75**	**-15.56**
FINANCE														
2	KFC	2009-10	2010-11	81.47	47.39	0.36	33.72	91.95	…	204.06	21.14	749.12	81.11	10.83
Sector-wise total				**81.47**	**47.39**	**0.36**	**33.72**	**91.95**	**…**	**204.06**	**21.14**	**749.12**	**81.11**	**10.83**

[α] **Share capital is ` 200 only.**

Sl. No.	Sector and name of the company/ corporation	Period of Accounts	Year in which finalised	Net Profit (+)/ Loss (-)				Turnover	Impact of Accounts Comments#	Paid up Capital	Accumulated Profit / Loss (-)	Capital[@] employed	Return[$] on capital employed	Percentage return on capital employed
				Net Profit/ Loss before Interest & Depreciation	Interest	Depreciation	Net profit/ Loss							
(1)	(2)	(3)	(4)	5(a)	5 (b)	5 (c)	5 (d)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
INFRASTRUCTURE														
3	KINFRA	2008-09	2009-10	68.54	1.33	3.42	63.79	64.86	-0.29	…	64.98	322.81	65.12	20.17
Sector-wise total				**68.54**	**1.33**	**3.42**	**63.79**	**64.86**	**-0.29**	**0.00**	**64.98**	**322.81**	**65.12**	**20.17**
POWER														
4	KSEB	2008-09	2009-10	969.05	316.89	434.74	217.42	5349.82	-1555.50	1553.00	1245.46	6071.71	534.31	8.80
Sector-wise total				**969.05**	**316.89**	**434.74**	**217.42**	**5349.82**	**-1555.50**	**1553.00**	**1245.46**	**6071.71**	**534.31**	**8.80**
SERVICE														
5	KSRTC	2007-08	2009-10	-43.62	54.32	38.45	-136.39	867.86	…	406.03	-1368.89	-447.82	-82.07	…
Sector-wise total				**-43.62**	**54.32**	**38.45**	**-136.39**	**867.86**	**…**	**406.03**	**-1368.89**	**-447.82**	**-82.07**	**…**
Total B (All Sector wise working Statutory Corporations)				**1074.95**	**419.94**	**477.23**	**177.78**	**6379.51**	**-1555.79**	**2172.09**	**-44.45**	**6700.64**	**597.72**	**8.92**
Grand Total (A+B)				**1664.66**	**765.48**	**548.01**	**351.17**	**12349.97**	**-1793.90**	**3896.13**	**-895.37**	**12328.90**	**1116.48**	**9.06**
C. Non-working Government Companies														
AGRICULTURE & ALLIED														
1	KSCDCL	1995-96	2009-10	-0.56	…	0.05	-0.61	…	…	2.85	-12.36	-2.27	-0.61	…
Sector-wise total				**-0.56**	**…**	**0.05**	**-0.61**	**…**	**…**	**2.85**	**-12.36**	**-2.27**	**-0.61**	**…**
INFRASTRUCTURE														
2	KIIDCL	2004-05	2005-06	Commercial activities not commenced										
MANUFACTURING														
3	KPPFL	1985-86	1999-2000	-0.35	…	…	-0.35	…	…	0.35	-0.19	1.00	-0.35	-35.00
4	CRL	1989-90	1993-94	-0.39	…	…	-0.39	….	…	3.09	-3.36	-0.43	-0.39	…
5	KGL	2008-09	2009-10	0.36	0.60	0.01	-0.25	0.03	-0.30	0.48	-10.23	-7.87	0.35	-4.45

Sl. No.	Sector and name of the company/ corporation	Period of Accounts	Year in which finalised	Net Profit (+)/ Loss (-)				Turnover	Impact of Accounts Comments#	Paid up Capital	Accumulated Profit / Loss (-)	Capital[@] employed	Return[$] on capital employed	Percentage return on capital employed
				Net Profit/ Loss before Interest & Depreciation	Interest	Deprecia -tion	Net profit/ Loss							
(1)	(2)	(3)	(4)	5(a)	5 (b)	5 (c)	5 (d)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
6	KSRL	2008-09	2009-10	-0.01			-0.01	…	…	2.91	-2.18	1.77	-0.01	-0.56
7	KACPFL	1984-85	1986-87	…	…	…	…	…	…	0.06	…	…	…	…
8	KCCL	2007-08	2009-10	-0.03	0.24	0.01	-0.28	…	-0.12	0.28	-4.61	-0.27	-0.04	…
9	SKL	2002-03	2003-04	-1.20	….	…..	-1.20	0.61	…..	4.72	-12.40	-3.71	-1.20	…
10	KSEWL	1991-92	1992-93	-0.17	…	…	-0.17	…	….	0.46	-1.51	-0.72	-0.17	…
11	SMKL	2006-07	2008-09	0.00	0.75	…	-0.75	…	-0.01	0.17	-4.97	0.27	…	…
12	MECL	2001-02	2007-08	-0.59	…	…	-0.59	1.78	…	2.49	-9.90	1.31	-0.59	-45.04
13	KCL	2003-04	2006-07	-3.67	…	…	-3.67	1.52	…	4.97	-31.74	-10.62	-3.67	…
14	KPDL	2001-02	2005-06	-0.49	…	…	-0.49	…	…	15.38	-27.12	-4.98	-0.49	…
15	SIDKEL	1999-2000	2004-05	-0.48	….	….	-0.48	…	…	0.44	-4.14	-2.03	-0.48	…
16	AWL	2009-10	2009-10	-0.11	0.26		-0.37	…	…	0.95	-5.59	-0.58	-0.11	…
17	KRL	1999-2000	2005-06	-1.10	…	…	-1.10	1.11	…	6.63	-17.33	-0.48	-1.10	…
18	TSML	2002-03	2003-04	-0.44	…	…	-0.44	…	…	7.73	-17.28	0.06	-0.44	-733.33
19	TPIL	2008-09	2010-11	-0.07			-0.07	…	…	1.06	-28.93	-6.03	-0.07	…
20	TRWL	2001-02	2010-11	-0.98	0.01	0.03	-1.02	1.52	…	2.35	-25.99	14	-1.01	-7.21
21	KSWIL	1991-92	2007-08	-0.86	…	…	-0.86	2.22	….	1.70	-7.26	-1.25	-0.86	…
22	KSOL	1994-95	2001-02	-4.50	….	…	-4.50	…	…	3.00	-37.40	-6.71	-4.50	…
23	KSDCL	2007-08	2010-11	-0.23	0.07	0.04	-0.34		0.99	1.55	-20.34	-4.48	-0.27	…
24	KSSCL	1997-98	2004.05	-1.23	…	…	-1.23	…	…	6.28	-34.43	-12.94	-1.23	…
25	KTL			Not available										
26	VLL			Not available										
Sector-wise total				**-16.54**	**1.93**	**0.09**	**-18.56**	**8.79**	**-0.43**	**67.05**	**-306.90**	**-44.69**	**-16.63**	**…**

Sl. No.	Sector and name of the company/ corporation	Period of Accounts	Year in which finalised	Net Profit (+)/ Loss (-)				Turnover	Impact of Accounts Comments#	Paid up Capital	Accumulated Profit / Loss (-)	Capital[@] employed	Return[$] on capital employed	Percentage return on capital employed
				Net Profit/ Loss before Interest & Depreciation	Interest	Deprecia -tion	Net profit/ Loss							
(1)	(2)	(3)	(4)	5(a)	5 (b)	5 (c)	5 (d)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
SERVICE														
27	KSIPTC	2007-08	2008-09	-0.22	…	…	-0.22	…	-3.32	0.34	1.93	2.18	-0.22	-10.09
Sector-wise total				**-0.22**	**…**	**…**	**-0.22**	**…**	**-3.32**	**0.34**	**1.93**	**2.18**	**-0.22**	**-10.09**
Total C (All sector wise non working Government companies)				**-17.32**	**1.93**	**0.14**	**-19.39**	**8.79**	**-3.75**	**70.24**	**-317.33**	**-44.78**	**-17.46**	…
D.Non-working Statutory Corporations: NIL														
	Grand Total (A+B+C+D)			**1647.34**	**767.41**	**548.15**	**331.78**	**12358.76**	**-1797.65**	**3966.37**	**-1212.70**	**12284.12**	**1099.02**	**8.95**

\# Impact of accounts comments include the net impact of comments of Statutory Auditors and CAG and is denoted by (+) increase in profit/ decrease in losses (-) decrease in profit/ increase in losses.

@ Capital employed represents net fixed assets (including capital works-in-progress) plus working capital except in case of finance companies/ corporations where the capital employed is worked out as a mean of aggregate of the opening and closing balances of paid up capital, free reserves, bonds, deposits and borrowings (including refinance).

$ Return on capital employed has been worked out by adding profit (after tax) and interest charged to profit and loss account

Annexure 3

Statement showing grants and subsidy received/receivable, guarantees received, waiver of dues, loans written off and loans converted into equity during the year and guarantee commitment at the end of March 2010

(Referred to in paragraph 1.10)

(Figures are in ` crore)

Sl.No.	Sector & name of the company/ corporation	Equity/loans received out of Budget during the year		Grants and subsidy received during the year				Guarantees received during the year and commitment at the end of the year@		Waiver of dues during the year			
		Equity	Loans	State Government	Central Government	Others	Total	Received	Commitment	Loans repayment written off	Loans converted into equity	Interest/ penal interest waived	Total
1	2	3(a)	3(b)	4(a)	4(b)	4 (C)	4(d)	5(a)	5(b)	6(a)	6(b)	6©	6(d)
A. Working Government Companies													
AGRICULTURE & ALLIED SECTOR													
1	KAMCO	…	…	…	…	…	…	…	…	…	…	…	…
2	KFDC	…	…	1.57	….	…	1.57	…	…	….	…	…	…
3	KLDB	…	…	…	…	…	…	…	…	…	…	…	…
4	Horticorp	0.10	…	1.73	…		1.73	…	…	…	…	…	…
5	KEPCO	…	…	5.85	1.67	…	7.52	…	…	….	….	…	…
6	MPIL	…	…	0.75	0.98	…	1.73	…	0.50				
7	OPIL	…	…	…	…	…	…	…	….	….	…	…	…
8	KAICO	…	0.90	2.78	…	…	2.78	…	0.13	…	…	…	…
9	KSCDCL	…	8.13	24.00	…	0.23	24.23	…	…	…	…	…	…
10	KSCCL	..	..	3.67	0.45		4.12	…	…	…	…	…	…

Sl.No.	Sector & name of the company/ corporation	Equity/loans received out of Budget during the year		Grants and subsidy received during the year				Guarantees received during the year and commitment at the end of the year@		Waiver of dues during the year			
		Equity	Loans	State Government	Central Government	Others	Total	Received	Commitment	Loans repayment written off	Loans converted into equity	Interest/ penal interest waived	Total
1	2	3(a)	3(b)	4(a)	4(b)	4 (C)	4(d)	5(a)	5(b)	6(a)	6(b)	6©	6(d)
11	PCKL	…	…	83.20	…	…	83.20	…	…	…	…	…	…
12	RPL	…	…	0.01	…	…	0.01	…	…	…	…	…	…
13	SFCK	…	…	…	…	…	…	…	…	…	…	…	…
Sector-wise total		**0.10**	**9.03**	**123.56**	**3.10**	**0.23**	**126.89**	**…**	**0.63**	**…**	**…**	**…**	**…**
FINANCE													
14	HDCKL	…	0.97	3.22	1.00	…	4.22	…	…	…	…	…	…
15	KADCO	0.28	…	…	0.12	…	0.12	…	…	…	…	…	…
16	KSTNSWCL	…	…	…	…	…	…	0.31	0.33	…	…	…	…
17	SIDCO	0.20	…	…	…	…	…	1.5	0.40	…	…	…	…
18	KSDCCCSCRCL	3.00	…	…	…	…	…	…	…	1.1	…	1.03	2.13
19	KSDCSCSTL	4.68	…	1.00	…	…	1.00	…	9.28	4.47	…	5.08	9.55
20	KSFDCL	0.65	…	…	…	…	…						
21	KSHPWCL	…	…	1.40	…	…	1.40		6.00		…	…	…
22	Hanveev	3.06	0.32	0.33	…	…	0.33	…	…	…	…	…	…
23	KELPALM	…	0.48	0.16	…	…	0.16	…	…	…	…	…	…
24	KSWDCL	…	…	1.51	…	…	1.51	10.5	10.50	…	…	…	…
25	KTDFC	…	…	…	…	…	0.00	805	548.88	…	…	…	…
26	KURDFC	..	0.75	..	…	…	0.00	…	50.61	…	…	…	…

