REPORT OF THE COMPTROLLER AND AUDITOR GENERAL OF INDIA

FOR THE YEAR ENDED 31 MARCH 2010

Report No.4
(COMMERCIAL)

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REPORT OF THE COMPTROLLER AND AUDITOR GENERAL OF INDIA

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GOVERNMENT OF TAMIL NADU

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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 Tamil Nadu Electricity Board and has been prepared for submission to the Government of Tamil Nadu under Section 19-A 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 Tamil Nadu.

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 Tamil Nadu Electricity Board, which is a Statutory corporation, the CAG is the sole auditor. In respect of Tamil Nadu Warehousing Corporation, CAG has the right to conduct the audit of its accounts in addition to the audit conducted by the Chartered Accountants appointed by the State Government in consultation with the CAG. In respect of Tamil Nadu Electricity Regulatory Commission, the CAG is the sole auditor. The Audit Reports on the annual accounts of these corporations/commission 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 2009-10 as well as those which came to notice in the 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 Comptroller and Auditor General of India.

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 Tamil Nadu had 66 working PSUs (64 companies and 2 Statutory corporations) and 11 non-working PSUs (all companies), which employed 2.79 lakh employees. The State PSUs registered a turnover of ₹47,578.39 crore as per their latest finalised accounts. This turnover was equal to 19.73 per cent of State's GDP indicating the important role played by State PSUs in the economy. The PSUs had accumulated loss of ₹21,297.39 crore as per their latest finalised accounts.

Investment in PSUs

As on 31 March 2010, the investment (Capital and long term loans) in 77 PSUs was ₹36,408.15 crore. Power Sector accounted for 80.57 per cent of total investment and Service Sector 9.72 per cent in 2009-10. The Government contributed ₹7,729.58 crore towards equity, loans and grants/subsidies during 2009-10.

Performance of PSUs

As per latest finalised accounts, out of 66 working PSUs, 40 PSUs earned a profit of ₹511.96 crore and 20 PSUs incurred a loss of ₹8,547.73 crore. The major contributors to profit were Tamil Nadu Newsprint and Papers Limited (₹126.06 crore), State Industries Promotion Corporation of Tamil Nadu Limited (₹62.32 crore), Tamil Nadu Industrial Investment Corporation Limited (₹44.84 crore), Tamil Nadu Power Finance and Infrastructure Development Corporation Limited (₹41.30 crore) and TIDEL Park, Chennai (₹38.05 crore). Heavy losses were incurred by Tamil Nadu Electricity Board (₹7,771.39 crore), Tamil Nadu State Transport Corporation (Madurai) Limited (₹166.47 crore), Tamil Nadu State Transport Corporation (Coimbatore) Limited (₹141.42 crore) and State Express Transport Corporation Limited (₹100.82 crore).

Audit noticed various deficiencies in the functioning of PSUs. A review of three years' Audit Reports of CAG shows that the State PSUs' losses of ₹4035.35 crore and infructuous investments of ₹632.60 crore were controllable with better management. Thus, there is tremendous scope to improve the functioning and enhance profits. The PSUs can discharge their role efficiently only if they are financially self-reliant. There is a need for greater professionalism and accountability in the functioning of PSUs.

Arrears in accounts and winding up

19 working PSUs had arrears of 35 accounts as of 30 September 2010, of which 15 accounts pertained to earlier years and the remaining were 2009-10 accounts. There were 11 non-working PSUs including two under liquidation. The Government may consider winding up these companies.

Quality of accounts

The quality of accounts of PSUs needs improvement. During the year, out of 61 (59 accounts of Government companies and two accounts of Statutory corporations) accounts finalised, the statutory auditors of Government companies had given unqualified certificates for 27 accounts, qualified certificates for 32 accounts. There were 26 instances of non-compliance with Accounting Standards. Reports of Statutory Auditors on internal control of the companies indicated several weak areas.

2 Performance review relating to Government Company

Schemes implemented by Social Sector Companies of Tamil Nadu

Between the years 1974 and 1999, the State Government formed three social sector companies viz., Tamil Nadu Adi Dravidar Housing and Development Corporation Limited (TAHDCO), Tamil Nadu Backward Classes Economic Development Corporation Limited (TABCEDCO) and Tamil Nadu Minorities Economic Development Corporation Limited (TAMCO) with identical objectives of raising the economic status of the scheduled caste, most/other backward classes and minorities in the State. To assess the effectiveness of the schemes of these companies, a horizontal performance review across these companies was taken up between January and May 2010.

Financial management

All the three companies kept major portion of undisbursed funds in short term and interest earning deposits, which ranged between ₹92.72 crore and ₹249.20 crore in respect of TAHDCO, ₹10.89 crore and ₹87.37 crore in respect of TABCEDCO and ₹2.41 crore and ₹13.55 crore in respect of TAMCO. The interest earned on these deposits only resulted in overall profit for these companies.

Planning

The companies did not have village level, block level data base of targetable beneficiaries and did not have long term corporate plans. The shortfall in achievement of annual targets was due to absence of strategic plan and delays in processing the loan applications.

Implementation of the scheme

The land purchase scheme of TAHDCO suffered from the deficiencies such as assistance for purchase of fragmented and over exploited land. The coverage of land irrigation scheme by TABCEDCO was poor due to its inability to identify the beneficiaries. TAHDCO extended loans to manual scavengers for the trades other than in which they were trained. Both TAHDCO and TABCEDCO sanctioned lower amount of loan for the purchase of milch animals. TAHDCO did not ensure that the self help groups obtaining the initial loan come back for the main part of the loan. The self employment programmes of TAHDCO did not concentrate on high income generating activities prescribed by GOI. The beneficiaries were subjected to high interest rates and delays due to poor control and monitoring by TABCEDCO and TAMCO. TAHDCO imparted training through unrecognised institutes and did not compile the data of the employment status of the trained beneficiaries.

Monitoring and recovery performance

The post disbursement monitoring by these companies was poor and revealed non-verification of assets created, non-maintenance of data base of guarantors and security, poor recovery of loans and lack of adequate impact studies.

Impact assessment

The independent impact assessment of the schemes by Audit substantiated the audit findings mentioned in the performance review and indicated an urgent need for the companies to take remedial actions.

Conclusion and Recommendations

Audit concludes that these companies were required to improve their performance. Audit recommends to prepare the annual plans and the need based strategic plans in consonance with the goals of the Government, improve implementation of the schemes by correct identification of beneficiaries, avoid procedural delays and ensure that the assistance given would help to achieve the objectives and constantly monitor and assess the impact of the schemes to enable mid-term corrections wherever required.

(Chapter 2)

3 Performance review relating to Statutory Corporation

Power Generation Activities of Tamil Nadu Electricity Board

The availability of reliable and quality power is crucial for sustained growth of the economy. The National Electricity Policy envisaged providing at least 1,000 units per capita electricity by 2012. The Performance Audit of power generation stations of Tamil Nadu Electricity Board (Board) was taken up between January and May 2010 to assess the adequacy of power supply with reference to the State's demand and the National Mission. Our findings indicated the following.

Planning and Project Management

To meet the generation requirement of the State, a capacity addition of 3,977 MW was required against which the Board added only 290 MW during 2005-10. The low capacity addition was attributable to non-completion of planned projects in time and non taking-up of identified hydro projects. All the five projects completed during the review period missed their time schedules due to improper project management resulting in avoidable time overrun with consequent cost overrun of ₹392.37 crore. Further, the Board took up life extension programme only in two out of 16 hydro stations which had completed their normative life of 35 years.

Contract Management

The Board became ineligible for duty exemption of ₹133.26 crore due to award of work valuing ₹2,175 crore on nomination basis.

Input efficiency

The supply of coal suffered from deficiencies such as short receipt of coal against linkage, which resulted in loss of generation of 812.77 MUs during 2008-10 valued at ₹266.41 crore. Deficiencies were also noticed in the system of coal handling at NCTPS and TTPS resulting in extra expenditure of ₹20.58 crore. A comparison of the rates finalised by the Board for the purchase of imported coal with that of the rates of similar grade coal imported by another State PSU indicated that the Board had incurred extra expenditure of ₹337.76 crore. Excess consumption of 45.25 lakh MT of coal at TTPS with reference to TNERC norms resulted in additional expenditure of ₹1,103.30 crore. The manpower in excess of the norms in thermal and gas stations resulted in extra expenditure of ₹279.65 crore.

Output efficiency

The Board continued to operate unviable Ennore Thermal Power Station and Basin Bridge Gas Station. Low plant load factor at Ennore Thermal Power Station was due to low capacity utilisation, major shutdowns and delays in repairs and maintenance. The gas station at Basin Bridge was not able to break even due to usage of high cost naptha and non-conversion of the station from single cycle mode to combined cycle mode. The hydel stations could only be partially operated due to not carrying out desilting, river training courses, repair to turbo generator, non-availability of dedicated feeders etc. Excess auxiliary consumption as compared to TNERC norms resulted in lesser availability of 859.34 MUs of generated power valued at ₹281.63 crore.

Financial Management

The Board incurred continuous losses during the review period. Consequently, the dependence on borrowings increased over the review period from ₹9,583.68 crore in 2005-06 to ₹32,039.26 crore in 2009-10. The Board was dependent on costlier power from other sources. The Board did not file with TNERC the application for tariff revision every year. Instead, they filed the application only in February 2010 after a gap of seven years despite increased cost of operation and consequent poor financial position.

Environmental issues

Two thermal stations of the Board (TTPS and NCTPS) were operating without the consent of TNPCB. The air pollution levels at TTPS were much more than the norms prescribed. The Board relied on manual data for evaluating SPM levels even after installation of the online

monitoring system. The ash disposal by the thermal stations was lower than the quantity generated.

Conclusion and Recommendations

The Board's inability to meet the power demand of the State was mainly due to insignificant capacity additions and not optimising the existing power generating capacity coupled with stoppage of generation though controllable. These problems could be managed by better planning and proper monitoring of the existing facilities. This review contains seven recommendations. Taking up capacity additions to the levels of demand, avoiding pre-construction and execution delays, avoiding shortage of coal, improving coal handling system and minimising forced outages are some of these.

(Chapter 3)

4 Transaction Audit Observations

Audit observations included in this Report highlight deficiencies in the management of Public Sector Undertakings with huge financial implications. The irregularities pointed out are broadly of the following nature:

Loss of ₹120.63 crore in eight cases due to not safeguarding of financial interests of the organisation.

(Paragraphs 4.1, 4.5, 4.9, 4.10, 4.11, 4.12, 4.15 and 4.16)

Loss of ₹36.03 crore in five cases due to non compliance with rules, directives, procedures and terms and conditions of contracts.

(Paragraphs 4.2, 4.6, 4.7, 4.8 and 4.14)

Loss of ₹30.41 crore in three cases due to defective/ deficient planning

(Paragraphs 4.3, 4.4 and 4.13)

Gist of some of the important observations is given below:

Poompuhar Shipping Corporation Limited incurred avoidable expenditure of ₹56.37 crore due to delay in purchase of spares, incorrect selection of shipping yard, non-rectification of the problems in cranes and turbo engines and delay in finalising the dry docking yard. Besides, while inviting/evaluating tenders for spot chartering of the vessels, it also deviated from the Tender Rules, terms and conditions resulting in avoidable extra expenditure of ₹26.76 crore.

(Paragraphs 4.1 and 4.2)

Arasu Cable TV Corporation Limited created unfruitful infrastructure worth ₹28.28 crore and incurred cash loss of ₹8.11 crore during its three years of commercial operations up to October 2010.

(Paragraph 4.3)

Without conducting any feasibility and ascertaining the marketability of the land, **Electronics Corporation of Tamil Nadu Limited** purchased land in two phases in quick succession which resulted in idle investment of ₹20.00 crore.

(Paragraph 4.4)

Computation of Electricity Tax after deducting night hour rebate and Power Factor incentive by wrongly interpreting Tamil Nadu Tax on Consumption or Sale of Electricity Act, 2003 by **Tamil Nadu Electricity Board**, resulted in short collection of tax of ₹38.85 crore.

(Paragraph 4.9)

Tamil Nadu Electricity Board failed to analyse the capabilities of the lowest tenderer resulting in avoidable extra expenditure of ₹7.07 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 Tamil Nadu, the State working PSUs occupy an important place in the state economy. The State PSUs registered a turnover of ₹47,578.39 crore[∝] for 2009-10 as per their latest finalised accounts as of September 2010. This turnover was equal to 19.73 *per cent* of the State Gross Domestic Product (GDP) of ₹2,41,122 crore for 2009-10. Major activities of the State PSUs are concentrated in power, service and other sectors. The State PSUs incurred an aggregate loss of ₹8,062.40 crore as per the latest accounts finalised during 2009-10. They had employed 2.79 lakh[♣] employees as of 31 March 2010. The State PSUs do not include two[Ω] Departmental Undertakings (DUs), which carry out commercial operations as they are a part of Government departments. Audit findings of these DUs are incorporated in the Civil Audit Report for the State.

1.2 As on 31 March 2010, there were 77 PSUs as per the details given below. Of these, three[§] companies were listed on the stock exchange(s).

Type of PSUs	Working PSUs	Non-working PSUs[ψ]	Total
Government Companies[♦]	64	11	75
Statutory Corporations	2	---	2
Total	**66**	**11**	**77**

1.3 The State Government approved (October 2008) formation of a holding Company *viz.*, Tamil Nadu Electricity Board Limited and two subsidiary companies *viz.*, Tamil Nadu Transmission Corporation Limited (TANTRANSCO) and Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO). The subsidiary companies were formed in June and December 2009 respectively.

∝ 13 companies finalised their accounts for the years other than 2009-10.

♣ As per the details provided by 66 PSUs.

Ω The Institute of Veterinary and Preventive Medicine, Ranipet and King Institute, Guindy.

§ Tamil Nadu Newsprint and Papers Limited, Tamil Nadu Telecommunications Limited and Tamil Nadu Industrial Explosives Limited.

ψ Non-working PSUs are those which have ceased to carry on their operations.

♦ Includes 619-B companies.

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 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 the CAG as per the provisions of Section 619(2) of the Companies Act, 1956. These accounts are also subject to supplementary audit conducted by the CAG as per the provisions of Section 619 of the Companies Act, 1956.

1.6 Audit of the statutory corporations is governed by their respective legislations. Out of two Statutory corporations in the State, CAG is the sole auditor of the Tamil Nadu Electricity Board. In respect of Tamil Nadu Warehousing Corporation, the audit is conducted by Chartered Accountants and supplementary audit by CAG.