Sl.No.	Sector & name of the company/ corporation	Equity/loans received out of Budget during the year		Grants and subsidy received during the year				Guarantees received during the year and commitment at the end of the year@		Waiver of dues during the year			
		Equity	Loans	State Government	Central Government	Others	Total	Received	Commitment	Loans repayment written off	Loans converted into equity	Interest/ penal interest waived	Total
1	2	3(a)	3(b)	4(a)	4(b)	4 (C)	4(d)	5(a)	5(b)	6(a)	6(b)	6©	6(d)
27	KSBCDC	7.00	…	0.92	…	0.07	0.99	…	…	…	…	…	…
28	KSFE	…	…	..	…	…	0.00	1500	2187.89	…	…	…	…
29	KVCFPL						0.00						
30	KVCTPL						0.00						
Sector-wise total		**18.87**	**2.52**	**8.54**	**1.12**	**0.07**	**9.73**	**2317.31**	**2813.89**	**5.57**	**…**	**6.11**	**11.68**
INFRASTRUCTURE													
31	KPHCCL	…	…	**6.86**	**…**	**…**	**6.86**	**…**	**…**	**…**	**…**	**…**	**…**
32	KSCCL	…	…	…	…	…	…	…	…	…	…	…	…
33	KSIDC	1.00	1.00	…	…	…	…	6.32	4.42				
34	RBDCK	40.00	156.00	42.23	…	…	42.23	…	18.10	…	…	…	…
35	KLDCL	…	…	…	…	…	…	…	…	…	…	…	…
36	KSITIL	10.00	…	…	…	…	…						
37	KEPIP							…	…	…	…	…	…
38	KFVP	…	…	…	…	3.53	3.53	…	…	…	…	…	…
39	KIAP												
40	MPIDCL	…	…	…	…	…	…	…	…	…	…	…	…
Sector-wise total		**51.00**	**157.00**	**49.09**	**…**	**3.53**	**52.62**	**6.32**	**22.52**	**…**	**…**	**…**	**…**

Sl.No.	Sector & name of the company/ corporation	Equity/loans received out of Budget during the year		Grants and subsidy received during the year				Guarantees received during the year and commitment at the end of the year@		Waiver of dues during the year			
		Equity	Loans	State Government	Central Government	Others	Total	Received	Commitment	Loans repayment written off	Loans converted into equity	Interest/ penal interest waived	Total
1	2	3(a)	3(b)	4(a)	4(b)	4 (C)	4(d)	5(a)	5(b)	6(a)	6(b)	6©	6(d)
MANUFACTURING													
41	Autokast	…	2.33	…	…	…	…	…	…	…	…	2.47	2.47
42	FOMIL	…	…	…	…	…	…	…	…	…	…	…	…
43	FIT	…`	…	…	…	..	…	…	…	…	…	…	…
44	KEEL	…	…	0.15	…	…	0.15	…	…	…	…	…	…
45	KCCL	…	…	…	…	…	…	…	…	…	…	…	…
46	KCL	…	…	…	…	…	…	…	…	…	…	…	…
47	KECL	…	0.47	…	…	…	…	…	…	…	…	…	…
48	KML	…	…	…	…	…	…	…	…	…	…	…	..
49	KRL	…	…	…	…	…	…	…	…	…	…	…	…
50	KAL	…	1.59	…	…	…	…	4.41	…	….	…	…	…
51	KCCPL	…	…	…	…	…	…	…	…	…	…	…	…
52	KEL	…	…	…	…	…	…	…	29.61	…	…	…	…
53	KFL	3.91	…	3.92	7.35	…	11.27	…	…	…	…	…	…
54	KSBCL	0.50	2.94	…	…	…	…	…	…	…	…	…	…
55	BEVCO	…	…	…	…	…	…	…	…	…	…	…	…
56	KSDPL	…	…	…	…	…	…	…	…	…	…	…	…
57	KELTRON	…	12.50	…	…	…	…	…	…	…	…	…	…

Sl.No.	Sector & name of the company/ corporation	Equity/loans received out of Budget during the year		Grants and subsidy received during the year				Guarantees received during the year and commitment at the end of the year@		Waiver of dues during the year			
		Equity	Loans	State Government	Central Government	Others	Total	Received	Commitment	Loans repayment written off	Loans converted into equity	Interest/ penal interest waived	Total
1	2	3(a)	3(b)	4(a)	4(b)	4 (C)	4(d)	5(a)	5(b)	6(a)	6(b)	6©	6(d)
58	KEMDEL	…	…	…	…	…	…	…	…	…	…	…	…
59	KSTCL	0.50	1.50	…	…	…	…	12.02	8.78	…	…	…	…
60	MCL	…	…	…	…	…	…	…	…	…	…	…	..
61	STL	…	1.44	…	…	…	…	…	…	…	…	…	…
62	SIFL	5.53	3.00	…	…	…	…	8.53	6.59	…	…	…	…
63	SCL	…	…	…	…	…	…	…	…	35.67	…	30.91	66.58
64	SILK	…	4.29	…	…	…	…	…	…	….	…	….	…
65	Kerala Ceramics	…	0.93	…	…	…	…	…	…	…	…	…	…
66	KMML	…	…	…	…	…	…	…	…	…	…	…	…
67	MIL	…	1.19	…	…	…	…	…	…	…	…	…	…
68	OUSHADI	3.80	…	…	0.17	…	0.17	…	…	…	…	…	…
69	TCL	…	…	…	…	…	…	…	…	…	…	…	…
70	TSCL	…	…	….	…	…	…	…	….	…	…	…	…
71	TCCL	…	…	…	…	…`	….	…	….	…	…	…	…
72	TRACO	…	…	…	…	…	…	…	26.19	…	12.38	…	12.38
73	TELK	…	…	…	…	…	…	…	…	…	…	…	…
74	TTPL	8.00	…	…	…	…	…	…	…	…	…	…	…
75	UEIL	…	2.00	…	…	…	…	…	…	…	…	…	…

Sl.No.	Sector & name of the company/ corporation	Equity/loans received out of Budget during the year		Grants and subsidy received during the year				Guarantees received during the year and commitment at the end of the year@		Waiver of dues during the year			
		Equity	Loans	State Government	Central Government	Others	Total	Received	Commitment	Loans repayment written off	Loans converted into equity	Interest/ penal interest waived	Total
1	2	3(a)	3(b)	4(a)	4(b)	4 (C)	4(d)	5(a)	5(b)	6(a)	6(b)	6©	6(d)
76	MDL	0.01	…	…	….	….	…	….	….	…	…	…	…
Sector-wise total		**22.25**	**34.18**	**4.07**	**7.52**	**…**	**11.59**	**24.96**	**71.17**	**35.67**	**12.38**	**33.38**	**81.43**
	POWER												
77	KSPIFCL	…	…	…	…	…	…	…	**330.00**	…	…	…	…
78	KINESCO	…	…	…	…	…	….	…	…	…	…	…	…
Sector-wise total		**…**	**…**	**…**	**…**	**…**	**…**	**…**	**330.00**	**…**	**…**	**…**	**…**
SERVICE													
79	BRDCL	0.02	…	…	…	…	…	…	…	…	…	…	…
80	IIITM-K	…	…	3.00	…	…	3.00	…	…	…	…	…	…
81	KMSCL												
82	KSINCL	6.00	…	…	…	…	…	…	…	…	…	…	…
83	KEXCON	…	…	…	…	…	…	…	…	…	…	…	…
84	KSIE	…	…	…	…	…	…	…	…	…	…	…	…
85	KSMDCL	0.10	…	…	…	…	…	…	…	…	…	…	…
86	KTDC	1.00	…	0.46	…	…	0.46	…	..	…	…	…	…
87	ODEPCL	…	…	…	….	….	…	…	…	…	…	…	…
88	SUPPLYCO	…	…	64.00	237.18	27.68	328.86	…	…	…	…	532.84	532.84
89	TRKL	0.02	…	…	…	…	…	…	…	…	…	…	…

Sl.No.	Sector & name of the company/ corporation	Equity/loans received out of Budget during the year		Grants and subsidy received during the year				Guarantees received during the year and commitment at the end of the year@		Waiver of dues during the year			
		Equity	Loans	State Government	Central Government	Others	Total	Received	Commitment	Loans repayment written off	Loans converted into equity	Interest/ penal interest waived	Total
1	2	3(a)	3(b)	4(a)	4(b)	4 (C)	4(d)	5(a)	5(b)	6(a)	6(b)	6©	6(d)
90	VISL	…	…	**25.00**	**…**	**…**	**…**	**…**	**…**	**…**	**…**	**…**	**…**
91	KSCADC	0.09	…	**…**	**…**	**4.06**	**4.06**						
Sector-wise total		**7.23**	**…**	**92.46**	**237.18**	**31.74**	**336.38**	**…**	**…**	**…**	**…**	**532.84**	**532.84**
Total A (All sector-wise working Government Companies)		**99.45**	**202.73**	**277.72**	**248.92**	**35.57**	**537.21**	**2348.59**	**3238.21**	**41.24**	**12.38**	**572.33**	**625.95**
B. Working Statutory Corporations													
AGRICULTURE & ALLIED													
1	KSWC	0.50	…	…	…	…	…	…	1.01	…	…	…	…
Sector-wise total		**0.50**	**…**	…	…	…	…	…	1.01	…	…	…	…
FINANCE													
2	KFC	…	**…**	…	…	…	…	…	107.26	…	…	…	…
Sector-wise total		**…**	**…**	**…**	**…**	**…**	**…**	**…**	**107.26**	**…**	**…**	**…**	**…**
INFRASTRUCTURE													
3	KINFRA	**…**	**15.00**	5.16	0.42	…	5.58	250	124.05	…	…	…	…

Sl.No.	Sector & name of the company/ corporation	Equity/loans received out of Budget during the year		Grants and subsidy received during the year				Guarantees received during the year and commitment at the end of the year@		Waiver of dues during the year			
		Equity	Loans	State Government	Central Government	Others	Total	Received	Commitment	Loans repayment written off	Loans converted into equity	Interest/ penal interest waived	Total
1	2	3(a)	3(b)	4(a)	4(b)	4 (C)	4(d)	5(a)	5(b)	6(a)	6(b)	6©	6(d)
Sector-wise total		…	15.00	5.16	0.42	…	5.58	250.00	124.05	…	…	…	…
POWER													
4	KSEB	**…**	**…**	5.84	…	…	5.84	…	…	…	…	…	…
Sector-wise total		…	…	5.84	…	…	5.84	….	…	…	…	…	…
SERVICE													
5	KSRTC	15.00	105.00	…	…	…	…	75	258.10				
Sector-wise total		**15.00**	**105.00**	**…**	**…**	**…**	**…**	**75.00**	**258.10**	**…**	**…**	**…**	**…**
Total B (All sector-wise working Statutory Corporations)		**15.50**	**120.00**	**11.00**	**0.42**	**…**	**11.42**	**325.00**	**490.42**	**….**	**…**	**…**	**…**
Grand Total (A+B)		**114.95**	**322.73**	**288.72**	**249.34**	**35.57**	**548.63**	**2673.59**	**3728.63**	**41.24**	**12.38**	**572.33**	**625.95**
C. Non-Working Government Companies													
AGRICULTURE & ALLIED SECTOR													
1	KSCDCL												

Sl.No.	Sector & name of the company/ corporation	Equity/loans received out of Budget during the year		Grants and subsidy received during the year				Guarantees received during the year and commitment at the end of the year@		Waiver of dues during the year			
		Equity	Loans	State Government	Central Government	Others	Total	Received	Commitment	Loans repayment written off	Loans converted into equity	Interest/ penal interest waived	Total
1	2	3(a)	3(b)	4(a)	4(b)	4 (C)	4(d)	5(a)	5(b)	6(a)	6(b)	6©	6(d)
Sector-wise total		**…**	**…**	**…**	**…**	**…**	**…**	**…**	**…**	**…**	**…**		
INFRASTRUCTURE													
2	**KIIDCL**	**...**	**....**	**....**	**....**	**....**	**....**	**....**	**....**	**...**	**...**	**....**	**...**
Sector-wise total		…	…	…	…	…	…	…	…	…	…	…	…
MANUFACTURING													
3	**KPPFL**	**...**	**...**	**...**	**...**	**...**	**...**	**...**	**...**	**...**	**...**	**...**	**...**
4	CRL	…	…	…	…	…	…	…	…	…	…		
5	KGL	…	…	…	…	…	…	…	…	…	…	…	…
6	KSRL	…	…	…	…	…	…	…	…	…	…	…	…
7	KACPFL	…	…	…	…	…	…	…	…	…	…	…	…
8	KCCL	…	…	…	…	…	…	…	…	…	…	…	…
9	SKL	…	…	…	…	…	…	…	…	…	…	…	…
10	KSEWL	…	…	…	…	…	…	…	…	…	…	…	…
11	SMKL	…	…	…	…	…	…	…	…	…	…	…	…
12	MECL	…	…	…	…	…	…	…	…	…	…	…	…

Sl.No.	Sector & name of the company/ corporation	Equity/loans received out of Budget during the year		Grants and subsidy received during the year				Guarantees received during the year and commitment at the end of the year@		Waiver of dues during the year			
		Equity	Loans	State Government	Central Government	Others	Total	Received	Commitment	Loans repayment written off	Loans converted into equity	Interest/ penal interest waived	Total
1	2	3(a)	3(b)	4(a)	4(b)	4 (C)	4(d)	5(a)	5(b)	6(a)	6(b)	6©	6(d)
13	KCL	…	…	…	…	…	…	…	…	…	…	…	…
14	KPDL	…	…	…	…	…	…	…	…	…	…	…	…
15	SIDKEL	…	…	…	…	…	…	…	…	…	…	…	…
16	AWL	…	…	…	…	…	…	…	…	…	…	…	…
17	KRL	…	…	…	…	…	…	…	…	…	…	…	…
18	TSML	…	…	…	…	…	…	…	…	…	…	…	…
19	TPIL	…	…	…	…	…	…	…	…	…	…	…	…
20	TRWL	…	…	…	…	…	…	…	…	…	…	…	…
21	KSWIL	…	…	…	…	…	…	…	…	…	…	…	…
22	KSOL	…	…	…	…	…	…	…	…	…	…	…	…
23	KSDCL	…	…	…	…	…	…	…	…	…	…	…	…
24	KSSCL	…	…	…	…	…	…	…	…	…	…	…	…
25	KTL	…	…	…	…	…	…	…	…	…	…	…	…
26	VLL	…	…	…	…	…	…	…	…	…	…	…	…
Sector-wise total		…	…		…	…		…	…	…	…	…	…