Investment in State PSUs

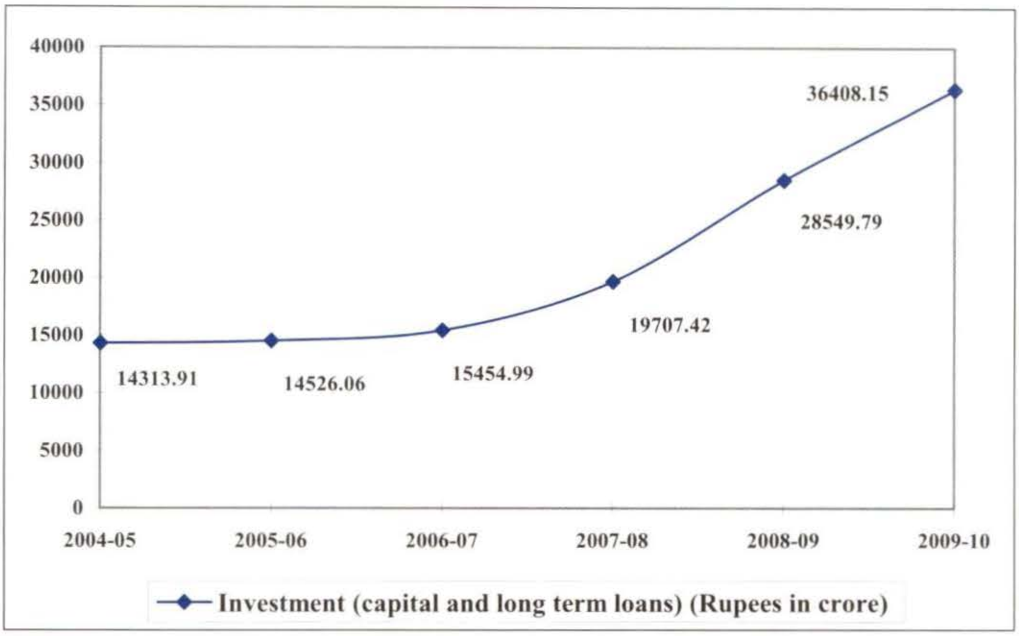
1.7 As on 31 March 2010, the investment (capital and long-term loans) in 77 PSUs (including 619-B companies) was ₹36,408.15 crore as per details given below.

(₹ in crore)

Type of PSUs	Government Companies			Statutory Corporations			Grand Total
	Capital	Long Term Loans	Total	Capital	Long Term Loans	Total	
Working PSUs	2,991.34	4,046.50	7,037.84	2,478.11	26,805.29	29,283.40	36,321.24
Non-working PSUs	36.15	50.76	86.91	---	---	---	86.91
Total	**3,027.49**	**4,097.26**	**7,124.75**	**2,478.11**	**26,805.29**	**29,283.40**	**36,408.15**

A summarised position of government investment in the State PSUs is detailed in **Annexure-1**.

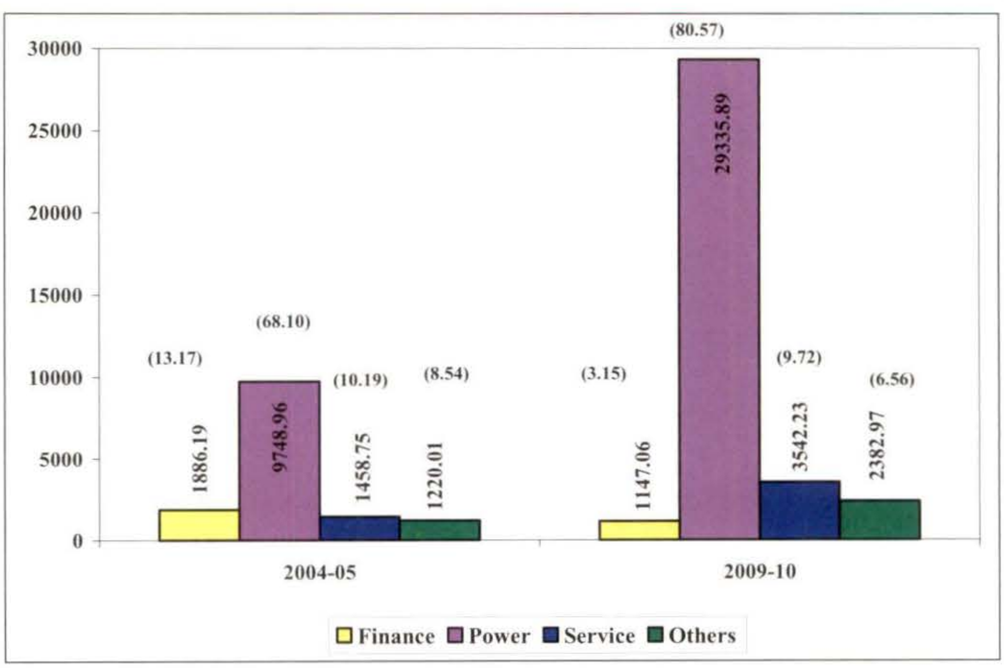
1.8 As on 31 March 2010, of the total investment in the State PSUs, 99.76 *per cent* was in working PSUs and the remaining 0.24 *per cent* was in non-working PSUs. This total investment consisted of 15.12 *per cent* towards capital and 84.88 *per cent* in long-term loans. The investment has grown by 154.36 *per cent* from ₹14,313.91 crore in 2004-05 to ₹36,408.15 crore in 2009-10 due to large loans availed by State Transport Undertakings and Tamil Nadu Electricity Board through other sources 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 investment in power sector has increased by 200.91 *per cent* from ₹9,748.96 crore in 2004-05 to ₹29,335.89 crore in the year 2009-10 taking the percentage share in the total investment to 80.57 *per cent* in 2009-10. The services sector followed the power sector where there was an increase in investments by 142.83 *per cent* from ₹1,458.75 crore in 2004-05 to ₹3,542.23 crore in 2009-10.

(₹ in crore)



(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 the State PSUs during the year are given in **Annexure-3**. The summarised details are given below for three years ended 2009-10.

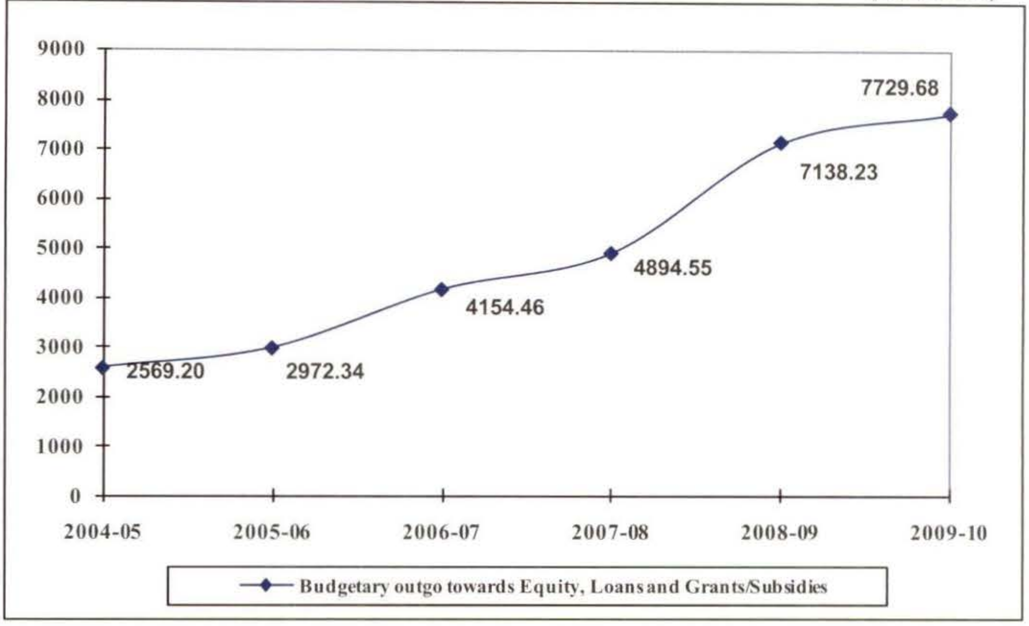
(₹ in crore)

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	14	873.25	15	1,051.45	13	737.21
2	Loans given from budget	7	42.28	9	775.53	6	483.13
3	Grants/Subsidy received	17	3,979.02	13	5,311.25	16	6,509.34
4	Total Outgo (1+2+3)	28♦	4,894.55	26♦	7,138.23	25♦	7,729.68
5	Loans converted into equity	---	---	1	4.95	1	28.00
6	Loans written off	---	---	1	3.47	1	0.19
7	Interest/Penal interest written off	---	---	2	6.13	1	0.63
8	Total Waiver (6+7)	---	---	2	9.60	2	0.82
9	Guarantees issued	6	599.55	6	1,322.81	5	126.00
10	Guarantee Commitment	13	3,500.55	14	4,036.49	13	5,221.87

♦ These are the actual number of companies/corporation, which have received budgetary support in the form of equity, loan, subsidies and grant from the State Government during the respective years.

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

(₹ in crore)



The budgetary support in respect of equity, loans and grants/ subsidies showed an increasing trend from 2004-05 to 2009-10 due to increase in grant and subsidy by the State Government over the years to Tamil Nadu Electricity Board and Tamil Nadu Civil Supplies Corporation Limited.

1.12 The PSUs are liable to pay guarantee commission to the State Government up to 0.5 *per cent* of the amount of guarantee utilised by them on raising cash credit from banks and loans from other sources including operating Letters of Credit. During the year 2009-10, guarantee commission of ₹144.68 crore was payable by 11 PSUs. Out of this amount, ₹143.09 crore remained unpaid including ₹142.03 crore in respect of TNEB.

Reconciliation with Finance Accounts

1.13 The figures in respect of equity, loans and guarantees outstanding as per records of the 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	4,977.97	5,139.52	161.55
Guarantees	5,209.02	5,221.87	12.85

1.14 Audit observed that the differences occurred in 12 PSUs and 8 PSUs in respect of equity and guarantees, respectively. Some of the differences were pending reconciliation since April 2004♣. The companies where the difference had occurred were addressed in November 2010 to reconcile the position. The Government had been addressed (January 2010) to expedite the process of reconciliation of figures between Finance accounts and the figures as furnished by the companies in their respective accounts. The Government and PSUs should take concrete steps to reconcile the differences in a time-bound manner.

Performance of PSUs

1.15 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 PSUs' turnover to State GDP shows the significant extent of PSU activities in the State economy. The table below provides the details of working PSUs' turnover *vis-a-vis* State GDP for the period from 2004-05 to 2009-10.

(₹ in crore)

Particulars	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Turnover∝	24,298.35	25,665.47	26,206.99	38,040.09	42,534.33	47,578.39
State GDP	2,00,780	2,23,528	2,46,266	2,79,287	2,28,479	2,41,122
Percentage of Turnover to State GDP	12.10	11.48	10.64	13.62	18.62	19.73

Figures of State GDP for 2009-10 are advance estimates.

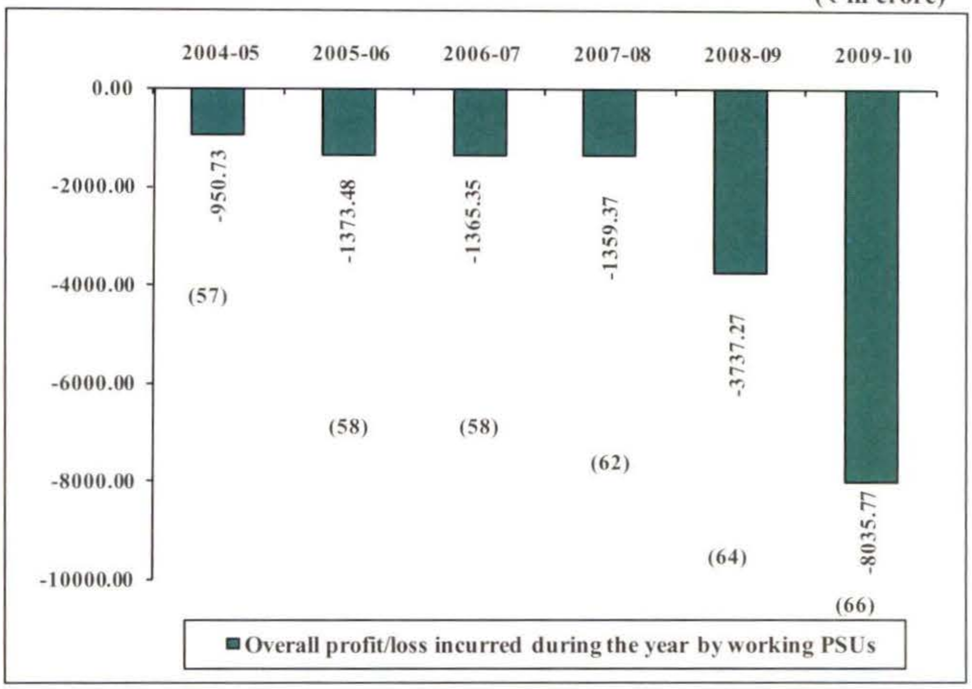
The turnover of PSUs has increased continuously from 2004-05 to 2009-10. The turnover increased by 95.81 *per cent* in 2009-10 as compared to the turnover in 2004-05. The percentage of PSUs' turnover to State GDP marginally declined between 2004-05 and 2006-07 but steadily improved from 2007-08 to 2009-10.

♣ Tamil Nadu Adi-dravidar Housing and Development Corporation Limited and Tamil Nadu Sugar Corporation Limited.

∝ Turnover as per the latest finalised accounts as of 30 September.

1.16 Profits/losses earned/incurred by the State working PSUs during the period from 2004-05 to 2009-10 are given below in the bar chart.

(₹ in crore)



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

The State working PSUs collectively incurred continuous losses from 2004-05 to 2009-10 which increased from ₹950.73 crore to ₹8,035.77 crore during the same period.

During the year 2009-10, out of 66 working PSUs, 40 PSUs earned a profit of ₹511.96 crore and 20 PSUs incurred a loss of ₹8,547.73 crore. One* PSU incorporated in October 2007 has not submitted the first accounts till date (October 2010). Four€ PSUs are in their preliminary stages of commercial operation. In respect of Tamil Nadu Civil Supplies Corporation Limited, the deficit of income is entirely compensated by the State Government in the form of subsidy.

As per the accounts finalised as of 30 September 2010, the major contributors to profit are Tamil Nadu Newsprint and Papers Limited (₹126.06 crore), State Industries Promotion Corporation of Tamil Nadu Limited (₹62.32 crore), Tamil Nadu Industrial Investment Corporation Limited (₹44.84 crore), Tamil Nadu Power Finance and Infrastructure Development Corporation Limited (₹41.30 crore) and TIDEL Park Limited, Chennai (₹38.05 crore). Heavy losses were incurred by Tamil Nadu Electricity Board (₹7,771.39 crore), Tamil Nadu State Transport Corporation (Madurai) Limited (₹166.47 crore), Tamil Nadu State Transport Corporation (Coimbatore) Limited (₹141.42 crore) and State Express Transport Corporation Limited (₹100.82 crore).

* Arasu Cable TV Corporation Limited.