Sl.No.	Sector & name of the company/ corporation	Equity/loans received out of Budget during the year		Grants and subsidy received during the year				Guarantees received during the year and commitment at the end of the year@		Waiver of dues during the year			
		Equity	Loans	State Government	Central Government	Others	Total	Received	Commitment	Loans repayment written off	Loans converted into equity	Interest/ penal interest waived	Total
1	2	3(a)	3(b)	4(a)	4(b)	4 (C)	4(d)	5(a)	5(b)	6(a)	6(b)	6©	6(d)
SERVICE													
27	KSIPTCL	…	…	…	…	…	…	…	…	…	…	…	…
Sector-wise total		…	…	…	…	…	…	…	…	…	…	…	…
Total C (All sector wise non working Government companies)		…	…	…	…	…	…	…	…	…	…	…	…
D Non-working Statutory Corporation		**…**	**…**	**NIL**									
Grand Total (A+B+C+D)		**114.95**	**322.73**	**288.72**	**249.34**	**35.57**	**548.63**	**2673.59**	**3728.63**	**41.24**	**12.38**	**572.33**	**625.95**

@Figures indicate total guarantees outstanding at the end of the year

Annexure 4
Statement showing financial assistance by State Government to companies whose accounts are in arrear
(Referred to in paragraph 1.22)

(Figures in columns 4 and 6 to 8 are ` in crore)

Sl No	Name of the company/ corporation	Year upto which Accounts Finalised	Paid up capital as per latest finalised accounts	Investment made by State Government during the years for which accounts are in arrears			
				Year	Equity	Loans	Grants
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
A. Working Government companies							
1.	The Kerala Agro -Industries Corporation Limited	2004-05	4.74	2005-06	…	2.40	…
				2008-09	…	…	4.67
				2009-10	…	0.90	2.78
2.	The Kerala State Coir Corporation Limited	2008-09	8.05	2009-10	…	…	3.67
3.	The Kerala State Cashew Development Corporation Limited	2005-06	200.64	2006-07	…	33.32	…
				2007-08	…	16.00	2.00
				2008-09	…	5.13	15.97
				2009-10	…	8.13	24.00
4.	Kerala State Horticultural Products Development Corporation Limited	2003-04	5.18	2006-07	0.50	…	…
				2007-08	0.05	…	0.30
				2008-09	0.10	…	0.95
				2009-10	0.10	…	1.73
5.	Kerala State Poultry Development Corporation Limited	2005-06	1.97	2006-07	…	…	0.65
				2007-08	…	…	5.38
				2008-09	…	…	6.80
				2009-10	…	…	5.85
6.	Kerala Electrical and Allied Engineering Company Limited	2006-07	71.38	2008-09	…	1.00	…
7.	Kerala Small Industries Development Corporation Limited	2005-06	22.14	2006-07	0.40	…	…
				2007-08	0.25	…	…
				2008-09	0.30	…	…
				2009-10	0.20	…	…
8.	Kerala State Film Development Corporation Limited	2004-05	18.32	2005-06	0.55	…	1.00
				2006-07	0.50	…	…
				2007-08	…	…	1.00
				2008-09	0.65	…	1.50
				2009-10	0.65	…	
9.	Kerala State Electronics Development Corporation Limited	2008-09	115.16	2009-10	…	12.50	…
10.	Keltron Component Complex Limited	2007-08	5.53	2008-09	…	…	2.30

Sl No	Name of the company/ corporation	Year upto which Accounts Finalised	Paid up capital as per latest finalised accounts	Investment made by State Government during the years for which accounts are in arrears			
				Year	Equity	Loans	Grants
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
11.	Kerala State Handloom Development Corporation Limited	2007-08	14.22	2008-09	0.80	0.05	1.10
				2009-10	3.06	0.32	0.33
12.	Handicrafts Development Corporation of Kerala Limited	2004-05	2.77	2005-06	…	…	0.82
				2006-07	…	…	0.70
				2007-08	…	…	0.28
				2008-09	…	…	1.28
				2009-10	…	0.97	3.22
13.	Kerala Forest Development Corporation Limited	2008-09	7.95	2009-10	…	…	1.57
14.	Kerala State Bamboo Corporation Limited	2005-06	6.75	2006-07	…	…	2.45
				2008-09	0.15	0.36	7.00
				2009-10	0.50	2.94	…
15.	Kerala Police Housing and Construction Corporation Limited	2006-07	0.27	2007-08	…	5.05	…
				2008-09	…	6.10	…
				2009-10	…	…	6.86
16.	Kerala State Development Corporation for Scheduled Castes and Scheduled Tribes Limited	2007-08	73.03	2008-09	4.13	…	1.30
				2009-10	4.68	…	1.00
17.	The Kerala State Backward Classes Development Corporation Limited	2005-06	46.06	2006-07	4.50	…	…
				2007-08	4.40	…	…
				2008-09	7.00	…	0.07
				2009-10	7.00	…	0.92
18.	Kerala State Handicapped Persons' Welfare Corporation Limited	1998-99	1.74	1999-2000	0.13	0.32	0.36
				2000-01	0.08	0.15	0.45
				2001-02	0.03	0.05	0.41
				2002-03	0.04	0.10	0.35
				2003-04	0.04	0.09	0.47
				2004-05	…	…	0.68
				2005-06	0.05	0.65	0.10
				2006-07	0.05	0.10	0.30
				2007-08	0.04	0.08	0.40
				2008-09	…	…	1.32
				2009-10	…	...	1.40
19.	Kerala State Development Corporation for Christian Converts from Scheduled Castes & the Recommended Communities Limited	1998-99	3.68	2006-07	3.50	….	…
				2007-08	3.40	…	…
				2008-09	3.50	…	…
				2009-10	3.00	…	…

Sl No	Name of the company/ corporation	Year upto which Accounts Finalised	Paid up capital as per latest finalised accounts	Investment made by State Government during the years for which accounts are in arrears			
				Year	Equity	Loans	Grants
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
20.	Kerala Artisans' Development Corporation Limited	2003-04	2.53	2006-07	…	…	0.23
				2007-08	0.05	…	0.05
				2008-09	1.00	…	0.29
				2009-10	0.78	…	…
21.	Kerala State Palmyrah Products Development and Workers' Welfare Corporation Limited	2006-07	0.87	2007-08	…	…	0.20
				2008-09	…	…	0.33
				2009-10	…	0.48	0.16
22.	The Kerala State Civil Supplies Corporation Limited	2006-07	8.56	2007-08	…	…	93.06
				2008-09	…	…	165.41
				2009-10	…	…	64.00
23.	Tourist Resorts (Kerala) Limited	2008-09	28.20	2009-10	0.02		
24.	Kerala State Drugs and Pharmaceuticals Limited	2002-03	7.58	2007-08	…	3.00	…
				2008-09	…	7.00	…
25.	The Pharmaceutical Corporation (Indian Medicines) Kerala Limited	2008-09	6.87	2009-10	3.80	…	…
26.	Kerala Urban & Rural Development Finance Corporation Limited	2008-09	0.96	2009-10	…	0.75	…
27.	Kerala Shipping and Inland Navigation Corporation Limited	2006-07	15.24	2008-09	5.50	…	…
				2009-10	6.00	…	…
28.	Indian Institute of Information Technology and Management - Kerala	2007-08	Nil[∇]	2008-09	…	…	1.00
				2009-10	…	…	3.00
29.	Vizhinjam International Seaport Limited	2007-08	8.50	2008-09	25.70	…	2.30
				2009-10	…	…	25.00
30.	Kerala State Industrial Development Corporation Limited	2008-09	299.24	2009-10	1.00	1.00	…
31.	Kerala Automobiles Limited	2006-07	10.23	2008-09	…	3.15	…
				2009-10	…	1.59	…
32.	Meat Products of India Limited	2005-06	1.81	2008-09	…	…	1.08
				2009-10	…	…	0.75

[∇] **Share capital is ` 200 only.**

Sl No	Name of the company/ corporation	Year upto which Accounts Finalised	Paid up capital as per latest finalised accounts	Investment made by State Government during the years for which accounts are in arrears			
				Year	Equity	Loans	Grants
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
33.	Steel Industrials Kerala Limited	2008-09	36.56	2009-10	…	4.29	…
34.	Kerala Medical Services Corporation Limited	…	…	2008-09	…	…	95.03
35.	Kerala State Maritime Development Corporation Limited	2006-07	9.16	2009-10	0.10	…	…
36.	Autokast Limited	2008-09	19.97	2009-10	...	2.33	…
37.	Kerala State Coastal Area Development Corporation Limited	First Accounts not prepared		2009-10	0.09	…	…
38.	Travancore Titanium Products Limited	2006-07	1.77	2009-10	8.00	…	…
39.	Kerala State Information Technology Infrastructure Limited	2008-09	30.10	2009-10	10.00	…	…
40.	Malabar Distilleries Limited	First Accounts not prepared		2009-10	0.01	…	…
41.	Kerala State Women's Development Corporation Limited	1997-98	3.88	2009-10	…	…	1.51
42.	United Electrical industries Limited	2008-09	3.99	2009-10	…	2.00	…
43.	Kanjikode Electronics and Electricals Limited	2008-09	0.10	2009-10	…	…	0.15
44.	Sitaram Textiles Limited	2008-09	5.94	2009-10	…	1.44	…
45	Kerala State Textile Corporation Limited	2008-09	57.97	2009-10	0.50	1.50	…
46	Kerala Ceramics Limited	2006-07	11.21	2009-10		0.93	
47	Metal Industries Limited	2008-09	1.94	2009-10	…	1.19	…
	Total A (Companies)				**116.88**	**127.36**	**569.24**
B. Working Statutory corporations							
1	Kerala State Electricity Board	2008-09	1553.00	2009-10	…	…	5.84
2	Kerala State Road Transport Corporation	2007-08	406.03	2008-09	25.00	85.50	…
				2009-10	15.00	105.00	…
3	Kerala State Warehousing Corporation	2006-07	9.00	2008-09	0.50	…	…
				2009-10	0.50	…	…

Sl No	Name of the company/ corporation	Year upto which Accounts Finalised	Paid up capital as per latest finalised accounts	Investment made by State Government during the years for which accounts are in arrears			
				Year	Equity	Loans	Grants
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
4	Kerala Industrial Infrastructure Development Corporation	2008-09	…	2009-10	…	15.00	5.16
	Total B (Statutory Corporations)				**41.00**	**205.50**	**11.00**
	Grand Total (A)+(B)				**157.88**	**332.86**	**580.24**
C. Non-working Government Companies: Nil							
	Total C (Non-working Government Companies)				**…**	**…**	**…**
	Grand Total (A+B+C)				**157.88**	**332.86**	**580.24**
	Aggregate						**1070.98**

Annexure 5

Statement showing financial position of Statutory corporations

(Referred to in paragraph 1.14)

(` in crore)

1. Kerala State Electricity Board

Particulars	2006-07	2007-08	2008-09
A. Liabilities			
Equity Capital	1553.00	1553.00	1553.00
Loans from Government	-	-	…
Other long-term loans (including bonds)	2498.52	1856.72	1100.36
Reserves and Surplus (Funds)	3536.11	4055.27	4683.58
Current liabilities and provisions	3422.82	3812.35	4472.61
Total – A	**11010.45**	**11277.34**	**11809.55**
B. Assets			
Gross fixed assets	8216.85	8684.56	9249.11
Less : Depreciation	3070.27	3489.36	3924.10
Net fixed assets	5146.58	5195.20	5325.01
Capital works-in-progress	1184.48	1090.49	1171.12
Current assets	3060.61	3772.87	4084.63
Investments	16.48	16.48	25.80
Miscellaneous expenditure	1602.30	1202.30	1202.99
Deficits	…	…	…
Total – B	**11010.45**	**11277.34**	**11809.55**
C. Capital employed[@]	5779.95	7410.68	6071.71

[@] **Capital employed represents net fixed assets (including capital works-in-progress) plus working capital (excluding deferred costs and assets not in use).**

(` in crore)

2. Kerala State Road Transport Corporation			
Particulars	**2005-06**	**2006-07**	**2007-08**
A. Liabilities			
Capital (Including capital loan & equity capital)	147.95	152.95	406.03
Borrowings (Government)	90.65	156.75	0
(Others)	370.49	391.32	476.97
Funds*	30.05	32.25	38.10
Trade dues and other current liabilities (including provisions)	1225.75	1254.42	723.85
Total - A	**1864.89**	**1987.69**	**1644.95**
B. Assets			
Gross block	478.81	487.61	551.08
Less: Depreciation	309.84	344.29	367.44
Net fixed assets	168.97	143.32	183.64
Capital works-in-progress (including cost of chassis)	2.78	0.64	5.25
Investments	0.03	0.03	0.03
Current assets, loans and advances	75.01	66.20	87.14
Accumulated loss	1618.10	1777.50	1368.89
Total - B	**1864.89**	**1987.69**	**1644.95**
C. Capital employed @	**(-)979.00**	**(-) 1044.27**	**(-)447.82**

* **Excluding depreciation funds.**
@ **Capital employed represents net fixed assets (including capital works-in-progress) plus working capital.**

(` in crore)

3. Kerala Financial Corporation			
Particulars	**2007-08**	**2008-09**	**2009-10**
A. Liabilities			
Paid-up capital	159.06	74.06	204.06
Share application money	...	…	…
Reserve fund and other reserves and surplus	33.56	45.26	65.89
Borrowings:			
(i) Bonds and debentures	123.17	107.26	97.49
(ii) Fixed Deposits	0.12	…	…
(iii) Industrial Development Bank of India & Small Industries Development Bank of India	308.93	406.34	479.03
(iv) Reserve Bank of India	...	…	…
(v) Loan towards share capital: (a) State Government (b) Industrial Development Bank of India	 … …	 … 130.00	 … …
(vi) Others (including State Government) (a) Loans (b) subventions	 ... 2.51	 … 2.52	 … …
Other liabilities and provisions	34.40	9.71	35.01
Total – A	**661.75**	**775.15**	**881.48**
B. Assets			
Cash and Bank balances	23.31	141.31	10.42
Investments	...	1.67	1.99
Loans and Advances	508.26	589.82	828.30
Net fixed assets	2.85	2.58	2.47
Other assets	22.33	…	38.30
Miscellaneous expenditure	105.00	39.77	…
Total – B	**661.75**	**775.15**	**881.48**
C. Capital employed @	587.40	654.48	749.12

@ **Capital employed represents the mean of the aggregate of opening and closing balances of paid-up capital, loans in lieu of capital, seed money, debentures, reserves (other than those which have been funded specifically and backed by investments outside), bonds, deposits and borrowings (including refinance).**

(` in crore)

4. Kerala State Warehousing Corporation			
Particulars	**2004-05**	**2005-06**	**2006-07**
A. Liabilities			
Paid-up capital	9.00	9.00	9.00
Reserves and surplus	1.85	1.85	1.47
Borrowings : (Government) (Others)	0.50 …	0.50 …	0.50 0.99
Trade dues and current liabilities (including provisions)	18.36	18.55	16.43
Total – A	**29.71**	**29.90**	**28.39**
B. Assets			
Gross block	16.71	16.85	15.36
Less: Depreciation	5.81	6.18	5.62
Net fixed assets	10. 90	10.67	9.74
Capital works-in-progress	0.77	0.34	0.35
Current assets, loans and advances	12.98	12.51	11.16
Profit and loss account	5.06	6.38	7.14
Total – B	**29.71**	**29.90**	**28.39**
C. Capital employed [@]	6.29	4.97	4.82

[@] **Capital employed represents net fixed assets (including capital works-in-progress) plus working capital.**

(` in crore)

5. Kerala Industrial Infrastructure Development Corporation(KINFRA)			
Particulars	**2006-07**	**2007-08**	**2008-09**
A. Liabilities			
Grants	112.36	138.16	148.88
Loans	149.20	149.40	131.53
Trade dues and current liabilities(including provisions)	50.74	85.10	126.62
Reserves and surplus	0	1.95	64.98
Total – A	**312.30**	**374.61**	**472.01**
B. Assets			
Gross block	41.08	51.37	49.17
Less: Depreciation	8.21	10.19	11.10
Net fixed assets	32.87	41.18	38.07
Investment	17.70	21.45	22.58
Current assets, loans and advances	260.09	310.59	411.36
Accumulated loss	1.64	1.39	0
Total – B	**312.30**	**374.61**	**472.01**
C. Capital employed [@]	242.22	264.72	322.81

[@] **Capital employed represents net fixed assets (including capital works-in-progress) plus working capital.**

Annexure 6

Statement showing working results of Statutory corporations

(Referred to in paragraph 1.14)

(` in crore)

1.	Kerala State Electricity Board			
Sl. No.	**Particulars**	**2006-07**	**2007-08**	**2008-09**
1.	(a) Revenue receipts	4416.17	5135.84	5349.82
	(b) Subsidy/subvention from Government	-	-	…
	(c) Revenue gap/ regulatory asset	142.23	91.28	749.17
	Total	4558.40	5227.12	6098.99
2.	Revenue expenditure (net of expenses capitalised) including write off of intangible assets but excluding depreciation and interest	3525.59	4327.93	5657.87
3.	Gross surplus(+)/deficit(-) for the year (1-2)	(+)1032.81	(+)899.19	(+)441.12
4.	Adjustments relating to previous years	(-)15.20	(+)60.76	(+)527.93
5.	Final gross surplus(+)/deficit(-) for the year (3+4)	(+)1017.61	(+)959.95	(+)969.05
6.	Appropriations:			
	(a) Depreciation (less capitalised)	405.98	419.09	434.74
	(b) Interest on Government loans	-	-	
	(c) Interest on others, bonds, advance, etc., and finance charges	429.34	352.77	339.6
	(d) Total interest on loans and finance charges (b+c)	429.34	352.77	339.6
	(e) Less: Interest capitalised	35.13	29.33	22.71
	(f) Net interest charged to revenue (d-e)	394.21	323.44	316.89
	(g) Total appropriations (a+f)	800.19	742.53	751.63
7.	Surplus(+)/deficit(-) before accounting for subsidy from state Government [5-6(g)-1(b)]	(+)217.42	(+)217.42	(+)217.42
8.	Net surplus (+)/deficit(-) {5-6(g)}	(+)217.42	(+)217.42	(+)217.42
9.	Total return on capital employed [#]	611.63	540.86	534.31
10.	Percentage of return on capital employed	10	7.3	8.80

[#] Total return on capital employed represents net surplus/ deficit plus total interest charged to profit and loss account (less interest capitalised).

(` in crore)

2. Kerala State Road Transport Corporation			
Particulars	**2005-06**	**2006-07**	**2007-08**
Operating :			
(a) Revenue	817.21	861.94	867.86
(b) Expenditure	771.21	772.13	720.49
(c) Surplus(+)/Deficit(-)	46.00	89.81	147.37
Non-operating :			
(a) Revenue	14.49	14.06	13.88
(b) Expenditure	252.39	259.50	297.64
(c) Surplus(+)/Deficit(-)	(-)237.90	(-)245.44	(-)283.76
Total :			
(a) Revenue	831.70	876.00	881.74
(b) Expenditure	1023.60	1031.63	1018.13
(c) Net Profit(+)/Loss(-)	(-)191.90	(-)155.63	(-)136.39
Interest on capital and loans	58.37	59.98	54.32
Total return on capital employed #	(-)133.53	(-)95.65	(-)82.07

Total return on capital employed represents net surplus/deficit plus total interest charged to profit and loss account (less interest capitalised).

(` in crore)

3. Kerala Financial Corporation			
Particulars	**2007-08**	**2008-09**	**2009-10**
1. Income :			
(a) Interest on loans	82.93	101.92	91.96
(b) Other income	5.40	7.34	65.99
Total – 1	**88.33**	**109.26**	**157.95**
2. Expenses :			
(a) Interest on long-term loans	37.83	40.47	47.39
(b) Bad debts written-off	32.91	117.58	37.72
(c) Other expenses	27.88	27.51	26.19
Total – 2	**98.62**	**185.56**	**111.30**
Profit before tax(1-2)	(-)10.29	(-)76.30	46.65
Provision for tax	2.98	0.07	12.04
Other appropriations	14.88	-	11.20
Amount available for dividend **	(-)28.15	11.70	18.99
Dividend	…	…	8.16
Total return on capital employed #	27.54	(-)35.83	94.04
Percentage of return on capital employed	4.69		12.79

** **Represents profit of current year available for dividend after considering the specific reserves and provision for taxation.**

Total return on capital employed represents net surplus/deficit plus total interest charged to profit and loss account (less interest capitalised).

(` in crore)

4. Kerala State Warehousing Corporation			
Particulars	**2004-05**	**2005-06**	**2006-07**
1. Income :			
(a) Warehousing charges	4.06	4.89	5.02
(b) Other income	5.06	3.69	5.20
Total – 1	**9.12**	**8.58**	**10.22**
2. Expenses :			
(a) Establishment charges	6.12	6.52	6.84
(b) Other expenses	4.24	4.08	4.14
Total – 2	**10.36**	**10.60**	**10.98**
3. Profit(+)/Loss(-) before tax	(-) 1. 24	(-)2.02	(-)0.76
4. Other appropriations@	…	…	…
5. Amount available for dividend	…	…	…
6. Dividend for the year	…	…	…
7. Total return on capital employed#	(-) 0. 99	(-) 1.86	(-)0.76
8. Percentage of return on capital employed	…	…	

@ This does not include prior period adjustments.

 # Total return on capital employed represents net surplus/deficit plus total interest charged to profit and loss account (less interest capitalised).

(` in crore)

5. Kerala Industrial Infrastructure Development Corporation (KINFRA)			
Particulars	**2006-07**	**2007-08**	**2008-09**
1.Income			
(a) Sale of land on long lease	4.36	6.46	64.86
(b) Miscellaneous income	3.15	4.51	17.22
Total -1	**7.51**	**10.97**	**82.08**
2. Expenses			
(a) Establishment charges	1.27	1.47	2.74
(b) Other expenses	5.33	8.33	15.55
Total-2	**6.60**	**9.80**	**18.29**
Net profit (+)/Loss (-)	(+)0. 91	(+)1.17	(+)63.79
Total return on capital employed[#]	(+)0. 91	(+)1.17	(+)65.12
Percentage of return on capital employed	0.37	0.44	20.17

[#] **Total return on capital employed represents net surplus/deficit plus total interest charged to profit and loss account (less interest capitalised).**

Annexure 7
Statement showing unit-wise production performance of Kerala Electrical and Allied Engineering Company Limited
(*Referred to in paragraph 2.10*)

Unit		Kundara		Mamala		Olavakkod	Kasargod
Product		Brush less Alternators	Castings	Distribution transformer	Structural and civil work	Electrical accessories	DG sets and Alternators
Installed capacity		2040 nos (15900 KW)	1500 MT	5 lakh KVA	1200 MT	4.44 lakh nos	3000 nos
2005-06	Budgeted Production	960♦	Not budgeted	419750 KVA	` 670 lakh∇	` 250 lakh∇	781
	Actual Production	9604.26 KW 868 nos (` 15.09 crore)	407 MT (` 35.46 lakh)	327175KVA (` 2463.98 lakh)	323.51 MT (` 563.88 lakh)	42546 nos (` 78.33 lakh)	858 (` 1732.64 lakh)
	% of budgeted production to installed capacity	47	NA	84	NA	NA	26
	% of actual production to budgeted production	90	NA	78	84	31	110
	% of actual production to installed capacity	43	27	65	27	10	29
2006-07	Budgeted Production	840	` 15 lakhα	296385 KVA	` 815.04 lakh	` 250 lakh	737
	Actual Production	9646.9 KW 859 nos (` 14.53 crore)	347 MT (` 13.38 lakh)	239858KVA (` 2121.80 lakh)	319.83MT ` 421.14 lakh	26701 nos (` 74.45 lakh)	858 nos (` 3736.51 lakh)
	% of budgeted production to installed capacity	41	NA	59	NA	NA	25
	% of actual production to budgeted production	102	89	81	52	30	116
	% of actual production to installed capacity	42	23	48	27	6	29
2007-08	Budgeted Production	900	` 24 lakh	351480 KVA	` 1015.32★	` 323 lakh	751
	Actual Production	10561.9KW 766 nos (` 21.69 crore)	433 MT (` 18.49 lakh)	416467 KVA (` 3777.26 lakh)	251.15 MT (` 340.66 lakh)	93948 nos (` 328.94 lakh)	641 nos (` 3777.35 lakh)
	% of budgeted production to installed capacity	44	NA	70	NA	NA	25
	% of actual production to budgeted production	85	77	118	34	102	85
	% of actual production to installed capacity	38	29	83	21	21	21

♦ Budgeted production represents number of alternators only whereas actual production(in KW) includes alternators and spares, hence not comparable

α Installed capacity in value terms is not ascertainable hence not comparable

★ Figures include value of civil work undertaken from 2007-08 onwards

Unit		**Kundara**		**Mamala**		**Olavakkod**	**Kasargod**
Product		Brush less Alternators	Castings	Distribution transformer	Structural and civil work	Electrical accessories	DG sets and Alternators
Installed capacity		2040 nos (15900 KW)	1500 MT	5 lakh KVA	1200 MT	4.44 lakh nos	3000 nos
2008-09	Budgeted Production	1105	` 60 lakh	365980 KVA	` 1010.76	` 300 lakh	916
	Actual Production	13391.2KW 753 nos (` 21.64 crore)	432 MT (` 5.76 lakh)	479054 KVA (` 4364.65 lakh)	114.4MT (` 475.06 lakh)	95293 nos (` 275.51 lakh)	696 (` 3283.14 lakh)
	% of budgeted production to installed capacity	54	NA	73	NA	NA	31
	% of actual production to budgeted production	68	10	131	47	92	76
	% of actual production to installed capacity	37	29	96	10	21	23
2009-10	Budgeted Production	1030	750 MT	409459 KVA	` 650 lakh	` 370 lakh	849 Nos
	Actual Production	1199.65 KW 1207 nos (` 15.34 crore)	452 MT	731545 KVA (` 5593.42 lakh)	418.18 MT (` 546.75 lakh)	` 195.89 lakh	637 nos (` 1472.02 lakh)
	% of budgeted production to installed capacity	50	50	82	NA	NA	28
	% of actual production to budgeted production	117	NA	179	84	53	75
	% of actual production to installed capacity	59	30	146	35	NA	21