€ Tidel Park, Coimbatore a 619-B Company, incorporated in June 2007, Chennai Metro Rail Limited incorporated in December 2007, TANTRANSCO and TANGEDCO incorporated in June and December 2009 respectively.

1.17 The losses of working PSUs are mainly attributable to deficiencies in financial management, planning, implementation of project, running their operations and monitoring. A review of last three years Audit Reports of CAG shows that the State PSUs incurred losses to the tune of ₹4,035.35 crore and made infructuous investment of ₹632.60 crore which were controllable with better management. Year wise details from Audit Reports are stated below:

(₹ in crore)

Particulars	2007-08	2008-09	2009-10	Total
Net Loss	1,359.37	3,737.27	8,035.77	13,132.41
Controllable losses as per the CAG's Audit Report	240.85	634.42	3,160.08	4,035.35
Infructuous Investment	120.10	92.00	420.50	632.60

1.18 The above losses pointed out by the Audit Reports of the CAG are based on test check of records of PSUs. The actual controllable losses would be much more. The PSUs can discharge their role efficiently only if they are financially self-reliant. The above situation points towards a need for greater professionalism and accountability in the functioning of PSUs.

1.19 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*)	1.76	NIL*	NIL*	0.17	NIL*	NIL*
Debt	11,877.65	12,053.49	12,757.52	16,136.56	23,878.24	30,902.55
Turnover	24,298.35	25,665.47	26,206.99	38,040.09	42,534.33	47,578.39
Debt/Turnover ratio	0.49:1	0.47:1	0.49:1	0.42:1	0.56:1	0.64:1
Interest payments	1,377.77	1,424.13	1,479.80	1,582.58	2,059.37	3,397.17
Accumulated losses	5,020.69	6,420.24	7,896.15	9,324.65	13,207.60	21,297.39

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

1.20 The State Government has not formulated a dividend policy for payment of minimum dividend. As per their latest finalised accounts as of 30 September 2010, 41 State PSUs (including one non-working PSU) earned an aggregate profit of ₹511.99 crore and 13 PSUs declared total dividend of ₹69.65 crore. Of this, the major contributors of the dividend were Tidel Park Limited, Chennai, Tamil Nadu Newsprint and Papers Limited and State Industries Promotion Corporation of Tamil Nadu Limited aggregating to ₹58.82 crore, which worked out to 84.45 *per cent* of total dividend paid during the year 2009-10.

* NIL indicates that Return on Capital Employed was negative during those years.

Arrears in finalisation of accounts

1.21 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 2010.

SL. No.	Particulars	2005-06	2006-07	2007-08	2008-09	2009-10
1	Number of Working PSUs	58	58	62	64	66
2	Number of accounts finalised during the year	57	59	63	54	61
3	Number of accounts in arrears	23	22	21	31	35[#]
4	Average arrears per PSU (3/1)	0.40	0.38	0.34	0.48	0.51
5	Number of Working PSUs with arrears in accounts	18	16	13	20	19
6	Extent of arrears (years)	1 to 4	1 to 5	1 to 6	1 to 7	1 to 8

1.22 In addition to above, there were arrears in finalisation of accounts by non-working PSUs. Out of 11 non-working PSUs, two[♠] PSUs had gone into liquidation process. Tamil Nadu Goods Transport Corporation Limited and Tamil Nadu Institute of Information Technology Limited have submitted winding up proposals and hence their accounts have not been considered due. Two[⊄] companies submitted their accounts. Five[°] PSUs had arrears of accounts for 1 to 7 years.

1.23 The State Government had invested ₹6,415.79 crore (equity: ₹428.51 crore, loans: ₹14.95 crore, grants: ₹115.72 crore and subsidy: ₹5,856.61 crore) in 8 PSUs (including one non-working PSU) during the years for which accounts had not been finalised as on 30 September 2010 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

Arasu Cable TV Corporation Limited incorporated in October 2007 and arrear of two years is considered.

♠ Tamil Nadu Steels Limited and Tamil Nadu Magnesium and Marine Chemicals Limited.

⊄ Tamil Nadu State Farms Corporation Limited and Tamil Nadu Graphites Limited.

° 1. Tamil Nadu Agro Industries Development Corporation Limited, 2. Tamil Nadu Poultry Development Corporation Limited, 3. Tamil Nadu Sugarcane Farms Corporation Limited, 4. The Chit Corporation of Tamil Nadu Limited, 5. Tamil Nadu Film Development Corporation Limited.

accounts may also result in risk of fraud and leakage of public money apart from violation of the provisions of the Companies Act, 1956.

1.24 The administrative Departments have the responsibility to oversee the activities of these entities and 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 quarter 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 taken up with the Chief Secretary/Finance Secretary in the Apex Committee meeting held in May 2009/October 2010.

1.25 In view of above state of arrears, it is recommended that the Government may oversee the work relating to preparation of accounts, which are in arrears, wherever the staff is inadequate or lacks expertise and expedite the clearance of arrears.

Winding up of non-working PSUs

1.26 There were 11 non-working PSUs (all companies) as on 31 March 2010. Liquidation process had commenced in two♥ PSUs. The number of non-working companies at the end of each year during the past five years are given below:

Particulars	2005-06	2006-07	2007-08	2008-09	2009-10
Number of non-working companies	14	14	14	11	11

The Government may consider the closure of non-working PSUs as their existence is not going to serve any purpose.

1.27 The stages of closure in respect of non-working PSUs are given below:

Sl. No.	Particulars	Companies
1	Total number of non-working PSUs∝	11
2	Of (1) above, the number under	
(a)	Liquidation by Court (liquidator appointed)	2
(b)	Voluntary winding up	6
(c)	Closure, *i.e.*, closing orders/instructions issued but liquidation process has not yet started.	3

1.28 During the year 2009-10, no closure of any non-working PSU took place. The process of voluntary winding up under the Companies Act is much faster and needs to be adopted/pursued vigorously. The closure of these companies was delayed due to (i) non-settlement of disputed claims (Tamil Nadu Magnesium and Marine Chemicals Limited, Tamil Nadu Sugarcane

♥ Tamil Nadu Magnesium and Marine Chemicals Limited and Tamil Nadu Steels Limited.

∝ As of 30 September 2010.

Farms Corporation Limited and Tamil Nadu Steels Limited), (ii) due to non-closure of accounts (Tamil Nadu Film Development Corporation Limited and Tamil Nadu Agro Industries Development Corporation Limited), (iii) decision pending from State Government on writing off proposals of the Government dues (Tamil Nadu Poultry Development Corporation Limited, The Chit Corporation of Tamil Nadu Limited and Tamil Nadu State Farms Corporation Limited) and (iv) decision pending with Registrar of companies on merger of companies (Tamil Nadu Institute of Information Technology - TANITEC), with Ministry of Company Affairs (Tamil Nadu Graphites Limited). The Government may consider to expedite closing down its non-working companies.

Accounts Comments and Internal Audit

1.29 Fifty five working companies forwarded their 59 accounts to Principal Accountant General during 2009-10. Of these, 53 accounts of 49 companies were selected for supplementary audit. 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 the CAG are given below.

(₹ 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	6	150.09	15	241.93	5	6.00
2	Increase in profit	---	---	---	---	2	0.54
3	Increase in loss	9	3.91	12	72.19	10	124.20
4	Non-disclosure of material facts	---	---	9	99.38	8	263.93
5	Errors of classification	2	61.20	4	7.80	4	24.45

1.30 During the year 2009-10, the statutory auditors had given unqualified certificates for 27 accounts and qualified certificates for 32 accounts. The compliance of companies with the Accounting Standards (AS) remained poor as there were 26 instances of non-compliance in 15 accounts during the year.

1.31 Some of the important comments in respect of accounts of companies are stated below:

State Transport Undertakings (2009-10)

- Five* STUs did not provide for interest on arrears of contribution to pension scheme resulting in understatement of loss and current liabilities.

Metropolitan Transport Corporation Limited (2009-10)

- The Company did not account for the profit on sale of buses and vehicles sold on auction as per AS-9. This resulted in overstatement of loss by ₹1.78 crore, overstatement of fixed assets by ₹0.15 crore and understatement of current assets and loans and advances by ₹1.93 crore.
- The Company accounted for the advertisement income and income from shelters on receipt basis against the provisions of AS-9, which resulted in overstatement of loss by ₹2.09 crore and understatement of current assets, loans and advances to the same extent.

State Express Transport Corporation Limited (2009-10)

- The Company did not provide for ₹7.33 crore towards non-payment of employees' contribution and excess expenditure over income up to March 2009 to provident fund trust. This resulted in understatement of loss and current liabilities and provisions by the same amount.

Tamil Nadu Tea Plantation Corporation Limited (2009-10)

- The Company did not create provision for ₹16.76 crore being the additional contribution for gratuity fund payable to Life Insurance Corporation of India resulting in understatement of prior period expenditure and accumulated loss to that extent.

1.32 Similarly, two working statutory corporations forwarded their two arrears accounts for 2008-09 to the Principal Accountant General during the year 2009-10. 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 the 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.	Increase in profit	1	0.45	1	0.52	---	---
2.	Increase in loss	1	141.45	1	284.13	1	263.30
3.	Non-disclosure of material facts	1	621.32	1	1,388.79	1	60.46
4.	Errors of classification	1	7.04	1	140.10	1	85.25
5.	Correctness of balance exhibited in accounts not susceptible of verification	---	---	---	---	1	283.55

* TNSTC, Villupuram (₹1.33 crore), Salem (₹1.20 crore), Madurai (₹1.06 crore), Kumbakonam (₹1.03 crore) and Coimbatore (₹0.38 crore).

Some of the important comments in respect of accounts of Statutory Corporations are stated below:

Tamil Nadu Electricity Board (2008-09)

- The Board did not provide for ₹236.37 crore being the claims preferred by Independent Power Producers resulting in understatement of liability for purchase of power as well as prior period expenses/losses
- Non-accountal of 1.12 lakh MTs of coal despatched from load ports resulted in understatement of coal in-transit and overstatement of advances for fuel supplies by ₹20.10 crore.
- The Board did not provide for interest payable to Mahanadhi Coalfields Limited amounting to ₹14.72 crore resulting in understatement of interest and finance charges as well as other current liabilities to that extent.
- Non-provision of ₹6.65 crore due from HT consumer, which was not backed up by any security, resulted in overstatement of receivables against supply of power and understatement of deficit by ₹6.65 crore.
- The net assets exhibited in the Headquarters' Balance Sheet was more than the consolidated balances of all the circles by ₹2,901.73 crore.
- The value appearing under Revenue from sale of power – Low Tension supply and sundry debtors for sale of power could not be ensured in Audit as the difference of ₹217.35 crore between the balances as per the billing units and LT data base was not reconciled.

1.33 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 16 companies for the year 2008-09 and 28 companies for the year 2009-10 are given below:

Sl. No.	Particulars	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	The internal audit system needs to be strengthened to make it commensurate with the size and nature of the business	4	4	2, 15, 45 and 50	8, 15, 45 and 50
2	There was no internal audit standards/manual/ guidelines prescribed by the companies for the conduct of internal audit	4	7	9, 18, 41 and 50	2, 9, 13, 26, 41, 50 and 55
3	Proper records showing full particulars including quantitative details and situation of fixed assets were not maintained	2	1	2 and 45	55

Sl. No.	Particulars	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
4	The existing system of monitoring the recovery of dues needs to be strengthened by preparing age-wise analysis of debtors and periodical monitoring	3	---	26, 32 and 54	---
5	Internal control system needs to be strengthened	2	1	2 and 50	2
6	The Companies did not have any defined fraud policy	8	16	15, 26 to 29, 35, 43 and 45	2, 5, 9, 14, 15, 26, 29, 30, 35, 37, 42, 43, 45, 50, 52 and 55
7	Documentation of software programs not available with the companies	4	1	9, 15, 37, and 50	55
8	The companies have no IT strategy/plan	7	17	18, 27 to 29, 37, 54 and 60	2, 7, 9, 12, 26, 27, 29, 30, 35, 37, 50, 54, 55, 56, 57, 59 and 60
9	The companies have not fixed minimum and maximum limits for maintenance of stores and spares	2	3	2 and 29	26, 29 and 41
10	The companies did not make ABC analysis for effective inventory control.	2	4	26 and 29	26, 29, 36 and 41
11	The companies did not evolve proper security policy for software/hardware	---	8	---	2, 26, 29, 30, 37, 45, 55 and 59

Recoveries at the instance of audit

1.34 During the course of propriety audit in 2009-10, recoveries of ₹139.48 crore were pointed out to Tamil Nadu Electricity Board. Out of which, ₹41.60 crore (including ₹41.28 crore pertaining to earlier years) was recovered during the year 2009-10.

Status of placement of Separate Audit Reports

1.35 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 the Statutory Corporation	Year upto 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.	Tamil Nadu Electricity Regulatory Commission	2008-09	2009-10	4 November 2010	Yet to be placed in the legislature

Disinvestment, Privatisation and Restructuring of PSUs

1.36 There was no disinvestment, privatisation or restructuring of PSUs excepting Tamil Nadu Electricity Board (as mentioned in Paragraph 1.3) in the State during the year.

Reforms in Power Sector

Status of implementation of MOU between the State Government and the Central Government

1.37 The State formed Tamil Nadu Electricity Regulatory Commission (TNERC) in March 1999 under the Electricity Regulatory Commissions Act, 1998, with the objective of rationalisation of electricity tariff for advising in matters relating to electricity generation, transmission and distribution in the State and issue of licences. During 2009-10, TNERC issued 14 orders on others and Nil on annual revenue requirements.

In pursuance of the decisions taken at the Chief Ministers' conference on Power Sector Reforms held in March 2001, a Memorandum of Understanding (MOU) was signed in January 2002 between the Union Ministry of Power and the Department of Energy, Government of Tamil Nadu as a joint commitment for implementation of the reform programme in the power sector with identified milestones.

Commitments made in the MOU, except the following have been achieved as reported by Tamil Nadu Electricity Board:

	Commitment as per MOU	Targeted completion Schedule	Status (as on 31 March 2010)
1.	Reduction of Transmission and Distribution losses to 15 *per cent*	December 2003	Transmission and Distribution losses - 18 *per cent*
2.	100 *per cent* metering of all consumers	September 2012	All services except the agricultural and hut services have been metered. The Government requested (September 2009) TNERC for extension of time for three years from 1 October 2009 for installation of meters in the agricultural and hut services. TNERC accepted Government's request and approved for extension of time for three years upto 1.10.2012.
3.	Current operations in distribution to reach break-even	March 2003	As per the accounts finalised for 2008-09, the Board had a deficit of ₹7,771.39 crore.
4.	Energy audit at 11 KV sub-stations level	January 2002	Energy audit was conducted in all the 11/22 KV feeders. 1,587 feeders were identified to have line losses of more than 10 *per cent.* By carrying out improvement works the line losses have been brought below 10 *per cent* in 852 feeders so far.