Annexure 8
Statement showing capacity utilisation of Kundara Foundry unit of Kerala Electrical and Allied Engineering Company Limited
(Referred to in paragraph 2.10)

Year	Installed Capacity (MT)	Actual Production (MT)	% of actual production to installed capacity	Raw Material cost for Production (`)	Wages & overtime (`)	Power Charges (`)	Maintenance Exps.(`)	Total Cost of Production (`)	Total Cost/ Kg (`)	Selling Price per Kg (`)
2005-06	1500	407	27	7179480	3736421	5219296	3494	16138691	39.65	37
2006-07	1500	347	23	7342520	4291847	4658329	2250	16294946	46.96	37
2007-08	1500	433	29	8863510	5134809	5222336	11600	19232255	44.42	45
2008-09	1500	432	29	11547360	6014507	6123340	25000	23710207	54.88	49
2009-10	1500	452	30	11114680	5227167	3389187	0	19731034	43.65	55

Annexure 9
Statement showing finished goods in stock of Kerala Electrical and Allied Engineering Company Limited
(Referred to in paragraph 2.15)

	Unit		Item	Qty.	Value ₹ in lakh	Lying since	As on	Delay in Months	Interest @ 14.5% (₹ in lakh)
1	Kundara		83 KVA GPA	1	0.55	31/03/2006	31/03/2010	48	0.32
2	Kundara		8KW Alternator	1	1.57	31/03/2006	31/03/2010	48	0.91
3	Kundara		2.5 KW Alternator	20	14.75	31/12/2008	31/03/2010	15	2.66
4	Olavakkod		Items	21	0.73	31/03/2006	31/03/2010	48	0.42
5	Mamala		BPL (1263)/1999-2000	1	4.25	31/03/2001	31/03/2010	108	5.55
6	Mamala		BESCOM (2008)	80	15.20	31/03/2005	31/03/2010	60	11.02
7	Mamala		ICOM Tele Ltd (2088)	1	0.60	31/03/2005	31/03/2010	60	0.44
	Total (A)				37.65				21.32
Finished goods lifted after a minimum of Ten months from date of production (Mamala)									
	Unit	**SO**	**Customer**	**Qty.**	**Value ₹ in lakh**	**Ready on**	**Lifted**	**Delay in Months**	**Interest @ 14.5% (₹in lakh)**
1	Mamala	1874	KPTCL/2000-01	3	2.28	Jan-02	Feb-08	73	2.01
2	Mamala	1909	Agricultural University2000-01	5	8.00	Jan-02	Nov-06	58	5.61
3	Mamala	2067	Quilon consulting Engg/ 2001-02	1	1.47	Jan-03	Feb-07	49	0.87
4	Kasaragod	A25507	Bharat Heavy Electricals Ltd	1	13.85	May-06	Sept-09	40	6.69
5	Mamala	2262	Guruvayoor Devaswam/2003-04	1	7.57	Mar-06	Mar-08	24	2.20
6	Mamala	2343	Ananthapuri Hospital/2006-07	1	13.85	Jan-08	Dec-08	10	1.67
7	Mamala	2474	N Sreekandan/2006-07	1	2.30	Mar-08	Aug-09	16	0.44
	Total B				49.32				19.49
Grand total (A+B)					**86.97**				**40.81**

Annexure 10

Statement showing loss incurred due to increase in cost of raw materials in Kerala Electrical and Allied Engineering Company Limited

(Referred to in paragraph 2.21)

Qty. (Nos)	KEL Readi-ness date	Raw Material cost per Transformer at the time of tender `	Price variation in % of R.M. at the time of readiness	Price Variation of Raw material `	Total RM cost `	Other Cost per Trans-former `	Total Cost per Transformer `	Total cost of supplied Trans-former (` in lakh)
KSEB PO TCM 172/2004-05/4548 dated 17.01.2005								
6	Apr-05	78455	26.75	20987	99442	4637.45	104079.45	6.25
41	May-05	78455	30.63	24031	102486	4637.45	107123.45	43.92
24	Jun-05	78455	30	23537	101992	4637.45	106629.45	25.59
29	Jul-05	78455	37.16	29154	107609	4637.45	112246.45	32.55
100						Total Cost	`	108.31
					Sales price		100X96309	96.31
					Loss			12.00
					Add penalty			2.49
					Total loss			**14.49**
KSEB PO TCM 210/05-06/5117 dated 24.01.2006								
12	Aug-06	78455	62.99	49419	127874	4637.45	132511.45	15.90
13	Sep-06	78455	63.32	49678	128133	4637.45	132770.45	17.26
25						Total Cost	`	33.16
					Sales price		25X96309	24.08
					Loss			9.08
					Add penalty			1.01
					Total loss			**10.09**
KSEB PO TCM 153/05-06-3872 dated 11.11.2005								
40	Feb-06	46115	67.51	31132	77247	7903	85150	34.06
34	Mar-06	46115	66.11	30487	76602	7903	84505	28.73
24	May-06	46115	74.22	34227	80342	7903	88245	21.18
28	Jun-06	46115	76.37	35218	81333	7903	89236	24.99
74	Jul-06	46115	78.66	36274	82389	7903	90292	66.81
200						Total Cost	`	175.77
					Sales price		200X69500	139.00
					PV claimed			5.14
					Total revenue received			144.14
					Loss			31.63
					Add penalty			6.57
					Total loss			**38.20**
Grand total								**62.78**

Annexure 11

Statement showing delay in supply of distribution transformers and consequent loss of price variation in Kerala Electrical and Allied Engineering Company Limited

(*Referred to in paragraph 2.23)*

SI No	KSEB Purchase order	Delivery schedule	Actual Delivery	No of Transformers	Basic Rate of Trans-former (`)	Price variation in %	Maximum Price variation % eligible	Price variation eligible per transformer (`)	Revenue foregone (` in lakh)
Supply of 800 nos 160 KVA									
1	TA.32/Ele 20/2003-04/Retender 1 KEL (118)/4272 dated 7-2-2004	March 2005	April 2005	160	69500	26.97 (March 2005)	10	6950	11.12
			May 2005	40	69500	26.97	10	6950	2.78
			Total	200				6950	**13.90**
Supply of 200 nos 160 KVA (25% additional quantity against the above order)									
2	TCM 153/05-06/3872 dated 11-11-2005	March 2006	May 2006	10	69500	67.51 (March 2006)	10	6950	0.70
			June 2006	14	69500	67.51	10	6950	0.97
			July 2006	58	69500	67.51	10	6950	4.03
			Aug 2006	44	69500	67.51	10	6950	3.06
			Total	126				6950	**8.76**
Supply of 1400 nos 100 KVA									
3	TA.32/TCM 106/2005-06/2623 dated 24-8-2005	June 2006	July 2006	100	63675	21.15 (June 2006)	10	6367.50	6.37
			Aug 2006	100	63675	21.15	10	6367.50	6.37
			Sept 2006	102	63675	21.15	10	6367.50	6.49
			Oct 2006	110	63675	21.15	10	6367.50	7.00
			Nov 2006	133	63675	21.15	10	6367.50	8.47
			Dec 2006	63	63675	21.15	10	6367.50	4.01
			Total	608				6367.50	**38.71**
Supply of 100 nos 250 KVA									
4	No TCM 172/2004-05/4548 dated 17-1-2005	June 2005	May-2005	47	96309	30 (June 2005)	10	9630.90	4.53
			June-2005	12	96309	30	10	9630.90	1.16
			July-2005	12	96309	30	10	9630.90	1.15
			Aug-2005	29	96309	30	10	9630.90	2.79
			Total	100				9630.90	**9.63**
Supply of 25 nos of 250 KVA (25% additional quantity against the above order)									
5	TCM 210/2005-06/5117 dated 24-1-2006	March 2006	Aug-2006	12	96309	51.62 (March 2006)	10	9630.90	1.16
			Sep-2006	13	96309	51.62	10	9630.90	1.25
			Total	25				9630.90	**2.41**
	Total loss								**73.41**

Annexure 12
Statement showing loss of interest due to delay in collection of sales proceeds and delay in lifting finished goods in Kerala Electrical and Allied Engineering Company Limited
(Referred to in paragraph 2.26)

Order date	**Date of delivery**	**Value (`)**	**Amount received (`)**	**Date of receipt**	**Delay in days**	**Interest loss @ 14.50% (` in lakh)**
A. Delay in collection of sales proceeds						
1. Rail Coach Factory, Kapurthala, (Kasaragod unit)						
21/05/2007	31/10/2007	1365287	0		882	4.78
06/08/2007	17/11/2007	1365287	1337244	20/03/2010	854	4.63
06/02/2008	10/07/2008	1341142	1341142	23/03/2010	621	3.31
2. Paras Electricals Ltd (Kundara unit)						
	31/03/2005	414387	0	0	1826	3.01
31/07/2007	22/04/2008	2910959	2910959	12/06/2008	51	0.59
	28/06/2008	1801686	1500000	31/10/2008	125	0.89
	balance	301686	301686	16/01/2009	202	0.24
	30/08/2008	1801686	1000000	09/06/2009	283	2.03
	balance	801686			295	0.94
3. Paras Electricals (Kasaragod unit)						
17/02/2009	31/03/2009	487548	0		365	0.71
4. Amith Industrial suppliers (Mamala unit)						
17/07/2008	31/10/2008	1030000	100000	21/01/2009	82	0.34
	balance	930000	0		648	2.39
B. Delay in lifting finished goods						
Order date	Ready on	Amount blocked (`)	Amount received (`)	Date of lifting/receipt	Delay in days	Interest loss @ 14.50% (`)
5. Kizhakkebhagam Agro Mlls (Mamala)						
14/11/2007	0	0	25000	16/11/2007	-49	0
	04/01/2008	715000	345000	31/01/2008	27	0.08
	31/01/2008	370000	100000	25/08/2008	207	0.30
	25/08/2008	270000	100000	05/09/2008	11	0.01
	05/09/2008	170000	170000	13/08/2009	342	0.23
Total						**24.48**

Annexure 13
Statement showing excess man days with reference to actual production in Kerala Electrical and Allied Engineering Company Limited
(Referred to in Paragraph 2.32)

	2005-06	2006-07	2007-08	2008-09	2009-10	Total
Kundara (Alternator Division)						
Actual production In number	2134	2144	2347	2976	2266	11867
Actual production In KW	9604	9647	10562	13391	10199	53403
Mandays required	43056	43257	47353	60044	45719	239429
Actual mandays	55200	55800	52500	51900	50700	266100
OT days	8306	7167	10865	10983	9213	46534
Total mandays	63506	62967	63365	62883	59913	312634
Excess mandays	12144	12543	5147	-8144	4981	73205
Percentage of excess mandays to total required mandays						31
Mamala(Transformer Division)						
Actual production In number	2716	1615	3079	2443	6257	16110
Actual production In KVA	327175	239858	416467	479054	730545	2193099
Mandays required	31113	20359	37289	33977	71589	194327
Actual mandays	50700	53100	51900	51000	49500	256200
OT days	5326	2744	10163	9192	9172	36597
Total	56026	55844	62063	60192	58672	292797
Excess mandays	24913	35485	24774	26215	-12917	98470
Percentage of excess mandays to total required mandays						51
Kasaragod						
Actual production In number	858	858	641	696	621	3674
Mandays required	21184	22642	20090	19692	17745	101353
Actual mandays	37500	36300	39600	39900	39900	193200
OT days	4910	5855	2513	1633	1519	16430
Total	42410	42155	42113	41533	41419	209630
Excess mandays	21226	19513	22023	21841	23674	108277
Percentage of excess mandays to total required mandays						107

Annexure 14
Statement showing operational performance of Kerala State Electricity Board
(*Referred to in paragraph 3.16*)

Sl No	Particulars	2005-06	2006-07	2007-08	2008-09	2009-10
1	Installed capacity	(MW)				
(a)	Thermal	234.60	234.60	234.60	234.60	234.60
(b)	Hydel	1831.60	1849.10	1854.10	1886.60	1889.85
(c)	Gas	…	…	…	…	…
(d)	Others (Wind farm)	2.03	2.03	2.03	2.03	2.03
	TOTAL	2068.23	2085.73	2090.73	2123.23	2126.48
2	Normal maximum demand (MW)	2624.00	2880.00	3020.00	2931.00	2998.00
	Percentage increase/decrease (-) over previous year		9.76	4.86	(-)2.95	2.29
3	Power generated	(MKWH)				
(a)	Thermal	148.99	247.02	374.14	653.54	592.27
(b)	Hydel	7449.88	7496.62	8327.45	5839.28	6646.27
(c)	Gas	…	…	…	…	…
(d)	Others	1.91	2.14	1.96	1.68	1.84
	TOTAL	7600.78	7745.78	8703.55	6494.50	7240.38
	Percentage increase/decrease (-) over previous year		1.91	12.37	(-)25.38	11.48
4	Less: Auxiliary consumption					
(a)	Thermal	6.48	8.47	10.80	17.19	17.37
	(Percentage)	4.35	3.43	2.89	2.63	2.93
(b)	Hydel	30.60	32.86	34.67	26.90	21.56
	(Percentage)	0.41	0.44	0.42	0.46	0.32
(c)	Substations	9.34	9.34	10.39	9.97	11.93
	(Percentage)					
	TOTAL	46.42	50.67	55.86	54.06	50.86
	(Percentage)	0.61	0.65	0.64	0.83	0.70
5	Net Power generated	7554.36	7695.11	8647.69	6440.44	7189.52
6	Total demand (in M Us)	13618.96	14798.06	15375.55	15606.09	17335.58
7	Deficit (-)/Surplus (+) power	(-)6064.60	(-)7102.95	(-)6727.86	(-)9165.65	(-)10146.06
8	Power purchased	6700.50	8149.84	8074.62	9628.98	10199.96
9	Total Generation & Power purchased (5+8)	14254.86	15844.95	16722.31	16069.42	17389.48
10	Power sold					
(a)	Within the State*	13618.96	14798.06	15375.55	15606.09	17335.58
(b)	Other States / through traders	635.9	1046.89	1346.76	463.33	53.90
	Total power sold	14254.86	15844.95	16722.31	16069.42	17389.48
	*including T&D loss and external loss	3349.16	3467.06	3325.7	3191.78	3364.48
	T&D Loss (Percentage)	24.59	23.43	21.63	20.45	19.40

Annexure 15
Statement showing capacity additions of Kerala State Electricity Board during review period
(Referred to in paragraph 3.25)

SlNo	Particulars of power station	Installed capacity as on 1st April 2005	Additions during 2005-10	Installed capacity as on 31 March 2010
			(MW)	
1	Idukki	780.00	…	780.00
2	Sabarigiri	300.00	30.00[1]	330.00
3	Lower Periyar	180.00	…	180.00
4	Kuttiadi	75.00	…	75.00
5	Kuttiadi Extension	50.00	…	50.00
6	Idamalayar	75.00	…	75.00
7	Sholayar	54.00	…	54.00
8	Kakkad	50.00	…	50.00
9	Sengulam	48.00	…	48.00
10	Neriamangalam	48.00	4.50[2]	52.50
11	Neriamangalam Extension Scheme`	…	25.00[3]	25.00
12	Pallivasal	37.50	…	37.50
13	Poringal	32.00	…	32.00
14	Panniar	30.00	2.00[4]	32.00
15	Poringalkuthu Left Bank Extension	16.00	…	16.00
16	Kallada	15.00	…	15.00
17	Chembukkadavu I & II	6.45	…	6.45
18	Urumi I & II	6.15	…	6.15
19	Peppara	3.00	…	3.00
20	Malampuzha	2.50	…	2.50
21	Madupetty	2.00	…	2.00
22	Malankara		10.50[5]	10.5
23	Lower Meenmutty		3.50[6]	3.50
24	Kuttiadi Tail Race		3.75[7]	3.75
	Total Hydel	**1810.6**	**79.25**	**1889.85**
25	Brahmapuram Diesel Power Plant	106.60	…	106.60
26	Kozhikode Diesel Power Plant	128.00	…	128.00
	Total Thermal	**234.60**	…	**234.60**
27	Wind Mill	**2.03**	…	**2.03**
	Grand Total	**2047.23**	**79.25**	**2126.48**

[1] **10 MW each in 2005-06 and 2006-07 and 5 each in 2007-08 and 2008-09**

[2] **2.5 MW in 2005-06 and 2 MW in 2006-07**
[3] **2008-09**
[4] **2009-10**
[5] **7 MW in 2005-06 and 3.5 MW in 2006-07**
[6] **1.5 MW in 2005-06 and 2 MW in 2006-07**
[7] **2.5 MW in 2008-09 and 1.25 MW in 2009-10**

Annexure 16

Statement showing status of forest/ environmental clearances of 11th Plan projects in Kerala State Electricity Board

(Referred to in paragraph 3.43)

Sl No	Name of Project	Request for forest clearances	Stage I/ Stage II clearance	Application for environmental clearance	Status of environmental clearance
1	Athirappally (163 MW)	20/11/1996 (from Govt. of Kerala to Govt. of India)	Stage I – 22/12/1997 Stage II – 16/12/1999	31/12/1996	Obtained on 20/01/1998 Suspended on High Court Intervention on 17/10/01 Suspension revoked and clearance obtained on 10/02/05 Clearance quashed by HC on 23/03/06
				06/11/2006	Obtained on 18/07/07 Challenged by Hon'ble HC of Kerala (PIL pending)
2	Kuttiady Addl. Extn. Scheme (100 MW)	24/05/2000	Stage I – 23/02/2001 Stage II – 20/09/2001	08/08/2000	27/04/2001
3	Pallivasal Extn. (60 MW)	Not required	-	18/09/2002	07/11/2003
4	Thottiar HEP (40 MW)	01/01/2003	Stage I – 23/03/2005 Stage II – 14/07/2009	Not required	-
5	Mankulam HEP (40 MW)	30/05/2001	Stage I – 08/12/2008 Stage II – 15/04/2009	20/03/2003	02/08/2004
6	Achencoil HEP (30 MW)	Yet to be applied for	-	29/11/2007	Stage I- 16/09/08 E.I.A. Study in progress
7	Perumthenaruvi HEP (10 MW)	10/11/2004	Stage I – 04/08/2008 Stage II – Pending for want of land for compensatory afforestation	Not required	-

Annexure 17
Statement showing details of tendering of projects in Kerala State Electricity Board
(Referred to in paragraph 3.49)

Sl No	Name of Project	Date of tender	Publicity	Contract PAC (` in crore)	No. of bidders	Name of selected contractor	Date of award of work	Date of completion
1	Lower Meenmutty	02/03/02	National level	8.35	4	Asian Tech-VA Tech Consortium	20/01/03	31/05/06
2	Pallivasal Extension Scheme	15/12/04	International Competitive Bidding	222	3	M/s. Essar-DEC- CPPL Consortium	30/09/06	in progress
3	Neriamangalam Extension Scheme	07/12/2000	National	35.06	4	VA Tech-Asian Tech Consortium	03/04/03	25/05/08
4	Ranni- Perinad	30/01/08	ICB	30.84	9	KBL- KECL-Aryacon Consortium	25/10/08	in progress
5	Thottiar	31/08/07	ICB	144	2	CPPL Chongquing	20/10/08	in progress
6	Chathankottunada	27/05/09	National	45.36	4	Coramandel-BHEL Consortium	02/08/09	in progress
7	Adyanpara	02/04/06	National	21.32	4	KBL-Aryacon Consortium	30/05/07	in progress
8	Poozhithode	25/05/08	National	32.79	2	PGC- FMEPL Consortium	03/04/09	in progress
9	Vilangad	06/09/09	National	59.49	4	PGC- FMEPL Consortium	02/05/10	in progress
10	Peechi	24/02/09	ICB	10.42	2	M/s. SILK	07/04/10	in progress

Annexure 18
Statement showing consumption of fuel in excess of norms by Thermal Stations of Kerala State Electricity Board
(*Referred to in paragraph 3.53*)

I.	**BDPP**					
1.	**LSHS**					
		2005-'06	**2006-'07**	**2007-'08**	**2008-'09**	**2009-'10**
1	Consumption (MT)	9893.92	13715.7	16342.1	39817	43842.8
2	Generation (MU)	49.319	68.749	81.45	201.309	222.156
3	Specific Fuel Consumption (gm/kwh)	200.61	199.50	200.64	197.79	197.35
4	Norms (gm/kwh)	190.03	190.03	190.03	190.03	190.03
5	Excess on units generated (MT) (3-4*2)	521.80	651.05	864.18	1562.16	1626.18
6	Cost/ MT (`)	15717.50	21214.00	24232.70	31083.30	29401.5
7	Value of Excess Consumption (` in Lakh)	82.01	138.11	209.42	485.57	478.12
		LSHS Total (` in Lakh)				1393.23
2.	**HSD**					
1	Net Consumption (KL)	1636.08	4129.36	3593.84	3763.34	2652.06
2	Generation (MU)	6.448	16.611	14.362	15.186	10.686
3	Specific Fuel Consumption (ml/kwh)	253.73	248.59	250.23	247.82	248.18
4	Norms (ml/kwh)	211.99	211.99	211.99	211.99	211.99
5	Excess on units generated (KL) (3-4*2)	269.14	607.96	549.20	544.11	386.73
6	Cost/ KL (`)	26241.70	28768.00	27528.40	29996.70	28935.70
7	Value of Excess Consumption (` in Lakh)	70.63	174.90	151.19	163.22	111.90
		HSD Total ` in Lakh)				671.84
		BDPP Total (` in Lakh)				**2065.07**
II.	**KDPP**					
	LSHS					
		2005-'06	**2006-'07**	**2007-'08**	**2008-'09**	**2009-'10**
1	Consumption (MT)	19074.40	32979.10	57231.80	89997.20	74157.20
2	Generation (MU)	93.38	161.656	278.375	437.237	359.475
3	Specific Fuel Consumption (gm/kwh)	204.27	204.01	205.59	205.83	206.293
4	Norms (gm/kwh)	194.40	194.40	194.40	194.40	194.4
5	Excess on units generated (MT) (3-4*2)	921.66	1553.51	3115.02	4997.62	4275.23
6	Cost/ MT (`)	15985.20	20608.50	25076.60	30455.40	28087.30
7	Value of Excess Consumption (` in Lakh)	147.33	320.16	781.14	1522.04	1200.80
		KDPP Total (` in Lakh)				**3971.47**

Annexure 19

Statement showing generation potential as per design, actual generation, plant load factor (PLF) as per design and actual plant load factor in Kerala State Electricity Board

(Referred to in paragraph 3.56 & 3.58)

Sl. No	Name of Station	Year	Energy to be generated as per design (MU)	Installed capacity (MW)	Generation potential for installed capacity (MU)	PLF as per design %	Actual generation (MU)	Actual PLF %
1	Idukki	2005-'06	2398	780	6832.80	35.10	2704.35	39.58
		2006-'07	2398	780	6832.80	35.10	2436.92	35.67
		2007-'08	2398	780	6832.80	35.10	3316.02	48.53
		2008-'09	2398	780	6832.80	35.10	2097.51	30.70
		2009-'10	2398	780	6832.80	35.10	2035.63	29.79
2	Sabarigiri	2005-'06	1338	310	2715.60	49.27	1471	54.17
		2006-'07	1338	320	2803.20	47.73	1556.48	55.53
		2007-'08	1338	330	2890.80	46.28	1541.35	53.32
		2008-'09	1338	330	2890.80	46.28	962.67	33.30
		2009-'10	1338	330	2890.80	46.28	1402.39	48.51
3	Lower Periyar	2005-'06	493	180	1576.80	31.27	631.49	40.05
		2006-'07	493	180	1576.80	31.27	645.02	40.91
		2007-'08	493	180	1576.80	31.27	677.97	43.00
		2008-'09	493	180	1576.80	31.27	483.36	30.65
		2009-'10	493	180	1576.80	31.27	525.26	33.31
4	Kuttiadi & KES	2005-'06	343	125	1095.00	31.32	515.55	47.08
		2006-'07	343	125	1095.00	31.32	645.38	58.94
		2007-'08	343	125	1095.00	31.32	644.72	58.88
		2008-'09	343	125	1095.00	31.32	594.55	54.30
		2009-'10	343	125	1095.00	31.32	634.52	57.95
5	Idamalayar	2005-'06	380	75	657.00	57.84	366.09	55.72
		2006-'07	380	75	657.00	57.84	386.68	58.86
		2007-'08	380	75	657.00	57.84	474.63	72.24
		2008-'09	380	75	657.00	57.84	293.79	44.72
		2009-'10	380	75	657.00	57.84	333.93	50.83
6	Sholayar	2005-'06	233	54	473.04	49.26	290.37	61.38
		2006-'07	233	54	473.04	49.26	265.75	56.18
		2007-'08	233	54	473.04	49.26	254.68	53.84
		2008-'09	233	54	473.04	49.26	213.89	45.22
		2009-'10	233	54	473.04	49.26	229.76	48.57
7	Neriamangalam and NES (commissioned in	2005-'06	237	50.5	442.38	53.57	245.32	55.45
		2006-'07	237	52.5	459.90	51.53	277.5	60.34
		2007-'08	237	52.5	459.90	51.53	313.06	68.07
		2008-'09	295.27	77.5	678.90	43.49	319.26	47.03
		2009-'10	295.27	77.5	678.90	43.49	336.16	49.52