CHAPTER - II

Performance review relating to Government Company

2. Schemes implemented by Social Sector Companies of Tamil Nadu

Executive Summary

Between the years 1974 and 1999, the State Government formed three social sector companies viz., Tamil Nadu Adi Dravidar Housing and Development Corporation Limited (TAHDCO), Tamil Nadu Backward Classes Economic Development Corporation Limited (TABCEDCO) and Tamil Nadu Minorities Economic Development Corporation Limited (TAMCO) with identical objectives of raising the economic status of the scheduled caste, most/other backward classes and minorities in the State. To assess the effectiveness of the schemes of these companies, a horizontal performance review across these companies was taken up between January and May 2010.

Financial management

All the three companies kept major portion of undisbursed funds in short term and interest earning deposits, which ranged between ₹92.72 crore and ₹249.20 crore in respect of TAHDCO, ₹10.89 crore and ₹87.37 crore in respect of TABCEDCO and ₹2.41 crore and ₹13.55 crore in respect of TAMCO. The interest earned on these deposits only resulted in overall profit for these companies.

Planning

The companies did not have village level, block level data base of targetable beneficiaries and did not have long term corporate plans. The shortfall in achievement of annual targets was due to absence of strategic plan and delays in processing the loan applications.

Implementation of the scheme

The land purchase scheme of TAHDCO suffered from the deficiencies such as assistance for purchase of fragmented and over exploited land. The coverage of land irrigation scheme by TABCEDCO was poor due to its inability to identify the beneficiaries. TAHDCO extended loans to manual scavengers for the trades other than in which they were trained. Both TAHDCO and TABCEDCO sanctioned lower amount of loan for the purchase of milch animals. TAHDCO did not ensure that the self help groups obtaining the initial loan come back for the main part of the loan. The self employment programmes of TAHDCO did not concentrate on high income generating activities prescribed by GOI. The beneficiaries were subjected to high interest rates and delays due to poor control and monitoring by TABCEDCO and TAMCO. TAHDCO imparted training through unrecognised institutes and did not compile the data of the employment status of the trained beneficiaries.

Monitoring and recovery performance

The post disbursement monitoring by these companies was poor and revealed non-verification of assets created, non-maintenance of data base of guarantors and security, poor recovery of loans and lack of adequate impact studies.

Impact assessment

The independent impact assessment of the schemes by Audit substantiated the audit findings mentioned in the performance review and indicated an urgent need for the companies to take remedial actions.

Conclusion and Recommendations

Audit concludes that these companies were required to improve their performance. Audit recommends to prepare the annual plans and the need based strategic plans in consonance with the goals of the Government, improve implementation of the schemes by correct identification of beneficiaries, avoid procedural delays and ensure that the assistance given would help to achieve the objectives and constantly monitor and assess the impact of the schemes to enable mid-term corrections wherever required.

Introduction

2.1 The State Government formed the following three companies with the mandate of extending assistance for raising the economic status of scheduled caste (SC), other backward classes (OBC), most backward classes (MBC) and minorities in the State:

Sl.No.	Name of the Company	Date of incorporation	Targeted section of population
1.	Tamil Nadu Adi-dravidar Housing and Development Corporation Limited (TAHDCO)	15 February 1974	Scheduled caste
2.	Tamil Nadu Backward Classes Economic Development Corporation Limited (TABCEDCO)	16 November1981	Other Backward Classes/Most Backward Classes/Denotified communities
3.	Tamil Nadu Minorities Economic Development Corporation Limited (TAMCO)	31 August 1999	Minorities

These companies are the State's channelising agencies for the schemes financed by National Scheduled Caste Finance and Development Corporation (NSFDC), National Safai Karmachari Finance and Development Corporation (NSKFDC), National Backward Classes Finance and Development Corporation (NBCFDC) and National Minorities Development and Finance Corporation (NMFDC). The funds requirement for the schemes of TAHDCO are met out from share capital assistance received from Central/State Government and Special Central/State Assistance (SCA) and soft loan from NSFDC, NSKFDC. The schemes of TABCEDCO and TAMCO are mainly financed by NBCFDC and NMFDC. The funds received are distributed to the targeted beneficiaries through banks[€] under the following schemes:

TAHDCO	TABCEDCO	TAMCO
(i) Land purchase scheme (ii) Individual loan scheme (iii) Financial assistance to self help group (iv) Self employment programme for youth (v) Collector discretionary fund (vi) Training schemes	(i) General term loan (ii) Milch animal through Aavin (iii) Micro credit scheme to self help groups (iv) New Swarnima scheme	(i) Individual loan scheme (ii) Milch animal through Aavin (iii) Micro credit scheme to self help groups (iv) Loan for purchase of TSRs Auto (v) Educational loan

€ Banks include Nationalised, District Central Co-operative and Primary Agricultural Co-operative banks.

2.2 These companies together have disbursed loans aggregating to ₹553.86 crore among 8.47 lakh beneficiaries under various schemes during 2005-10 and have covered 17.47 lakh beneficiaries since their inception as detailed below:

Sl.No.	Particulars	Estimated population of targeted groups below the poverty line (In lakh)	Total number of beneficiaries covered since inception to March 2010		Beneficiaries covered (2005-10) (In lakh)	Loan disbursed (2005-10) (₹ in crore)
			Number (In lakh)	Percentage of Column (4) to (3)		
1.	TAHDCO	119♣	14.38	12.08	6.56	357.53
2.	TABCEDCO	70*	2.64	3.77	1.46	124.46
3.	TAMCO	15*	0.45	3.00	0.45	71.87

Organisational set up

2.3 The management of these companies is vested with their Board of Directors (BOD) including Chairman. The Managing Director is the Chief Executive assisted by General Managers in managing the affairs of these companies. TAHDCO had 32 district offices headed by District Managers for implementation of the schemes at the block/village level and seven♦ divisional offices for construction of hostels/class rooms. Whereas, TABCEDCO and TAMCO play a limited role of disbursing the funds to the Sub-Channelising Agency (SUCA) *viz.*, Primary Agriculture Co-operative Banks (PACB)/District Co-operative banks (DCB). SUCAs perform various functions *viz.*, selection of beneficiaries, disbursement of loans and its recovery.

Scope of Audit

2.4 The previous reviews on TABCEDCO and TAHDCO, included in the Reports of the Comptroller and Auditor General of India (Commercial) for the year ended 31 March 1986 and 2003, were discussed by the Committee on Public Undertakings (COPU) during September 1992 and October 2009 respectively. COPU recommended (January 2003) that TABCEDCO should take more efforts to identify and increase the number of beneficiaries. The recommendations for TAHDCO are awaited (December 2010). The present performance review taken up between January and May 2010 covered all the schemes implemented by these companies during 2005-2010. The audit

♣ As per 2001 census and categorised as BPL population by TAHDCO in December 2008.

* Calculated at 20.1 *per cent* (poverty percentage) on the estimated population as per the citizen's charter of State Government in 2009.

♦ Chennai, Villupuram, Coimbatore, Vellore, Tiruchirappalli, Madurai and Tirunelveli.

examination involved scrutiny of records of the head offices, nine[•] district offices and four[∝] civil divisions of TAHDCO and SUCAs of TABCEDCO and TAMCO in ten[€] out of the total 32 districts of the State. Districts were selected based on the concentration of the targeted communities.

Audit objectives

2.5 The Audit objectives of the performance review were to ascertain whether there was:

Planning

- a system for identifying targeted group of beneficiaries and coverage was done in a phased manner.

Implementation of schemes

- an efficient system for optimum utilisation of funds for fulfilment of specified objectives.
- an effective appraisal system for selection of only eligible beneficiaries.
- an efficient and effective loan sanction/disbursement.
- effective follow-up of loan recovery.

Monitoring

- an effective system of monitoring with follow-up that ensured uplifting of the assisted beneficiaries.

Impact assessment

- impact assessment of various assistance/schemes with regard to raising of income levels of the targeted groups.

Internal audit and control

- adequate internal audit and control.

Audit criteria

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

- annual policy notes of the State Government.
- procedures/guidelines prescribed by the national funding agencies.

• Chennai, Coimbatore, Cuddalore, Kancheepuram, Thiruvallur, Thiruvarur, Thiruvannamalai, Villupuram and Vellore.

∝ Chennai, Villupuram, Coimbatore and Vellore.

€ Villupuram, Cuddalore, Thiruvannamalai, Vellore, Salem, Thiruvallur, Kancheepuram, Karur, Tiruchirappalli and Erode.

- targets for various schemes *vis-a-vis* their achievements.
- procedures laid down by these companies for implementation and follow-up.

Audit methodology

2.7 The methodology adopted for attaining the Audit objectives consisted of review of the Planning Commission guidelines, scheme guidelines of the Government of India (GOI), policy notes and orders of the State Government, Agenda notes, Board Minutes, scheme files and correspondence files including the loan ledgers of the respective companies. Further, Audit directly interacted with 2,601 numbers of randomly selected beneficiaries of the three companies under various schemes for independent assessment of the success of the schemes.

Audit findings

2.8 We explained our objectives to TAHDCO during the entry conference held on 8 February 2010. A similar entry conference with TABCEDCO and TAMCO was conducted on 5 March 2010. Our findings were reported to these companies in July 2010 to which the respective Managements furnished the replies in September/October/December 2010. The draft reviews were discussed in the exit conference held on 14 October 2010 in respect of TABCEDCO and TAMCO and 22 October 2010 in respect of TAHDCO. Our findings were finalised considering the Management's replies and the views expressed in the exit conferences and are discussed below:

Financial performance

2.9 The details of amount received from the funding agencies and the amount disbursed to the beneficiaries by these companies are given below:

(₹ in crore)

Sl.No.	Particulars	Amount received from the funding agencies including share capital assistance and opening cash and bank balance during the review period	Loan disbursed
1.	TAHDCO	457.67	357.53
2.	TABCEDCO	136.37	124.46
3.	TAMCO	64.06	71.87#
	TOTAL	**658.10**	**553.86**

Against the available funds of ₹658.10 crore, these companies together disbursed funds aggregating to ₹553.86 crore amongst 8.47 lakh beneficiaries under various schemes during the review period.

The excess disbursal over and above the amount of receipt in respect of TAMCO was due to utilisation of the recoveries from the beneficiaries for disbursement as fresh loan. Apart from this, the Company kept surplus funds in term deposits as discussed in para 2.10.

These companies have finalised their accounts up to 2009-10 except TAHDCO which had finalised the accounts up to 2008-09. The financial position and working results are furnished in **Annexures-7 and 8**. A review of the financial position and working results of TAHDCO indicated that against the share capital assistance of ₹19.11 crore due from the GOI from the year 1999-2000 and 2004-2009, the Company received (1999-2000) only ₹1.40 crore as the recovery of earlier loans by the Company was below the norm of 60 *per cent* and the State Government did not release its portion of capital contribution (₹19.89 crore since 2003-04). The insufficient recoveries deprived the beneficiaries of the margin money assistance of ₹37.60 crore. Also as per the guidelines of GOI (October 1998), TAHDCO was permitted to utilise only 3 *per cent* SCA towards its administrative expenditure. Even though we pointed out the appropriation of SCA funds in excess of the prescribed limit in the Report of the Comptroller and Auditor General of India (Commercial) for the year ended 31 March 2003 *vide* Paragraph 2.7, excess appropriation continued during the review period amounting to ₹27.54 crore♦.

TAHDCO replied (October 2010) that it followed the guidelines (December 1990) of the State Government for charging of the administrative expenditure to SCA funds. However, appropriation of SCA funds of GOI should be based only on the guidelines of GOI and not based on State Government guidelines.

TAMCO and TABCEDO earned profit (except TAMCO in 2008-09) out of interest earned from investment of the surplus funds accumulated due to delay in implementation of the schemes as detailed in the succeeding paragraphs.

Financial management

2.10 As could be seen from the Paragraph 2.8, the three companies collectively received funds amounting to ₹658.10 crore during the five years ending 31 March 2010 (except TAHDCO which had finalised the accounts upto 2008-09) for implementation of the schemes. We noticed that major portion of the undisbursed funds were kept in short term/Fixed Deposits (FD), Personal Deposit (PD) and Savings Bank (SB) accounts of banks resulting in overall profits due to the interest earned as shown below:

(₹ in crore)

Sl. No.	Particulars	2005-06	2006-07	2007-08	2008-09	2009-10♣
I	**TAHDCO**					
1.	Net Profit as per accounts	4.30	4.23	1.86	1.74	2.98
2.	Interest income on SB accounts and term deposits	4.57	2.39	3.21	5.22	2.98
3.	Operative income excluding interest (1-2)	(-)0.27	1.84	(-)1.35	(-)3.48	NIL
4.	Funds in PD/SB/FD account	146.88	92.72	134.48	225.39	249.20

♦ 2005-06: ₹4.66 crore, 2006-07: ₹4.39 crore, 2007-08: ₹8.53 crore, 2008-09: ₹9.96 crore and 2009-10: Not available.

♣ Figures in respect of TAHDCO for the year 2009-10 are provisional.

Sl. No.	Particulars	2005-06	2006-07	2007-08	2008-09	2009-10*
II	**TABCEDCO**					
5.	Net Profit as per accounts	0.43	0.61	0.72	0.74	1.60
6.	Interest income on SB accounts and term deposits	0.86	1.39	1.77	1.79	1.80
7.	Operative income excluding interest (5-6)	(-)0.43	(-)0.78	(-)1.05	(-)1.05	(-)0.20
8.	Funds in PD/SB/FD account	18.28	11.50	10.89	82.49€	87.37
III	**TAMCO**					
9.	Net Profit as per accounts	0.01	0.15	0.40	0.44	0.64
10.	Interest income on SB accounts and term deposits	0.06	0.25	0.38	0.73	0.29
11.	Operative income excluding interest (9-10)	(-)0.05	(-)0.10	0.02	(-)0.29	0.35
12.	Funds in PD/SB/FD account	2.41	5.12	5.19	8.10	13.55

We noticed that despite, COPU's recommendations (January 2003) to TABCEDCO to disburse the surplus funds to more beneficiaries, the Company had no action plan for expeditious implementation of schemes and coverage of maximum beneficiaries with available surplus funds.

TABCEDCO replied (December 2010) that the short term deposits were out of the collection from the sub-channelising agencies. The fact, however, remained that FD investments could have been recycled among the beneficiaries as recommended by the COPU.

TAHDCO replied (October 2010) that accumulation of unspent balances were due to receipt of SCA funds at the fag end of the year and staggered expenditure throughout the next financial year.

The fact remains that apart from accumulation of balances in PD account being the funds received for construction works, scheme funds have also been kept in FD and SB accounts. These could have been effectively utilised by fixing targets to the level of funds availability. However, this was not done.