Sl. No	Name of Station	Year	Energy to be generated as per design (MU)	Installed capacity (MW)	Generation potential for installed capacity (MU)	PLF as per design %	Actual generation (MU)	Actual PLF %
	May 08)							
8	Kakkad	2005-'06	262	50	438.00	59.82	248.77	56.80
		2006-'07	262	50	438.00	59.82	248.57	56.75
		2007-'08	262	50	438.00	59.82	246.75	56.34
		2008-'09	262	50	438.00	59.82	162.8	37.17
		2009-'10	262	50	438.00	59.82	224.16	51.18
9	Sengulam	2005-'06	182	48	420.48	43.28	188.79	44.90
		2006-'07	182	48	420.48	43.28	176.23	41.91
		2007-'08	182	48	420.48	43.28	164.77	39.19
		2008-'09	182	48	420.48	43.28	153.66	36.54
		2009-'10	182	48	420.48	43.28	157.78	37.52
10	Pallivasal	2005-'06	284	37.5	328.50	86.45	238.41	72.58
		2006-'07	284	37.5	328.50	86.45	241.69	73.57
		2007-'08	284	37.5	328.50	86.45	229.04	69.72
		2008-'09	284	37.5	328.50	86.45	197.96	60.26
		2009-'10	284	37.5	328.50	86.45	240.16	73.11
11	Poringal & PLBE	2005-'06	244	48	420.48	58.03	270.07	64.23
		2006-'07	244	48	420.48	58.03	292.28	69.51
		2007-'08	244	48	420.48	58.03	222.52	52.92
		2008-'09	244	48	420.48	58.03	237.06	56.38
		2009-'10	244	48	420.48	58.03	264.77	62.97
12	Panniar	2005-'06	158	30	262.80	60.12	159.86	60.83
		2006-'07	158	30	262.80	60.12	168.2	64.00
		2007-'08	158	30	262.80	60.12	69.24	26.35
		2008-'09	158	30	262.80	60.12	0	0.00
		2009-'10	158	32	280.32	56.36	132.8	47.37
13	Kallada	2005-'06	65	15	131.40	49.47	64.11	48.79
		2006-'07	65	15	131.40	49.47	76.16	57.96
		2007-'08	65	15	131.40	49.47	73.03	55.58
		2008-'09	65	15	131.40	49.47	46.34	35.27
		2009-'10	65	15	131.40	49.47	60.41	45.97
14	Malankara	2005-'06	44	7	61.32	71.75	20.58	33.56
	(2 no. 6.8.05)	2006-'07	44	10.50	61.32	71.75	32.22	52.54
	(3rd 27.8.06)	2007-'08	44	10.50	61.32	71.75	43.7	71.27
		2008-'09	44	10.50	61.32	71.75	33.49	54.62
		2009-'10	44	10.50	61.32	71.75	32.46	52.94

Sl. No	Name of Station	Year	Energy to be generated as per design (MU)	Installed capacity (MW)	Generation potential for installed capacity (MU)	PLF as per design %	Actual generation (MU)	Actual PLF %
15	Peppara	2005-'06	11.50	3.00	26.28	43.76	3.82	14.54
		2006-'07	11.50	3.00	26.28	43.76	7.48	28.46
		2007-'08	11.50	3.00	26.28	43.76	8.17	31.09
		2008-'09	11.50	3.00	26.28	43.76	5.52	21.00
		2009-'10	11.50	3.00	26.28	43.76	6.04	22.98
16	Chempu I	2005-'06	6.59	2.70	23.65	27.86	4.11	17.38
		2006-'07	6.59	2.70	23.65	27.86	4.74	20.04
		2007-'08	6.59	2.70	23.65	27.86	3.85	16.28
		2008-'09	6.59	2.70	23.65	27.86	4.03	17.04
		2009-'10	6.59	2.70	23.65	27.86	3.65	15.43
17	Chempukadavu II	2005-'06	9.03	3.75	32.85	27.49	6.48	19.73
		2006-'07	9.03	3.75	32.85	27.49	7.47	22.74
		2007-'08	9.03	3.75	32.85	27.49	4.73	14.40
		2008-'09	9.03	3.75	32.85	27.49	5.98	18.20
		2009-'10	9.03	3.75	32.85	27.49	4.82	14.67
18	Urumi I	2005-'06	9.72	3.75	32.85	29.59	7.16	21.80
		2006-'07	9.72	3.75	32.85	29.59	8.93	27.18
		2007-'08	9.72	3.75	32.85	29.59	8.65	26.33
		2008-'09	9.72	3.75	32.85	29.59	7.05	21.46
		2009-'10	9.72	3.75	32.85	29.59	6.96	21.19
19	Urumi II	2005-'06	6.28	2.40	21.02	29.87	5.65	26.87
		2006-'07	6.28	2.40	21.02	29.87	5.62	26.73
		2007-'08	6.28	2.40	21.02	29.87	5.29	25.16
		2008-'09	6.28	2.40	21.02	29.87	4.48	21.31
		2009-'10	6.28	2.40	21.02	29.87	4.68	22.26
20	Maduppetty	2005-'06	6.40	2.00	17.52	36.53	6.87	39.21
		2006-'07	6.40	2.00	17.52	36.53	5.68	32.42
		2007-'08	6.40	2.00	17.52	36.53	6.91	39.44
		2008-'09	6.40	2.00	17.52	36.53	5.74	32.76
		2009-'10	6.40	2.00	17.52	36.53	1.91	10.90
21	Malampuzha	2005-'06	5.60	2.50	21.90	25.57	0	0.00
		2006-'07	5.60	2.50	21.90	25.57	0	0.00
		2007-'08	5.60	2.50	21.90	25.57	0	0.00
		2008-'09	5.60	2.50	21.90	25.57	0	0.00
		2009-'10	5.60	2.50	21.90	25.57	0	0.00

Sl. No	Name of Station	Year	Energy to be generated as per design (MU)	Installed capacity (MW)	Generation potential for installed capacity (MU)	PLF as per design %	Actual generation (MU)	Actual PLF %
22	L. Meenmutty	2005-'06	0	0.00	0	0.00	0	0.00
		2006-'07	7.63	3.50	30.66	24.89	5.62	18.33
		2007-'08	7.63	3.50	30.66	24.89	4.85	15.82
		2008-'09	7.63	3.50	30.66	24.89	4.45	14.51
		2009-'10	7.63	3.50	30.66	24.89	3.43	11.19
23	KTR	2005-'06	0	0.00	0	0	0	0.00
	(9.11.08) or	2006-'07	0	0	0	0	0	0.00
	2 in 6/08	2007-'08	0	0	0	0	0	0.00
		2008-'09	14	3.75	32.85	42.62	5.76	17.53
		2009-'10	14	3.75	32.85	42.62	4.62	14.06

Note: ***At Malankara, one machine is standby.***
At Malampuzha there is no generation activity
Generation details of stage I and II of Chembukadavu and Urumi SHEPs are shown separately whereas that of Poringalkuthu Left Bank Extension, Kuttiyadi Extension and Neriamanagalam Extension schemes are clubbed with original stations for analysis purpose.

Annexure 20

Statement showing delay in annual maintenance of renovated machines in Kerala State Electricity Board

(Referred to in paragraph 3.65)

Machine particulars	Date of re-commission-ing after RMU	Particulars of Annual Maintenance after recommissioning			Remarks
		From	To	No. of days	
Neriamangalam Machine #2 (18 MW)	31/11/05	02/04/07	05/05/07	34	A/M not done for 16 months
		07/04/08	03/05/08	27	-
		26/03/09	20/04/09	26	-
Neriamangalam Machine #3 (18 MW)	29/09/06	25/02/08	30/03/08	35	A/M not done for 17 months
		21/04/09	23/05/09	33	-
Sabarigiri Machine #6 (55 MW)	01/07/05	21/08/06	23/09/06	34	-
		02/01/08	22/01/08	21	A/M not done for 15 months
		24/12/09	30/01/10	38	A/M not done for 23 months
Sabarigiri Machine #5 (55 MW)	04/05/06	21/04/08	08/05/08	18	Shut down during 07/07/06 to 11/11/06 following fire in excitation transformer. A/M not carried out for next 16 months

Annexure 21

Statement showing higher cost of construction of Small HE Projects by Kerala State Electricity Board

(Referred to in paragraph 3.73)

Sl. No.	Name of Project	Installed Capacity (MW)	Project Cost (` in Crore)	Interest During Construction (` in Crore)	Total Cost (` in Crore)	Cost per MW (` in Crore)	Price level reckoned
1	Adyanpara	3.5	17.00	1.40	18.40	5.26	2005
2	Sengulam Tail Race	3.6	19.00	1.57	20.57	5.71	2004-05
3	Anakkampoil	7.5	34.99	2.55	37.54	5.00	2007
4	Kandappanchal	3.75	19.18	1.00	20.18	5.38	2007
5	Chathankottunada II	6	29.92	3.22	33.14	5.52	2004
6	Perunthenaruvi	6	30.00	3.83	33.83	5.64	2004
7	Poozhithode	4.8	23.40	2.17	25.57	5.33	2004
8	Ranni- Perinad	4	18.00	1.94	19.94	4.99	2004
9	Barapole	15	127.59	10.85	138.44	9.23	2007

Annexure 22
Statement showing status of work in Roads and Bridges Development Corporation of Kerala Limited
(Referred to in paragraph 4.2)

Sl. No	Name of ROB	Date of awarding work	Scheduled date of completion	Estimated Cost Rs. in crore	Date of actual completion	Date of handing over of land	Delay in handing over land	No of times re tendered	Delay in shifting utilities	Delay in getting approval of Railways	Delay in getting material from Railways	Status of work completed in May 2010
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
1	Nandi Bazar (MOU work)	January 2001	January 2002	6.07	April 2006 (Partial)	July 2003	2 years	2 (November 2004- February 2005)	…	6 Years (January 2001- December 2006)	2 Years (January 2007- July 2009)	**Work completed in February 2010**
2	Palakkad Town (MOU work)	December 2001	December 2002	4.07	December 2002 (Partial)	November 2002 (part). Balance not transferred.	8 Years	Not retendered	…	…	…	**Work not completed. 0.1808 acres of land not handed over. Land notification became denova**
3	Ponnurunni (MOU work)	December 2001	December 2002	4.63	Work not commenced	August 2003	1.5 Years	Not retendered	…	…	…	**No progress after partial completion and abandonment by the contractor**
4	Koratty Angadi (MOU work)	November 2001	November 2002	3.38	October 2007 (partial)	April 2003	15 months	once July 2003	November 2001- November 2008 (7 years)	November2001 - December 2009 8 Years	…	**No progress due to delay in getting approval of designs by Railways**

Sl. No	Name of ROB	Date of awarding work	Scheduled date of completion	Estimated Cost Rs. in crore	Date of actual completion	Date of handing over of land	Delay in handing over land	No of times re tendered	Delay in shifting utilities	Delay in getting approval of Railways	Delay in getting material from Railways	Status of work completed in May 2010
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
5	Vallikunnu (MOU work)	…	….	…	Not commenced	Land not made available	7 Years	….	….	…	…	**Not commenced. The land was not made available. Land notification became de nova.**
6	Athani♣ (Non-MOU)	January 2002	May 2003	4.00	Completed (September 2004) partially	July 2005	3 Years	Not retendered	….	…	…	
7	Kadukkamkunnu (Non-MOU)	December 2001	December 2002	2.73	October 2002 (partial)	February 2002 (partial)	December 2001- May 2003) (2 years)	…	8 Years	…	…	**Contractor abandoned the work, not recommenced. Railway portion of work was included in the contract and subsequently retendered. Railway portion to be completed.**
8	Bekal (Non-MOU)	January 2002	May 2002	4.58	September 2004 (partial)	August 2005	3 Years	…	January 2002- September 2004 (2 years)	…	…	
9	Pullepady♣ (Entrusted by Government)	December 2001	December 2002	4.63	November 2003 (partial)	November 2003 (advance possession)	2 Years	Twice (November 2004 and May 2009)	…	…	...	

♣ **Work in progress.**

Annexure 23
Statement showing cost overrun of ongoing projects in Roads and Bridges Development Corporation of Kerala Limited
(Referred to in paragraph 4.2)

Sl. No.	Name of ROB	Original Cost	Expenditure as on March 2009	Cost overrun
		(Rupees in lakh)		
1	Koratty Angady	337.75	454.52	116.77
2	Nandi Bazar	606.75	894.08	287.33
3	Sulthanpet	407.32	510.24	102.92
4	Athani	262.02	356.96	94.94
5	Kadukkamkunnu	272.31	389.43	117.12
6	Bekall	458.49	629.74	171.25
7	Pullepady	461.12	1257.00	795.88
8	Ponnurunni	451.74	382.49	-69.25
		3257.50	**4874.46**	**1616.96**

Note : *Vallikunnu ROB not commenced.*

Annexure 24

Calculation of loss of interest due to blocking of funds in ongoing projects by Roads and Bridges Development Corporation of Kerala Limited

(Referred to in Paragraph 4.2)

Name of ROB	Land acquisition				Other Direct cost				Total	
	Period		Amount invested	Loss of interest	Period		Amount invested	Loss of interest	Investment	Interest
	From	To	(` Lakh)		From	To	(` lakh)			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10) =(4)+(8)	(11) =(5)+(9)
Koratty Angady	May-03	March 2010	110.23	84.78	Apr.07	Mar.10	186.36	62.17	296.59	146.95
Nandi Bazar	Aug.03	March 2010	83.52	61.92	Apr.07	Mar.10	412.55	137.63	496.07	199.54
Sulthanpet	Nov.02	March 2010	96.14	79.29	Apr.07	Mar.10	272.52	90.91	368.66	170.20
Ponnurunni	Aug.03	March 2010	165.59	122.76	Apr.07	Mar.10	151.49	50.54	317.08	173.29
Athani	Aug.05	March 2010	75.98	39.43	Apr.07	Mar.10	168.25	56.13	244.23	95.56
Kadukkam kunu	Dec.04	March 2010	1.77	1.05	Apr.07	Mar.10	258.82	86.34	260.59	87.39
Bekal	Aug.05	March 2010	19.95	10.35	Apr.07	Mar.10	440.44	146.93	460.39	157.28
Pullepady	Jan.04	March 2010	198.45	134.24	Apr.07	Mar.10	500.04	166.81	698.49	301.06
			751.63	**533.82**			**2390.47**	**797.46**	**3142.10**	**1331.27**

Note: Work of Vallikkunnu ROB not commenced

Annexure 25

Statement showing avoidable expenditure by The Kerala Minerals and Metals Limited due to non-reduction of contract demand
(Referred to in paragraph 4.4)