- TAHDCO should utilise the amount received from NSFDC within three months of its receipt failing which it had to be refunded. Any belated remittances to NSFDC attracted 3 *per cent* penal interest. The Company refunded (May 2009) the unspent NSFDC fund (₹4.58 crore) received during 2007-08 after a delay of 17 months even though it was aware (October 2008) that the funds were not required for implementation of the schemes. Consequently, TAHDCO became liable to pay penal interest of ₹2.28 crore as NSFDC had rejected (April 2010) the waiver request (March 2010) of the Company. Similarly, NSKFDC also demanded (March

€ This includes ₹56.70 crore received for land irrigation scheme and kept in PD account.

2010) ₹1.32 crore as extra charges for non-utilisation of its funds (₹9.68 crore) pertaining to the period 1999-2003. However, the amount (₹3.60 crore) was still to be recovered by NSFDC/NSKFDC (November 2010).

TAHDCO replied that (October 2010) it had requested the national agencies for waiver of penal interest. However, the fact remained that the waiver proposal was also yet to be accepted by them (December 2010).

Planning

Absence of data base

Block/village level database of eligible beneficiaries was not compiled by all the three companies.

2.11 As per guidelines of the GOI for utilisation of SCA, families belonging to targeted communities living below poverty line[♣] are eligible for economic assistance/training by TAHDCO. As regards the NSFDC/NSKFDC schemes of TAHDCO and other two companies, the families living below double the poverty line (income level of ₹44,000/₹55,000 *per annum*) are eligible for financial assistance. A database of eligible beneficiaries with reference to their income, population density of targeted groups in each districts/block/village, *etc.,* is a prerequisite for effective implementation of any scheme. However, we noticed that none of these companies had block wise/village wise data regarding the eligible beneficiaries. TAHDCO instructed (February 2010) all its district officers to furnish the list of BPL population for the first time. The list remains to be compiled (December 2010). The GOI desired (September 2008) TAHDCO to furnish the details of BPL SC families covered under the schemes during 2005-06, who were able to cross the poverty line. In spite of the State Government directing (May 2009) TAHDCO to conduct a fresh survey and furnish details to GOI. TAHDCO furnished (March 2010) the details for which no basis was on record.

Absence of strategic plan

The companies did not prepare long term strategic plan.

2.12 A need based long term strategic plan aligned with the Government policies is essential to prioritise assistance to the beneficiaries in a phased manner. However, we noticed that there was no such strategic or corporate plan with all these companies.

In TAHDCO, even the annual plans requiring State Government's prior approval were submitted during middle of the year (July to September) and its approval was obtained only in September/October each year leaving little time for implementation. This resulted in tardy implementation and huge accumulation of funds. While TAMCO did not delay in preparing its annual action plan, TABCEDCO submitted its action plans to State Government with delays of 12 to 85 days during the review period.

♣ Families having income below ₹22,000 (rural) and ₹27,500 (urban) *per annum* are BPL families.

TAHDCO replied (October 2010) that delays in preparation of annual plans would be avoided in future.

Absence of publicity and awareness

2.13 Awareness campaigns are essential to reach out to the potential beneficiaries in districts/taluks/blocks/panchayats. TAHDCO has been allocating ₹95 lakh each year towards advertisement/publicity charges, which is restricted to 3 *per cent* of subsidy (₹3 lakh) allotted to each District. However, we noticed that no awareness campaign was conducted in any of the nine districts test checked and only ₹0.40 to ₹0.60 lakh was spent against the prescribed percentage. The district offices also did not organise pre-sanction counselling at the block levels to educate the beneficiaries, resulting in filing of incomplete applications (7,429) in six[9] districts which were rejected.

Similarly TABCEDCO and TAMCO incurred only a meager expenditure of ₹1.37 lakh and ₹3.69 lakh respectively on advertisement during 2005-10.

TAHDCO replied (October 2010) that awareness was being created through pamphlets and display in the notice boards of its regional offices. TABCEDCO replied (December 2010) that the advertisements on its schemes were released by the District Collectors. TAMCO assured (September 2010) to increase the awareness campaign in districts.

However, the fact remains that apart from displays in a routine manner in their own offices, the companies did not take adequate steps for creating awareness at village/block levels.

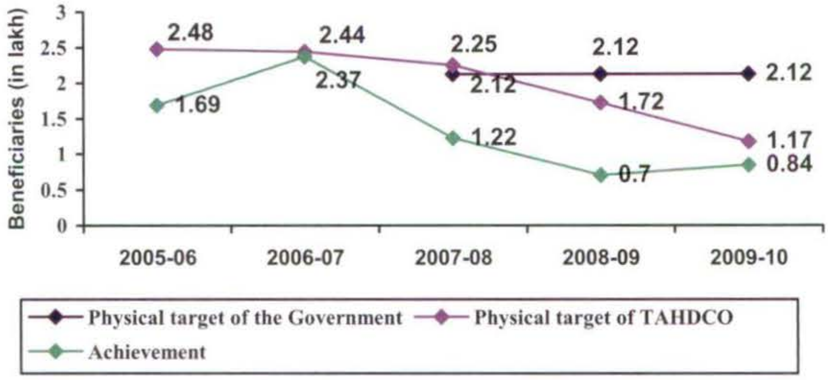
We recommend that the companies take up the planning of social upliftment schemes earnestly to achieve the overall objectives of social justice and equality. The database of targeted beneficiaries always available at block/village levels can be taken help of to spread awareness and bring more potential beneficiaries into net.

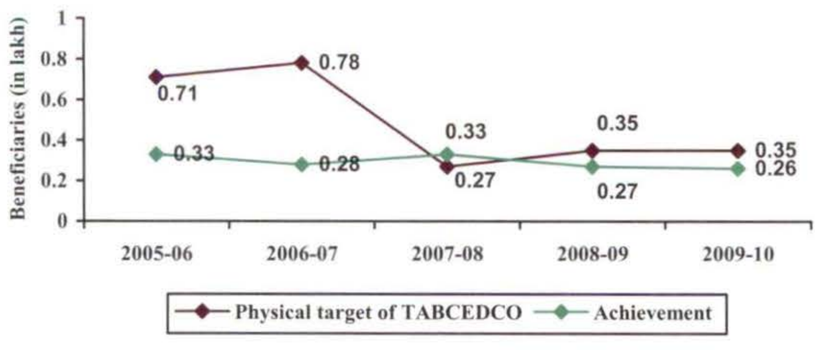
Targets and achievement

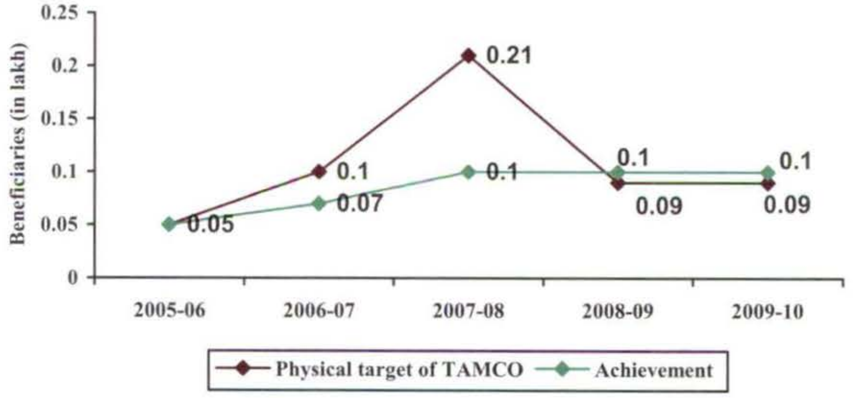
2.14 The targets and achievement of various schemes in respect of three companies is depicted in the following line chart and the details are furnished in **Annexure-9:**

9 Vellore, Villupuram, Thiruvallur, Kancheepuram, Coimbatore and Thiruvarur.

Targets and achievements







We observed that considering the estimated SC/OBC/MBC population of 2.04 crore living below poverty line in the State, the coverage by these companies during the review period was only 8.47 lakh beneficiaries. We further observed that:

TAHDCO could not achieve its target throughout the review period and TABCEDCO/ TAMCO could achieve the target only after reduction during 2007-09.

- Though the companies had fixed annual physical/financial targets, the State Government had not fixed any such target for these three companies up to 2006-07 indicating inadequate planning at the Government level for expeditious coverage of beneficiaries. However, in Eleventh Five Year Plan (2007-12) the State Government fixed physical target for coverage of 10.59 lakh beneficiaries by TAHDCO. To achieve targets, TAHDCO should have fixed its annual physical target of at least 2.12 lakh beneficiaries and covered 6.36 lakh beneficiaries up to 2009-10. Against this, TAHDCO fixed target of 5.13 lakh and achieved 2.77 lakh beneficiaries. This indicated that the goals of TAHDCO were not in consonance with those of the State Government.

- There was no system of fixing targets on need basis by these companies due to non identification of the target groups at the block level. In none of the years, TAHDCO could achieve its financial targets primarily due to absence of strategic plan and delay in processing the loan applications as was evident from the fact that 29,177 out of 98,552 (30 *per cent*) applications were delayed in processing for more than one year in respect of five# out of nine districts test checked in Audit.

- TABCEDCO and TAMCO fixed ad hoc targets and their actual achievement was in excess of the physical targets during 2007-08 and 2008-09 mainly due to downward fixation of targets for which no reasons were on record.

- The achievement by TAHDCO every year was overstated as it included sanction orders issued but were subsequently reversed due to limitation of time. Our analysis in nine[∝] districts showed that the overstatement related to 6,811 (4 *per cent*) sanction orders valuing ₹8.88 crore (8.13 *per cent*) out of 1,68,675 sanction orders valuing ₹109.20 crore issued during 2005-10 were reversed. We also noticed that in three[°] districts subsidy amount of ₹34.50 lakh had been drawn and kept undisbursed by the banks due to non-release of loan resulting in inflated report on achievement.

TAHDCO stated (October 2010) that the reversal of sanction orders in a few cases was unavoidable. The fact was that this happened continuously in all the years, which resulted in overstatement of data on achievements.

We are of the opinion that the targets of companies were not in consonance with the targets set by the State Government and the actual achievements were still less. We recommend that the companies should fix and make concerted efforts to achieve targets which are in line to those of the State Government.

Thiruvallur, Villupuram, Thiruvannamalai, Kancheepuram and Thiruvarur.

∝ Thiruvallur, Vellore, Villupuram, Cuddalore, Thiruvannamalai, Kancheepuram, Thiruvarur, Coimbatore and Chennai.

° Kancheepuram, Coimbatore and Chennai.

Deficiencies in sanction of assistance

2.15 In TAHDCO, applications received from prospective beneficiaries were scrutinised and selected by a committee consisting of Deputy Manager, TAHDCO, General Manager, District Industries Centre, Lead District Bank Managers and then sent to bank for issue of acceptance letter for disbursal of the loan. In respect of TABCEDCO and TAMCO, the identification and selection of beneficiaries were carried out by the District Screening Committee, with representatives of Primary Co-operative banks and village level agricultural banks without any representation from these companies.

We noticed deficiencies in the processing of applications for assistance:

- As per the instructions in vogue, the District Managers of TAHDCO have to maintain a master register indicating the details of receipt of application from the beneficiaries, date of approval of the application by the screening committee, date of forwarding the eligible application to the banks with nodal proceedings (Form-III). However, in none of the districts test checked, the master register was maintained. Instead these offices maintained application register, nodal issue register and Form-III separately without any correlation among them. Consequently, the identification and selection of beneficiaries was difficult. Besides, the Company couldn't monitor the delay in processing of eligible applications.
- District offices of TAHDCO took nearly one to two years instead of the norm of 30 to 60 days fixed for sanction as seen from Paragraph 2.14, which points out delays in 30 *per cent* of cases test checked. No mechanism existed to analyse the delays and to monitor timely disbursement of subsidy and loans. Further, there were instances of TAHDCO selecting ineligible beneficiaries under the scheme for rehabilitation of manual scavengers (Paragraph 2.19), non-verification of caste certificate for sanction of revolving fund under Self Help Group (SHG) (Paragraph 2.22) and selection of over-aged beneficiaries under Self Employment Programme for Youth (SEPY) (Paragraph 2.24). In TABCEDCO and TAMCO against the time limit of 10 days for sanction of loans for eligible applicants, delays ranged between 15 to 270 days in TABCEDCO and 12 to 728 days for TAMCO.

TAHDCO in its reply (October 2010) claimed that there were delays only in the individual entrepreneur scheme. However, we noticed the delays in all the schemes. TABCEDCO replied (December 2010) that the delays were attributable to the SUCA who were required to verify the viability of the projects and the repaying capacity of the beneficiaries. The fact, however, remained that TABCEDCO did not monitor timely disbursement of loans by SUCA.

Implementation of the schemes

Land purchase scheme

2.16 TAHDCO introduced this scheme in 2003-04 to enable landless SC women to own agricultural land and improve their economic status. Under the scheme, each beneficiary could purchase a maximum of 5 acres of dry land or 2.5 acres of wet land at a maximum unit cost of ₹2 lakh comprising ₹1 lakh each for purchase of land and its development. 50 *per cent* of the unit cost would be the subsidy to be borne by TAHDCO and the balance would be from the banks as term loan, repayable in five years.

We observed:

Instances of assistance for purchase of fragmented and over exploited land were noticed.

- In violation of guidelines that land procurement should be contiguous, assistance of ₹1.29 crore was given by TAHDCO for purchase of fragmented lands and those below one acre in respect of 156 beneficiaries in five[∝] districts test checked in Audit.
- Subsidy towards land development was to be released in a phased manner after completion of the land purchase. However, in two districts (Cuddalore and Thiruvannamalai), 96 beneficiaries were extended subsidy (₹28.79 lakh) for land development along with the subsidy for purchase of land.
- Subsidy amounting to ₹1.25 crore was paid during 2005-06 and 2009-10 for the purchase of 282 acres of land located in over exploited and critical (dark) areas *i.e.*, areas not suitable for cultivation in various blocks of Vellore and Villupuram districts.
- Though the land development cost included payment of deposit to TNEB, the district offices did not ensure that TNEB had provided power supply to beneficiaries. In Thiruvallur and Villupuram districts during our interaction with the beneficiaries, we ascertained that beneficiaries were not even aware of the existence of fast track scheme for effecting power supply by TNEB.

TAHDCO replied (October 2010) that the choice of selection of land vested with beneficiary. However, TAHDCO was duty bound to ensure that the beneficiaries select land suitable for cultivation to enable their economic development which evidently it failed to ensure.

Land purchase scheme under LAFTI

2.17 Based on the proposal (January 2006) by LAFTI[♣] for distribution of agriculture lands to landless SC/ST labourers in Nagapattinam and Thiruvarur districts, TAHDCO extended loan assistance at an interest rate of 6.5/6.0 *per cent per annum* repayable in seven years with onus of the recovery on LAFTI.

∝ Cuddalore, Thiruvallur, Villupuram, Thiruvannamalai and Vellore.

♣ "Land for freedom of tillers" a voluntary organisation formed to obtain cultivable lands and distribute to the landless agriculture labourers.

During the review period, 1,844.55 acres of land were distributed at a cost of ₹5.88 crore (consisting of NSFDC loan ₹2.75 crore and subsidy ₹3.13 crore) to 1,713 beneficiaries.

We observed:

Land purchase scheme implemented through LAFTI was not fully successful.

- LAFTI had not handed over the registered documents in respect of 1,010 out of 1,713 beneficiaries (August 2010).
- The overdue payments as on March 2010 in the present scheme was ₹1.18 crore in respect of Nagapattinam district.
- Out of 1,844.55 acres of land, 1,057 acres allotted to 1,057 beneficiaries in Nagapattinam and Thiruvarur districts was categorised as saline water area and the cultivation was dependent entirely on rain water.
- A feed back from 48 beneficiaries in Thiruvarur district revealed that their annual income was around ₹5,000 against the expected income of ₹22,000 *per annum* defeating the basic objective of the scheme.
- In the earlier (1991-95) land purchase scheme implemented through LAFTI in Nagapattinam district, only 498 out of 2,110 beneficiaries had obtained the legal ownership of the land. Besides, there were outstanding payments of ₹62.50 lakh as on March 2010. The State Government while forwarding (August 2006) the petition alleging malpractice in the earlier scheme of LAFTI, ordered necessary and immediate remedial action by the Company. In spite of all these short comings, TAHDCO accepted the second proposal of LAFTI.

Thus, the scheme aimed at enhancing the socio-economic status of the landless SC population had not achieved the desired result due to implementation through an intermediary agency, whose track record was not up to the mark.

TAHDCO replied (October 2010) that the Government issued orders in July 2010 granting 100 *per cent* exemption in stamp duty and the registration of land was in progress. The fact, however, remained that on both the occasions, the basic objective of improving economic status was not achieved.

Land Irrigation Scheme of TABCEDCO

Subsidy of ₹48.71 crore out of ₹50 crore received for land irrigation scheme was kept idle in PD account for more than two years.

2.18 The State Government introduced (December 2007) a scheme for providing irrigational facilities to small and marginal farmers belonging to OBC, MBC, De-notified communities with a financial assistance up to ₹1.00 lakh. The pattern of finance comprised bank loan and a matching grant by the State Government subject to a maximum of ₹50,000. The Government released (March/November 2008) ₹25 crore each during 2007-08 and 2008-09 for coverage of 10,000 beneficiaries each year.

We observed that against the target of 10,000 beneficiaries, the Company could disburse subsidy of ₹1.29 crore to only 261 beneficiaries in nine out of

32 districts upto November 2010. As the Company could not identify balance number of beneficiaries, ₹48.71 crore was lying idle in a PD account (November 2010). TABCEDCO replied (December 2010) that it had proposals on hand for disbursement of ₹2.68 crore in 17 districts. We feel that even if the full amount is disbursed it will be way short of the target of 10,000 beneficiaries.

Scheme for Rehabilitation of manual scavengers

2.19 The GOI launched (January 2007) the scheme for rehabilitation of manual scavengers by March 2009 involving training and subsequent economic assistance. For implementation of the scheme, NSKFDC released (May/June 2008) ₹22.66 crore. TAHDCO informed (October 2008) GOI that there were 11,896 SC manual scavengers to be rehabilitated. The Company imparted training in computers, repair of household articles, air-conditioners, Television, *etc.,* to 5,419 candidates in 23 districts at a cost of ₹7.29 crore but paid a subsidy of ₹13.15 crore to 10,352 beneficiaries. Our scrutiny in five[£] districts indicated that:

- NSKFDC guidelines prescribed maximum cost of ₹14,000 per beneficiary for training consisting of institution fees and stipend. However, for 1,482 beneficiaries ₹23.02 lakh was spent in excess of the prescribed amount.
- Minimum educational qualification for undertaking training in computer hardware and mobile phone repairs, *etc*, was Class 10. In Cuddalore and Thiruvannamalai, 295 beneficiaries (cost ₹44.25 lakh) who did not study up to class ten were trained.
- The guidelines stipulated that minimum and maximum age for assistance as 17 and 35 years respectively. In six[∞] districts, the Company provided training at the cost of ₹26.15 lakh to 182 over or under aged beneficiaries.

3,271 out of 5,419 trainees were provided assistance for venturing in trade other than in which they were trained.

- 3,271 beneficiaries, who were trained in two/four wheeler repair, electronic and consumer goods repair, motor winding, plumbing, carpentry *etc*., were provided subsidy and loan for setting up petty shops, provision stores, buying milch animal, cut piece shops *etc*., indicating mismatch with the training provided.

TAHDCO replied (October 2010) that selection of areas of training and trade was made by the beneficiaries themselves. The reply confirmed that TAHDCO did not monitor the training schemes to insist that the training and trade was the same which defeats the purpose of the scheme and the amount spent.

Financial assistance for purchase of milch animals

2.20 TAHDCO extended financial assistance to the SC families for purchase of milch animals under Individual Entrepreneur Scheme and

£ Salem, Villupuram, Cuddalore, Virudhunagar and Thiruvannamalai.

∞ Permablaur, Pudukottai, Salem, Chennai, Thiruvannamalai and Cuddalore.

assistance under Micro Credit Finance and Mahila Samridhi Yojana. The maximum unit cost under these schemes varied between ₹24,000 to ₹30,000 (including a subsidy of 30 *per cent* of the unit cost and the balance as loan). The unit cost was payable in two instalments for purchase of the first and second cow. The following system deficiencies were noticed:

- As against the normative cost of ₹32,000 to ₹40,000 fixed by the National Bank for Agriculture and Rural Development (NABARD), for the scheme, the Company had adopted the maximum unit cost as ₹24,000 to ₹30,000. Accordingly, it extended subsidy of ₹1.45 crore during the review period to 1,665 beneficiaries in Thiruvallur and Villupuram districts. Interaction with the beneficiaries in these districts showed that only low breed cows could be purchased with lower unit cost and they were able to earn only a maximum of ₹6,000 instead of ₹7,000 *per annum* projected by NABARD.
- 1,320 beneficiaries to whom subsidy of ₹1.02 crore was paid during 2005-06 and 2006-07 had not availed second instalment of subsidy in Vellore, Kancheepuram, Thiruvarur, Coimbatore and Villupuram districts. In 2007-08 to 2009-10, the District offices of Villupuram, Coimbatore and Thiruvarur disbursed only 50 *per cent* of subsidy to 1,287 beneficiaries and denied the balance 50 *per cent* subsidy amounting to ₹2.31 crore. In the absence of any feed back mechanism with TAHDCO, we could not ensure that sustainable income had accrued to the beneficiaries as envisaged .
- While in Villupuram the beneficiaries submitted purchase agreement along with insurance cover and health certificate from veterinary doctor, in other districts no such practice was followed.

TAHDCO replied (October 2010) that district managers have been instructed to adopt the unit cost fixed by NABARD and ensure the asset creation in future.

Milch animal scheme in TABCEDCO

2.21 The scheme envisaged loan for purchase of two milch animals through Aavin[∇] at a cost of ₹15,000 per animal repayable with 6 *per cent* interest in three years. As per the agreement between Aavin and TABCEDCO, the loan was to be disbursed by Aavin to the beneficiaries within one month from the date of receipt of funds from TABCEDCO. We observed:

- Of the 8,164 beneficiaries, there was delay in disbursement of loan to 7,864 beneficiaries ranging from 37 to 454 days. The delay was more than a year in the case of 2,520 beneficiaries. The reason was attributable to delay in processing applications by SUCAs. Consequently, the beneficiaries were deprived of the loan assistance within the time limit.

∇ Tamil Nadu Co-operative Milk Marketing Federation.

- Adoption of a lower unit cost of ₹30,000, as compared with the normative cost of ₹32,000 to ₹40,000 fixed by NABARD, could not generate the expected income, as borne out by the impact studies.

TABCEDCO replied (December 2010) that the decision for enhancement of loan would be taken in due course of time and the other deficiencies pointed by audit would be brought to the notice of Aavin for taking suitable action.

Financial assistance to Self Help Groups by TAHDCO

2.22 Under the scheme, SHG comprising 12 to 20 SC women of BPL category were to be formed according to the norms specified by a committee. After six months of formation, the SHG would be graded and the eligible SHG would be extended assistance of ₹10,000 per SHG in the form of revolving fund (RF) to meet the initial expenditure. The scheme envisaged subsequent sanction of project cost in the form of economic assistance (EA) up to ₹7.50 lakh including 50 *per cent* subsidy subject to the maximum of ₹2.50 lakh and promoter's contribution of 10 *per cent* and the balance in the form of term loan from the banks. Further, the guidelines of Sampoorna Gramin Swaraj Yojana (SGSY) of GOI regarding formation of SHG, sanction of RF and EA were also to be followed for implementation of the scheme. The targets and achievements under the scheme during the review period are given below:

Year	Physical target (In numbers)		Physical achievement (In numbers)		Financial target (₹ in crore)		Financial achievement (₹ in crore)	
	Revolving fund	Economic assistance	Revolving fund	Economic assistance	Revolving fund	Economic assistance	Revolving fund	Economic assistance
2005-06	1,12,500	30,000	59,259	26,124	7.50	20.00	3.99	16.48
2006-07	1,12,500	43,000	84,532	47,214	5.77	29.73	4.74	29.43
2007-08	60,000	1,00,000	43,338	24,913	3.00	21.50	2.22	14.02
2008-09	60,000	37,500	16,410	12,752	4.00	25.00	1.08	9.83
2009-10	30,000	37,500	13,082	23,526	2.00	25.00	1.02	21.11

- The fixation of maximum subsidy at ₹2.50 lakh was more than the ceiling of ₹1.25 lakh fixed by SGSY programme of GOI which formed the basis of this scheme.
- The Company continuously reduced the physical and financial targets from 2007-08 onwards indicating slackness in formation of SHG.
- There was no co-ordination between TAHDCO and other State agencies engaged in formation of SHGs. TAHDCO was not aware of the total number of SHGs operating in the State due to lack of coordination between TAHDCO and other state agencies engaged in formation of SHGs. TAHDCO had not created a database to verify whether the SHGs that availed revolving fund subsequently

availed economic assistance also. Consequently, the Company was not able to ensure that the members of the SHG had economically progressed.

- In Villupuram District, 599 SHGs were formed and a subsidy of ₹59.90 lakh was disbursed without obtaining community/income certificate from the beneficiaries. After being pointed out in audit, 10 such SHGs, which did not avail any loan from the bank refunded (26 April 2010) the subsidy of ₹60,000 against ₹ one lakh released to them under the revolving fund. This was indicative of the absence of a robust mechanism to identify the beneficiary before sanction and release of subsidy. NABARD too had pointed out (2009-10) prevalence of unhealthy competition among the NGOs to avail subsidy under Government sponsored schemes.
- The district offices (except Chennai) of TAHDCO did not ensure the genuineness of caste certificate submitted by the beneficiaries though such verification was necessary.
- In Vellore district 23 SHGs availed revolving fund amounting to ₹2.30 lakh despite non-repayment of previous outstandings, which was against the terms of the above scheme. None were held responsible for such violations.
- In six[€] districts, the project reports for mini dairies did not specify the infrastructure facilities for maintenance and rearing of milch animals. The members individually maintained the animals and sold the milk produced indicating that there was no group activity in SHGs. Therefore, the subsidy should have been regulated as per individual entrepreneur scheme.
- In all the six districts mentioned above, applications submitted by the SHGs were found to be deficient as these did not contain details of loans and revolving funds already availed.
- Based on the orders of the Government (August 2005), TAHDCO arranged imparting of training at a cost of ₹1.98 crore to 50,000 women members of SHGs in entrepreneurial development skill for employment through Tamil Nadu Corporation for Development of Women Limited. However, feedback on whether these SHGs had availed themselves of assistance was not obtained except in respect of three SHGs in Salem.

TAHDCO replied (October 2010) that the district managers had been instructed to create data base of SHGs availing revolving fund and economic assistance and have been directed to verify the income certificates to avoid such lapses in future.

€ Thiruvallur, Cuddalore, Villupuram, Vellore, Thiruvannamalai and Kancheepuram.

Self Help Groups of TABCEDCO and TAMCO

There were delays in processing and disbursing of loan to 55,387 beneficiaries, which ranged from 15 to 270 days (TABCEDCO) and 15 to 728 days (TAMCO).

2.23 The scheme named as Micro Credit Scheme covers the beneficiaries through SHG identified by a NGO. The recommended lists are forwarded to the District Co-operative Banks (DCB) who will recommend to TABCEDCO/TAMCO for sanction of assistance of ₹10,000 per individual. During the review period, 1.32 lakh and 34,773 beneficiaries were extended assistance of ₹95.83 crore and ₹40.13 crore by TABCEDCO and TAMCO respectively. A test check relating to 55,387 beneficiaries in 30 districts consisting of 208 sanction orders involving financial assistance of ₹58.44 crore revealed that TABCEDCO delayed processing and disbursing loans to 43,773 beneficiaries, by 15 days to 270 days. In respect of TAMCO, the delay in disbursement of loan to 11,614 beneficiaries ranged between 15 and 728 days.

TAMCO agreed (September 2010) to take steps to reduce delays. TABCEDCO replied (December 2010) that the applications which were in order were processed within the time limit. The fact, however, remained that the delays were noticed in release of sanction orders by TABCEDCO after processing of applications by SUCAs and hence were avoidable.

Self Employment Programme for Youth (SEPY) and Individual Entrepreneur Scheme (IES)

2.24 The SEPY implemented by TAHDCO provided financial assistance to SC youth of the age group between 18 and 35. After providing necessary vocational training to these youth through technical institutions, financial assistance is extended with the maximum project cost of ₹7.50 lakh consisting of 30 *per cent* subsidy (subject to a maximum of ₹25,000), promoter's contribution equivalent to 5 *per cent* and balance as term loans from the banks. The Company has to monitor the beneficiaries continuously for one year to ensure success of the projects being initiated by the beneficiaries. The modalities of IES were similar to SEPY without the age limit. During the review period, TAHDCO disbursed ₹11.99 crore to 5,067 beneficiaries under SEPY and ₹46.07 crore to 44,282 beneficiaries under IES respectively.

We observed in SEPY that:

- The Company continued to reduce the physical targets of SEPY from 3,000 in 2005-06 to 450 in 2009-10 without any valid reasons on record. Even the reduced targets were not achieved in any of the years except 2009-10.
- Against the maximum subsidy of ₹10,000 per beneficiary prescribed by GOI, 5,067 beneficiaries were paid excess subsidy ranging from ₹10,775 to ₹20,648, which amounted to ₹6.92 crore.
- The Company did not provide any training for skill development of the beneficiaries, which was a pre-requisite of the scheme. Even after GOI issued (March 2007) guidelines for providing training in high end income generating activities, the Company preferred assistance for setting up petty shops, small provision stores, cut

piece shops, milch animals, *etc.* Further the Company identified 13 sustainable employment opportunities for the scheme in Chennai, but similar exercise was not considered for the other districts.