Month	Contract demand	Recorded maximum demand	Billing demand (75 % of CD)	Excess billing	Excess payment (`)®
	(In KVA)				
Jul-08	16000	11273	12000	727	178115
Aug-08	16000	10289	12000	1711	419195
Sep-08	16000	10096	12000	1904	466480
Oct-08	16000	10217	12000	1783	436835
Nov-08	16000	10138	12000	1862	456190
Dec-08	16000	8671	12000	3329	815605
Jan-09	16000	9785	12000	2215	542675
Feb-09	16000	10072	12000	1928	472360
Mar-09	16000	9965	12000	2035	498575
Apr-09	16000	10498	12000	1502	367990
May-09	16000	10939	12000	1061	259945
Jun-09	16000	10050	12000	1950	477750
Jul-09	16000	10576	12000	1424	348880
Aug-09	16000	10472	12000	1528	374360
Sep-09	16000	10188	12000	1812	443940
Oct-09	16000	10367	12000	1633	400085
Nov-09	16000	9021	12000	2979	729855
Dec-09	16000	9879	12000	2121	519645
Jan-10	16000	9985	12000	2015	493675
Feb-10	16000	10357	12000	1643	402535
Mar-10	16000	9829	12000	2172	532140
Apri-10	16000	9833	12000	2167	530915
May-10	16000	9973	12000	2027	496615
Jun-10	16000	10903	12000	1097	268765
Jul-10	16000	10119	12000	1881	460845
Aug-10	16000	10080	12000	1920	470400
				Total	**11864370**

® **Excess billing X Rs. 245.**

Annexure 26

Statement showing funds blocked up (Minimum) in Current Accounts of various branches & HO of KTDFC (after giving an allowance of ` 5 lakh)

(Referred to in paragraph 4.5)

Sl. No	Month & year	Ernakulam			Thiruvalla			Thrissur		Kozhikode			Trivand-rum	Head Office			Total Min Balance in Current a/c	Min borro w-ing rate (%)	Loss of interest (`)
		SBT	SBI	IndusInd	SBT	IndusInd	Dhanlksmi	SBT	Dhanlksmi	SBI	SBT	IDBI	SBT Vazhutha-caud	SBT Puthenchan-thai	IDBI Acc no 0146231661600	HDFC Acc no 00630350000068			
1	Apr-07	465583	62710	573518				361695		1349664	872933	342653				3992741	8021497	10.5	70,188
2	May-07		131226	726265	243349					759239	913009	361007			180186	4011470	7325751	10.5	64,100
3	Jun-07		486096	920559	114505	421048			473795	315820	1386108	384468			1005560	6341131	11849090	10.5	103,680
4	Jul-07		1841768	1083168	114505	1242948			1205155	419410	1014092	404108		769439	1195894	3563394	12853881	10.5	112,471
5	Aug-07	310370	1909385	1269693	114505	1097622			985579	805178	126792	418444			2000471	2670702	11708741	10.5	102,451
6	Sep-07	518831	1645882	1419313	60990	1107253			637560	1555791	122089				2160145	2930403	12158257	10.5	106,385
7	Oct-07	952829	1599801	1594266		1157605			595648	1882257	443186				1816691	5433251	15475534	10.5	135,411
8	Nov-07	1329397	2068662	1754335		1155093			464657	2225944	1078499				2019626	9200113	21296326	12.5	221,837
9	Dec-07	1787052	2180858	1892959		1156459			467447	2594993	1518848				314839	8299167	20212622	12.5	210,548
10	Jan-08	2136410	2355759	2108399		1208613			542686	2984550	1754586				73260	1453115	14617378	13	158,355
11	Feb-08	2481319	2514986	2266946		1383031			650482	3356203	2083984				548075	20202249	35487275	13	384,445
12	Mar-08	2796432	2492887	2427618		746101			720946	3452487	2854904				891642	15405172	31788189	13	344,372
13	Apr-08	3108637	2370030	2721466		144882			807951	3798321	3123838					16379475	32454600	13	351,592
14	May-08	3464169	1770229	2909438					140590	4117979	1896140	4018			134746	26170934	40608243	13	439,923
15	Jun-08	3844614	274074	3086283		337502					1809735				630182	9094567	19076957	13	206,667
16	Jul-08	2822825	323459	440620							5843591				875042	8151710	18457247	13.5	207,644
17	Aug-08	2068250	842259	463830						157604					97322	23350625	26979890	14	314,765
18	Sep-08		1360595	694828									189815			14157991	16403229	13	177,702
19	Oct-08		1697936	841031		17437							683686			14085545	17325635	13	187,694

Sl. No	Month & year	Ernakulam			Thiruvalla			Thrissur		Kozhikode			Trivand-rum	Head Office			Total Min Balance in Current a/c	Min borro w-ing rate (%)	Loss of interest (`)
		SBT	SBI	IndusInd	SBT	IndusInd	Dhanlksmi	SBT	Dhanlksmi	SBI	SBT	IDBI	SBT Vazhutha-caud	SBT Puthenchan-thai	IDBI Acc no 0146231661600	HDFC Acc no 00630350000068			
20	Nov-08		1108577	1010354		64878				269761	454646		1207121			6435013	10550350	12.25	107,701
21	Dec-08		508328			21472				123502	67695		2098896			5571509	8391402	12.25	85,662
22	Jan-09					82689			47223	279083			4001192		750592	7698404	12859183	11.75	125,913
23	Feb-09	71474				157790			122320	613135	116617		4114622			10287832	15483790	11.75	151,612
24	Mar-09	305079	363168	52527		269902				934524	151613		4134622			7612792	13824227	11.75	135,362
25	Apr-09		189896							879869	402824		5447980			12825393	19745962	11.75	193,346
26	May-09		340218							754487			7415550	506683		17235032	26251970	11.75	257,051
27	Jun-09									167395			3787694	691636		10494299	15141024	11.75	148,256
28	Jul-09					64437					892773		2203450	3254169		31146193	37561022	11.25	352,135
29	Aug-09					290514					25278		2199260	7334437		15107198	24956687	11	228,770
30	Sep-09		480834	32041					19546				1417005	2669818		11052862	15672106	11	143,661
31	Oct-09		1598496	179928					284942		197147		2795430	8010609		15318952	28385504	11	260,200
32	Nov-09												8239201			15054235	23293436	11	213,523
33	Dec-09												933072	2338869		5237886	8509827	11	78,007
34	Jan-10															17361501	17361501	11	159,147
35	Feb-10												80968			23948989	24029957	11	220,275
36																			**6,760,851**

Annexure 27

Statements Showing estimated committed liability of Service Tax and penal interest by Kerala State Backward Classes Development Corporation Limited

(Referred to in Paragraph 4.6)

Year	Amount of Loan Disbursed from different Sources					Total (excluding Micro)	Processing Fee {(0.5%)/ (0.75% w.e.f. 01/04/2006)}	Processing fee of Micro Credit	Total Processing Fee	Rate of Service Tax (%)	Estimated Service Tax
	Term		Own Fund	Micro							
	NBCFDC	NMDFC		NBCFDC	NMDFC						
	(` in lakh)							(` in lakh)			(` in lakh)
2004-05	1280.6	1482.53	1806.49	174.9	0	4569.62	22.85	0.26	23.11	8	1.85
2005-06	1997.51	1817.48	874.95	400	260	4689.94	23.45	0.9	24.35	10.2	2.48
2006-07	2175.24	2430.3	1473.8	0	40	6079.34	45.60	0.1	45.70	12.24	5.59
2007-08	3946.22	3753.25	3577.75	485.5	189.5	11277.22	84.58	1.09	85.67	12.36	10.59
2008-09	4034.88	3811.52	4145.16	14.5	10.5	11991.56	89.94	0.06	90.00	12.36	11.12
						38607.68			**268.83**		**31.63**

Calculation of penal interest

Year	Service Tax (` in lakh)	Delay in months upto Dec.2009	Penalty @ 13% (` in lakh)
2004-05	1.85	57	1.14
2005-06	2.48	45	1.21
2006-07	5.59	33	2.01
2007-08	10.59	21	2.41
2008-09	11.12	9	1.08
		Total	**7.85**

Annexure - 28

Statement showing additional revenue foregone by Kerala State Electricity Board from excess consumption

(Referred to in paragraph 4.9)

	Rates for excess consumption approved by KSERC	Rates as per actuals	Difference	Units sold♦ EHT/ HT and LT	Additional revenue based on approved rates	Actual unit sold LT	Additional revenue based on actuals	Gross revenue
	(in `)			(MU)	(in ` crore)	(MU)	(in ` crore)	
(1)	(2)	(3)	(4)=(2) – (3)	(5)	(6)=(4 x 5)	(7)	(8)=(4 x 7)	(9)=(6+ 8)
July 2008	11.19	12.11	(-)0.92	8.27	(-)0.76	-	-	(-)0.76
August 2008	10.16	10.66	(-)0.50	35.13	(-)1.76	-	-	(-)1.76
September 2008	8.83	8.83	-	35.93		-	-	-
Total	**-**	**-**	**-**	**-**	**(-) 2.52**	**-**	**-**	**(-) 2.52**
October 2008	7.85	7.86	(-)0.01	43.05	(-)0.04	31.79	(-)0.03	(-)0.07
November 2008	7.85	7.81	0.04	34.73	0.14	56.10	0.22	0.36
December 2008	6.74	6.68	0.06	37.67	0.23	57.97	0.35	0.58
January 2009	5.45	4.92	0.53	39.49	2.09	57.97	3.07	5.16
February 2009	5.50	5.04	0.46	28.67	1.32	52.36	2.41	3.73
March 2009	5.59	5.32	0.27	49.84	1.35	57.97	1.56	2.91
April 2009	5.38	5.38	-	42.05	-	56.10	-	-
Total					**5.09**		**7.58**	**12.67**
Net revenue								**10.15**

♦ **Upto September 2008, EHT/HT only from October 2008 EHT/HT and LT.**

Annexure – 29

Statement showing comparison of EHT / HT and LT estimated vs. actual consumption in Kerala State Electricity Board

(Referred to in paragraph 4.9)

Month	Estimated excess consumption of EHT/HT/LT consumers (MU)	Actual excess consumption of consumers			Percentage of variation of estimates from actuals
		EHT/HT in (MU)	LT♦ (in MU)	Total (MU)	
(1)	(2)	(3)	(4)	(5)=(3)+(4)	(6)=(2)/(5)*100-100
July 2008 (25.7.2008 to 31.7.2008)	36.15	8.27	-	8.27	(+)337.12
August 2008	60.33	35.13	-	35.13	(+)71.73
September 2008	36.02	35.93	-	35.93	(+)0.25
October 2008	87.35	43.05	31.79	74.84	(+)16.72
November 2008	86.55	34.73	56.10	90.83	(-)4.71
December 2008	82.47	37.67	57.97	95.64	(-)13.77
January 2009	57.90	39.49	57.97	97.46	(-)40.59
February 2009	38.55	28.67	52.36	81.03	(-)52.43
March 2009	75.77	49.84	57.97	107.81	(-)29.72
April 2009	99.98	42.05	56.10	98.15	(+)1.86

♦ **Quota restrictions imposed for LT consumers with effect from October 2008 only.**

Annexure 30

Statement showing short realisation of electricity charges by Kerala State Electricity Board due to excess drawal of power over contract demand by two licensees during December 2007-July 2010

(Referred to in paragraph 4.11)

Sl.No	Licensee	Excess drawn (KVA)	Normal rate (`)	Short realisation (` in lakh)
(A)	(B)	(C)	(D)	(E) = (C*D*0.5)
1	Electricity Department, Pondicherry	37187	245	45.55
2	Karnataka Electricity Board, Madikery	1669	270	2.25
	Total			**47.80**

Annexure 31

Statement showing department-wise outstanding Inspection Reports (IRs) as on 30 September 2010

(Referred to in paragraph 4.12.3)

Sl. No	Name of Department	No. of PSUs	No. of outstanding IRs	No. of outstanding paragraphs	Year from which paragraphs outstanding
1	Agriculture	7	8	38	2007-08
2	Animal Husbandry	3	4	28	2005-06
3	Forest & Wild Life	1	3	11	2008-09
4	Industries	40	54	267	2005-06
5	Labour & Rehabilitation	2	2	6	2008-09
6	Cultural Affairs	1	1	9	2009-10
7	Tourism	3	5	27	2008-09
8	Food	1	2	26	2005-06
9	Taxes	4	7	30	2006-07
10	Health	2	1	3	2008-09
11	Social Welfare	2	2	11	2008-09
12	SC/ST Development	2	3	12	2006-07
13	Ports	2	4	6	2007-08
14	Public Works	2	4	14	2007-08
15	General Administration (Sainik Seva)	1	1	3	2008-09
16	Home	1	3	17	2007-08
17	Coastal Shipping & Inland Navigation	1	1	6	2009-10
18	Transport	2	86	440	2006-07
19	Local Self Govt.	1	1	2	2008-09
20	Power	1	270	1256	2004-05
Total		**79**	**462**	**2212**	

Annexure 32

Statement showing the department-wise draft paragraph/ reviews replies to which are awaited

(Referred to in paragraph 4.12.3)

Sl.No.	Name of Department	No. of draft paragraphs	No. of reviews	Period of issue
1	Power	2	1.	April 2010/May 2010/July 2010
2	Industries	2	1	May 2010/July 2010
3	Public Works	1	…	June 2010
	Total	**5**	**2**	