- Sanctions were made to those who had crossed 35 years of age and who were above the poverty line. In five* districts test checked, subsidy amounting to ₹5.75 lakh was released to 23 ineligible beneficiaries.
- We visited eight branches of four PSU banks in Chennai city and ascertained that there were heavy over dues from 339 beneficiaries, who were given subsidy of ₹84.75 lakh for purchase of passenger autos. In view of the non-payment of dues by these beneficiaries, we could not verify whether the basic objective of scheme assistance has been achieved.

TAHDCO replied (October 2010) that (i) targets were based on previous year performance and availability of funds, (ii) training was not imparted because the beneficiaries were already having required skill and (iii) the specific lapses pointed out by Audit were being enquired into. The reply for item (i) and (ii) was not convincing because the current year's targets was not matching even with the funds availability and previous year achievement and high end skill development was never attempted by the Company as directed by GOI.

We noticed in IES that:

- In five* districts test checked, assistance was extended without assessing individual capability. Further, there was no uniformity in unit cost adopted by the Company and the quotations obtained from the dealers based on which the unit cost was sanctioned was not authenticated as it did not include the details of TNGST Registration of the whole sale dealer.
- A feedback obtained by NABARD revealed that the security and documentation of bank loan continued to be cumbersome and the loan amount was inadequate which forced them to resort to external borrowings at high rates of interest.

TAHDCO replied (October 2010) that the unit cost and documentation procedure was decided by the bank. The reply was not convincing because the responsibility of TAHDCO would not end merely at the level of disbursing subsidy to the bank but would continue till such time subsidy actually reaches the selected beneficiary as it is directly related to implementation of the scheme.

Collector's discretionary fund scheme

2.25 Under the Collector's Discretionary Fund (CDF), the Adi Dravidar beneficiaries, who require immediate financial assistance, are given a maximum of ₹10,000 as subsidy. As per the guidelines for utilisation of CDF, 3 *per cent* of SCA funds subject to a maximum of ₹5 lakh per district were to

* Thiruvallur, Cuddalore, Villupuram, Vellore and Thiruvannamalai.

be spent annually. The District Collector is responsible for implementing the scheme who may depute the District Managers of TAHDCO for verification/inspection of the status of the beneficiaries. In addition, TAHDCO is to procure necessary assets approved in the sanction from the supplier and hand over to the beneficiaries after making entries in their stock registers.

During the review period, against the target for assistance of ₹26 crore to 34,300 beneficiaries, the fund amounting to ₹18.69 crore was disbursed to 26,642 beneficiaries. We observed:

- Against the annual permissible limit of ₹1.60 crore (at the rate of a maximum of ₹5 lakh) for 32 districts (total of ₹ 8.00 crore for five years up to 2009-10), the Company spent ₹18.69 crore under the scheme resulting in excess release of ₹10.69 crore
- The procedures regarding procurement of assets from the supplier and necessary entries to be made in the stock register were followed only during 2005-06 and later the subsidy of ₹15.71 crore was disbursed by issuing cheques in the name of beneficiaries.

TAHDCO did not verify creation of asset after disbursement of assistance in the form of cheques.

- As per the guidelines, the District Managers of the Company should verify creation of assets and send quarterly reports to their Head office and Government. During test check of four[≠] districts involving disbursal of subsidy of ₹1.76 crore to 2,482 beneficiaries, the District Managers did not verify asset creation in any of the cases up to 2007-08.

TAHDCO replied (October 2010) that guidelines were already issued with regard to verification of asset creation in the scheme. We are of the opinion that the scheme was utilised only as "temporary dole" without ensuring income generation and ignoring the skill possessed by the beneficiaries.

Training programme of TAHDCO and TABCEDCO

2.26 TAHDCO undertakes training in various fields such as computer, fashion technology, knitting and embroidery to the educated unemployed SC/ST youths. The cost of training is met out of Special Central/State Assistance funds, which is limited to 30 *per cent*. The Company was required to impart training only through recognised institutions. During the review period, TAHDCO imparted training to 1,52,371 candidates incurring ₹68.45 crore in the State against ₹59.62 crore available for the purpose. A test check of training programmes of TAHDCO in five[£] districts revealed:

- 12 months Nursing training courses imparted to 1,489 beneficiaries during 2005-06 at a cost of ₹1.01 crore were not through the recognised institutes. The certificates issued in another training course conducted between October 2008 and October 2009 by Vallalar Gurukul Educational Institute for Nursing Midwifes in

≠ Thiruvallur, Vellore, Thiruvannamalai and Villupuram.

£ Thiruvallur, Vellore, Villupuram, Thiruvannamalai and Cuddalore.

Cuddalore District were ineligible for registration in the Employment Exchange.

- During 2006-09, TAHDCO provided Airhostess training through Airhostess Academy, Chennai (Academy) to 326 beneficiaries at a cost of ₹1.58 crore. However, the academy could arrange diploma certificates for 30 trainees. The academy also did not ensure minimum placement of 75 *per cent* of candidates as agreed. During 2006-08, 152 candidates were placed as aviation ground staff, hospitality and travel managers and none of them got placement as airhostess/cabin crew. During 2007-08, the 'In Flight' Training (being the main part of Air Hostess Training) was not imparted to 196 candidates by the academy in violation of the agreement between TAHDCO and the Academy.

- 238 beneficiaries were extended assistance of ₹25,000 against the eligible amount of ₹10,000 under training scheme for Civil Services Preliminary Examination passed candidates resulting in overpayment of ₹35.70 lakh during 2008-09 and 2009-10. The Company had neither recovered the overpayment nor fixed any responsibility on the officials, who authorised such overpayment indicating lack of internal controls over the payment of subsidy.

TAHDCO was yet to compile data on employment status of trained candidates.

- Out of 7,171 beneficiaries trained at a cost of ₹7.05 crore during 2007-09 in six[◊] districts so far (March 2010), only 1,061 candidates were reported to have gained employment. However, TAHDCO did not verify the reports of employment given by the training institutes.

- In another four[≠] districts during the four years ended 31 March 2009, the Company trained 10,469 beneficiaries under various training programmes by incurring ₹7.69 crore. Despite our pointing out (January 2008), the Company was yet to compile data on employment status of these candidates for evaluation of the impact of the training programme.

TAHDCO justified (October 2010) that it followed the Government instructions of September 2008 regarding financial assistance to civil services preliminary examination candidates. However, the financial assistance for such training was given out of SCA funds in which the maximum unit cost allowed by GOI per beneficiary was ₹10,000 only. In respect of other deficiencies, TAHDCO replied that the entire training programme was being revamped and evaluated.

We noticed that TABCEDCO imparted training to 334 beneficiaries in four districts at a cost of ₹8.00 lakh only for training. They had not fixed any targets for training programmes either.

◊ Vellore, Kancheepuram, Chennai, Thiruvarur, Coimbatore and Pudukottai.

≠ Thiruvallur, Thiruvannamalai, Cuddalore and Villupuram.

TABCEDCO justified (December 2010) the poor coverage under training on the grounds that it had no allocation of funds for training schemes. This confirms our observation on the company's failure to implement training programmes for the benefit of needy beneficiaries. We are of the opinion that the tardy implementation of the various schemes including issues of assistance being provided for trades other than for which trainings were provided, training requirements not being fulfilled, *etc.*, assistance being provided beyond permissible ceilings, unmonitored trainings have led to non achievement of planned goals and performance going haywire.

Construction activities of TAHDCO

2.27 TAHDCO is engaged in construction of hostels and schools for Adi Dravidar students through the funds received from State Government and GOI. The Company is allowed 12.5 *per cent* of value of works executed as centage charges. During the review period, against the total receipt of ₹216.41 crore from these sources, the Company utilised only ₹131.32 crore leaving a balance of ₹85.19 crore (39 *per cent*). We observed:

- As against the earnings of centage charges (₹6.71 crore) in respect of the four[€] divisions test checked, the Company incurred ₹14.56 crore towards the supervision of the construction work indicating excess expenditure over income to the extent of ₹7.85 crore due to lack of cost control measures. Besides, it lost eligible centage charges of ₹3.56 crore in respect of the NABARD works as the Government reimbursed only 5 *per cent* as centage charges as against 12.5 *per cent* obtained for another NABARD work.
- The balance cost of construction of 142 hostels completed under Housing Urban Development Corporation scheme during December 2004 to the extent of ₹3.80 crore remains to be collected from the State Government due to non claiming of dues and poor follow-up by the Company.
- The Company deviated from the provisions of tender/agreement and arranged for undue financial assistance (₹8.52 crore) to the contractors by entering into a tri-partite agreement with the bank and contractor. In Villupuram and Coimbatore division, five contractors defaulted in repayment of financial assistance amounting to ₹10 lakh for which the Company may become liable for repayment to the bank in view of the tripartite agreement with the bank.

TAHDCO replied (October 2010) that the financial assistance to the contractors was given to help them.

€ Coimbatore, Chennai, Villupuram and Vellore.

Monitoring

2.28 Post disbursement monitoring of beneficiary is necessary to ensure that the financial assistance granted was used for intended purpose. No such control mechanism was in place in any of the three companies for ensuring the achievement of objectives of the schemes.

Our scrutiny revealed:

District officers of TAHDCO verified creation of asset only in respect of 7 *per cent* of the assisted beneficiaries.

- No procedure existed in any of the companies for post disbursement inspection of the beneficiaries.
- The beneficiaries have not obtained comprehensive insurance coverage for vehicles financed under NSFDC schemes.
- A test check in Thiruvallur, Vellore and Villupuram districts of TAHDCO revealed that 1,524 SHGs availed revolving fund of ₹1.52 crore during the review period against which only 1,117 SHGs availed economic assistance of ₹14.52 crore. TAHDCO had not analysed the reasons for drop out of 407 SHGs in availing economic assistance.
- The District Monitoring Committee♣ was responsible for monitoring the creation of assets. Of the 4.67 lakh beneficiaries assisted in five districts during the review period, the district offices had carried out physical verification only in 33,229 cases (7 *per cent*) in 2008-09 valuing ₹28.03 crore. The remaining assets valuing ₹279.52 crore remained unverified. As a result, TAHDCO was left with only statistical information as to the number of beneficiaries and the loan disbursed.
- The District Managers of TAHDCO did not collect the statements of accounts from the respective banks which should form the basis for reporting the physical and financial achievements reported to head office and to the Government. Ironically, the physical and financial achievements reported through monthly progress reports by the District Managers indicated 100 *per cent* achievement.
- TAHDCO detected (September 2005) certain irregularities in its Coimbatore district office including issue of open cheques to the beneficiaries, extension of assistance to other than SC beneficiaries, existence of nexus between with the supplier and Company employees, overpayment of training fees *etc.* The matter was still under investigation (November 2010). However, similar checks were not carried out by the Company in other districts.

TAHDCO assured (October 2010) that they would maintain the data base of guarantors and stated that the district managers were instructed to furnish monitoring reports continuously henceforth.

TABCEDCO attributed (December 2010) the poor monitoring to absence of staff at the district level and assured to obtain the Form-B from the banks.

♣ The Committee consisted of District Collector, Regional Manager of TAHDCO and representative of the lending bank.

TAMCO stated (September 2010) monitoring of schemes directly by NMFDC had commenced from 2009-10 onwards.

Recovery performance

Poor recovery of TAHDCO was due to not issuing demand notices regularly, non-fixation of targets for recovery and not invoking personal guarantees.

2.29 Due to deficiencies in implementation and weak internal control in monitoring the schemes, the recovery performance of TAHDCO was dismal and had impaired its ability to recycle the funds to other needy beneficiaries. The details of recovery performance of three companies during the five years ending 31 March 2010 are given in **Annexure-10**. While the recovery performance of TABCEDCO and TAMCO through SUCA ranged between 84 to 100 *per cent*, the same was just up to two *per cent* in TAHDCO. In respect of the Sanitary Mart scheme of TAHDCO, there was no recovery in 2007-08 and 2008-09. TAHDCO was compelled to pay (April/November 2006) ₹23.20 crore being the defaulted amount pertaining to the period up to December 2005 to NSFDC out of its share capital. Further, the balance outstanding as on March 2009 (₹95.85 crore) as shown in the Demand, Collection and Balance Statement submitted (March 2010) to the Board varied widely with the outstanding amount (₹103.06 crore) shown in the accounts for the year 2008-09.

The poor recovery in TAHDCO was due to not issuing demand notices regularly to the loanees, non-fixation of target for recovery at the district level and failure to invoke the personal guarantee of the third parties. FDRs (value: ₹12.03 lakh) obtained as collateral security were yet to be encashed in six[♠] districts. Thus, the Company's laxity in recovering the dues led to stoppage of GOI's share capital assistance from 2003-04 onwards. Further the Company has become liable to pay liquidated damage of ₹4.98 crore to NSFDC/NSKFDC on account of non payment of dues (2008-09).

Government of Tamil Nadu had ordered (November 2008) waiver of agricultural loans together with interest amounting to ₹4.07 crore (313 beneficiaries). We noticed that the TAHDCO's waiver proposal also included ₹2.88 crore (176 beneficiaries) being the loan for purchase of tractors and power tillers. As the guidelines stipulated that the waiver was only for crop loans, inclusion of loans extended for purchase of capital items under the waiver proposal was irregular. The State Government also ordered (April 2010) waiver of margin money outstanding as on 31 March 2009 amounting to ₹66.93 crore. Under this circumstance, the recovery of ₹66.93 crore being the outstanding principal amount of various loans extended up to March 2009 is doubtful.

While admitting its poor recovery, TAHDCO stated (October 2010) that it had now taken steps for recovery through tie-up arrangements and collection through post dated cheques, *etc.*

Zero recovery of loans in respect of TABCEDCO and TAMCO

2.30 Between 2005-06 and 2009-10, TABCEDCO and TAMCO extended general term loans (₹1.45 crore in respect of TABCEDCO and ₹19.37 lakh in

♠ Chennai, Kancheepuram, Vellore, Dindugal, Thanjavur and Thiruvannamalai.

respect of TAMCO) through Primary Agricultural Co-operative Banks (PACBs). We observed that there was no recovery under this category and major amounts were due from PACBs of Cuddalore (₹41.99 lakh), Pudukottai (₹14.78 lakh), Madurai (₹9.84 lakh), Dharmapuri (₹4.85 lakh) and Sivaganga (₹3.87 lakh) as these companies entered into direct agreement with PACBs instead of through the apex co-operative banks. In spite of this, the practice of entering into such agreements with the PACBs continued.

TABCEDCO replied (December 2010) that it had written letters to the Registrar of the Co-operative Societies to remit the dues.

Impact assessment

2.31 Impact evaluation is essential to assess the success of any welfare scheme. Our scrutiny revealed that only TABCEDCO conducted (March 2009) an evaluation study during the review period. The study covering 1,010 beneficiaries revealed that the socio economic profile was generally low, except in Entrepreneurship Development Programme and mobile laundry scheme. There were inconsistencies in rate of interest charged by the various banks. TABCEDCO was ranked third by NBCFDC among the better performing State Channelising Agencies during 2005-06 and 2006-07, and second in 2007-08.

Industrial Technical Consultancy of Tamil Nadu (ITCOT) pointed out (August 2003) that nearly 40 *per cent* of the scheme benefits were not reaching the deserving beneficiaries due to complacency and indifference of TAHDCO in implementing the schemes of NSFDC. Audit interacted with 1,297 beneficiaries of TAHDCO, 1,304 beneficiaries of TABCEDCO and TAMCO covering nine districts selected in Audit identified randomly for independent evaluation of the schemes. The following deficiencies were revealed:

TAHDCO	TABCEDCO/TAMCO
There was lack of awareness about various schemes implemented.	74 *per cent* of the beneficiaries interviewed were not aware of the rate of interest of milch animal scheme.
There were delays in sanction of loan.	The quantum of loan for milch animal was inadequate.
Creation and existence of assets could not be ensured in 50 *per cent* of the test checked cases except in land and auto rickshaw purchase scheme.	Only 11 *per cent* of the beneficiaries of micro credit scheme were aware of the rate of interest but the income level of the beneficiaries of micro credit scheme of TABCEDCO and TAMCO improved up to ₹500 per month.
The economic status of the beneficiaries continued to remain low.	

The interaction substantiates our findings discussed in the review. There is an urgent need for these companies to reassess their schemes and take remedial action.

Internal control and Internal audit

2.32 These companies do not have effective internal control mechanism in sanction, disbursement and recovery of loan from the beneficiaries as brought out in the earlier paragraphs. Further, the Internal audit system was lacking as was evident from the fact that the need to strengthen internal audit of TAHDCO has been reiterated by Comptroller and Auditor General of India in the Audit Report (Commercial) for the year 2002-03 and the statutory auditors in their last five years report up to 2008-09. In respect of the other two companies, the internal audit activity was outsourced without clear scope. The audit was restricted to only the registered office without verifying the transactions being routed through DCCB/PACB, *etc*.

Acknowledgement

Audit acknowledges the co-operation and assistance extended by the staff and the management of the companies in conducting this Performance Review.

Conclusion

The companies have been mandated to raise the economic status of the persons below poverty line. However, the schemes suffered from poor planning, absence of comprehensive data base of beneficiaries and improper use of resources. Need based realistic targets were not fixed and funds were parked in interest earning deposits.

The land purchase scheme of TAHDCO suffered from implementation deficiencies such as assistance for purchase of fragmented and over exploited land. The coverage of land irrigation scheme by TABCEDCO was poor due to its inability to identify the beneficiaries.

TAHDCO extended loans to manual scavengers for trades other than in which they were trained. Both TAHDCO and TABCEDCO sanctioned lower amount of loans for purchase of milch animals defeating the objectives of the schemes.

TAHDCO did not ensure that the self help groups obtaining the initial subsidy came back for the main part of the loan. The self employment programme of TAHDCO did not concentrate on high income generating activities as prescribed by GOI. Beneficiaries were subjected to high interest rates and delays due to poor control and monitoring by TABCEDCO and TAMCO. TAHDCO imparted training through unrecognised institutes and did not compile the data of the employment status of the trained beneficiaries.

The post disbursement monitoring by these companies was also poor and revealed non-verification of assets created, poor recovery of loans and lack of adequate impact studies.

Recommendations

These companies need to:

- **prepare the annual plans and the need based strategic plans for the schemes in consonance with the goals of the Government.**
- **improve implementation of the schemes by correct identification of beneficiaries.**
- **avoid procedural delays and ensure that the assistance given would help achieve the objectives.**
- **constantly monitor and assess the impact of the schemes to enable mid-term corrections and adjustments wherever required.**

CHAPTER-III

Performance review relating to Statutory Corporation

3. Power Generation Activities of Tamil Nadu Electricity Board

Executive Summary

The availability of reliable and quality power is crucial for sustained growth of the economy. The National Electricity Policy envisaged providing at least 1,000 units per capita electricity by 2012. The Performance Audit of power generation stations of Tamil Nadu Electricity Board (Board) was taken up between January and May 2010 to assess the adequacy of power supply with reference to the State's demand and the National Mission. Our findings indicated the following.

Planning and Project Management

To meet the generation requirement of the State, a capacity addition of 3,977 MW was required against which the Board added only 290 MW during 2005-10. The low capacity addition was attributable to non-completion of planned projects in time and non taking-up of identified hydro projects. All the five projects completed during the review period missed their time schedules due to improper project management resulting in avoidable time overrun with consequent cost overrun of ₹392.37 crore. Further, the Board took up life extension programme only in two out of 16 hydro stations which had completed their normative life of 35 years.

Contract Management

The Board became ineligible for duty exemption of ₹133.26 crore due to award of work valuing ₹2,175 crore on nomination basis.

Input efficiency

The supply of coal suffered from deficiencies such as short receipt of coal against linkage, which resulted in loss of generation of 812.77 MUs during 2008-10 valued at ₹266.44 crore. Deficiencies were also noticed in the system of coal handling at NCTPS and TTPS resulting in extra expenditure of ₹20.58 crore. A comparison of the rates finalised by the Board for the purchase of imported coal with that of the rates of similar grade coal imported by another State PSU indicated that the Board had incurred extra expenditure of ₹337.76 crore. Excess consumption of 45.25 lakh MT of coal at TTPS with reference to TNERC norms resulted in additional expenditure of ₹1,103.30 crore. The manpower in excess of the norms in thermal and gas stations resulted in extra expenditure of ₹279.65 crore.

Output efficiency

The Board continued to operate unviable Ennore Thermal Power Station and Basin Bridge Gas Station. Low plant load factor at Ennore Thermal Power Station was due to low capacity utilisation, major shutdowns and delays in repairs and maintenance. The gas station at Basin Bridge was not able to break even due to usage of high cost naptha and non-conversion of the station from single cycle mode to combined cycle mode. The hydel stations could only be partially operated due to not carrying out desilting, river training courses, repair to turbo generator, non-availability of dedicated feeders etc. Excess auxiliary consumption as compared to TNERC norms resulted in lesser availability of 859.34 MUs of generated power valued at ₹281.63 crore.

Financial Management

The Board incurred continuous losses during the review period. Consequently, the dependence on borrowings increased over the review period from ₹9,583.68 crore in 2005-06 to ₹32,039.26 crore in 2009-10. The Board was dependent on costlier power from other sources. The Board did not file with TNERC

the application for tariff revision every year. Instead, they filed the application only in February 2010 after a gap of seven years despite increased cost of operation and consequent poor financial position.

Environmental issues

Two thermal stations of the Board (TTPS and NCTPS) were operating without the consent of TNPCB. The air pollution levels at TTPS were much more than the norms prescribed. The Board relied on manual data for evaluating SPM levels even after installation of the online monitoring system. The ash disposal by the thermal stations was lower than the quantity generated.

Conclusion and Recommendations

The Board's inability to meet the power demand of the State was mainly due to insignificant capacity additions and not optimising the existing power generating capacity coupled with stoppage of generation though controllable. These problems could be managed by better planning and proper monitoring of the existing facilities. This review contains seven recommendations. Taking up capacity additions to the levels of demand, avoiding pre-construction and execution delays, avoiding shortage of coal, improving coal handling system and minimising forced outages are some of these.

Introduction

3.1 Power has been recognised as a basic human need. The availability of reliable and quality power at economical rates is crucial to sustain growth of all sectors of the economy. In compliance with Section 3 of the Electricity Act, 2003, the Government of India (GOI) prepared (February 2005) the National Electricity Policy for development of the Power Sector based on optimal utilisation of resources like coal, gas, hydro and renewable sources of energy. It also requires Central Electricity Authority (CEA) to frame National Electricity Plan (NEP) once in five years and give a 15 years' perspective.

3.2 During 2005-06, the average electricity requirement in Tamil Nadu was assessed as 55,479 Million Units (MUs) of which 54,380 MUs were available leaving a shortfall of 1,099 MUs (1.98 *per cent*). During the same period, the State's total installed generation capacity including the share from Central Generating Stations was 9,531 Mega Watt (MW) and effective available capacity was 7,625 MW[•] against the peak demand of 9,375 MW leaving a deficit of 1,750 MW (22.95 *per cent*) with reference to effective available capacity. As on 31 March 2010, the comparative figures of requirement and availability of power were 75,011 MUs and 70,457 MUs with deficit of 4,554 MUs (6.07 *per cent*). Whereas the installed generation capacity including the share from Central Generating Stations was 10,214 MW (**Annexure-11)** and effective available capacity was 8,040 MW[#] against the peak demand of 11,125 MW leaving a deficit of 3,085 MW (38.37 *per cent*). Thus, there was a growth in peak demand of 1,750 MW during 2005-2010, whereas the net capacity addition was only 683 MW (Board: 290 MW and Share from Central Generating Stations (CGSs)/Independent Power Producers (IPPs): 393 MW).

• 80 *per cent* of the installed capacity as per TNERC's norm for Plant Load Factor.

As assessed by the Board.

3.3 In Tamil Nadu, generation of power is carried out by Tamil Nadu Electricity Board, Chennai (Board) incorporated as a statutory body on 1 July 1957 under Electricity Supply Act, 1948. The Management of the Board is vested with a Board of Members comprising the Chairman, three full-time Members in charge of Accounts, Generation and Distribution and three part-time Members nominated by the State Government from the Departments of Energy, Finance and Industries. The Board has four thermal generation Stations, 39 hydro generation Stations, five gas turbine Stations and 10 renewable energy Stations with an installed capacity of 2,970 MW, 2,187 MW, 516 MW and 17 MW respectively as on 31 March 2010. The turnover of the Board was ₹18,845.88 crore (provisional) in 2009-2010, which was equal to 39.61 *per cent* and 7.82 *per cent* of the State PSUs' turnover (₹47,578.58 crore) and State Gross Domestic Product (₹2,41,122 crore) for the year 2009-10. It employed 81,582 employees as on 31 March 2010 including 14,816 employees in the generating stations.

3.4 The Government ordered (October 2008) restructuring of the Board by establishing a holding Company *viz*., TNEB Limited and two subsidiary companies *viz*., Tamil Nadu Transmission Corporation Limited (TANTRANSCO) and Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO). The Holding/Subsidiary companies were formed in June/December 2009. Based on the State Government order dated 19 October 2010, the Board ceased to exist from 1 November 2010 and its activities were transferred to the three new companies. Pending finalisation of transfer scheme, the transfer of assets and liabilities to these companies from the Board was done on provisional basis.

Scope and Methodology of Audit

3.5 The operational performance of a thermal unit, three gas power stations and implementation of two hydro projects were included in the Report of the Comptroller and Auditor General of India for the year 2000-01, 2002-03, 2005-06 and 2007-08 (Commercial), Government of Tamil Nadu respectively. These reviews except the review on one of the hydel projects are yet to be discussed by COPU (November 2010). The present review conducted during January to May 2010 covers the power generation activities of the Board during the period from 2005-06 to 2009-10. The review mainly deals with planning, contract and project management, operational performance, financial management, environmental issues and monitoring. The audit examination involved scrutiny of records at the Head Office, all the four[€] thermal generating Stations, 12 out of 39 hydro generating Stations having generation capacity of more than 25 MW and all the five gas turbine stations, thereby covering 91.37 *per cent* of the installed capacity of the Board as on 31 March 2010.

€ 1. Ennore Thermal Power Station (ETPS), 2. Mettur Thermal Power Station (MTPS), 3. North Chennai Thermal Power Station (NCTPS) and 4. Tuticorin Thermal Power Station (TTPS).

3.6 The Audit methodology 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, discussion of audit findings with the Management and issue of draft review to the Management.

Audit Objectives

3.7 The Audit objectives were to assess whether:

Planning and Project Management

- capacity additions were planned for meeting the shortage of power and was in line with the National Policy of Power for all by 2012;
- there was a plan of action for optimisation of generation from the existing capacity;
- the contracts were awarded with due regard to economy and in transparent manner; and
- the execution of projects were managed economically, effectively and efficiently.

Operational Performance

- operation of the power plants was efficient and preventive maintenance carried out to minimise the forced outages;
- requirements of fuel worked out realistically, procured economically and utilised efficiently;
- the manpower utilisation was optimal;
- the life extension (renovation and modernisation) programme were carried out in an economic, effective and efficient manner; and
- the impact of Renovation and Modernisation/Life Extension activity on the operational performance of the unit.

Environmental Issues

- Air and water pollutants in power stations were within the prescribed statutory norms; and
- the adequacy of waste management system and its implementation.

Monitoring and Evaluation

- adequate Management Information System existed to monitor the power plants.

Audit Criteria

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

- National Electricity Plan, norms/guidelines of CEA, Central Electricity Regulatory Commission (CERC)/ Tamil Nadu Electricity Regulatory Commission (TNERC) regarding planning and implementation of the projects;
- Transparency in Tender Act of 1998 formulated by the State;
- 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
- Acts relating to Environmental laws.

Financial Position and Working Results

3.9 The financial position of the Board as a whole covering Generation, Transmission and Distribution business for the five years ending 2009-10 is given in **Annexure – 12**.

An analysis of financial position revealed as under:

- The paid up equity capital increased from ₹535 crore during 2005-06 to ₹2,470.50 crore during 2009-10.
- The borrowings increased to ₹32,039.26 crore in 2009-10 as compared to ₹9,583.68 crore in 2005-06. Out of the increase in borrowings of ₹22,455.58 crore during 2005-10, ₹12,849.88 crore was utilised for capital expenditure indicating that Board's revenue gap was met out of borrowings.
- The increase of ₹6,180.83 crore in current liabilities during 2005-10 was mainly due to increase in electricity duty and other levies payable to Government and increase in security deposit from consumers.
- The debt-equity ratio, which was at 17.43:1 in 2005-06 improved to 10.85:1 in 2009-10 due to induction of share capital. But it continued to be adverse, compared to the ideal ratio of 4:1 in respect of power generating companies.

- The accumulated losses of the Board increased from ₹4,911.51 crore in 2005-06 to ₹27,094.17 crore in 2009-10 indicating the deteriorating financial health of the Board.

3.10 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 in **Annexure-13**. From the annexure it could be seen that:

- The realisation per unit increased by 1.24 *per cent* only over 2005-10 whereas the cost per unit increased by 40.34 *per cent* in the same period indicating that the recovery of cost from the sales was on decreasing trend.

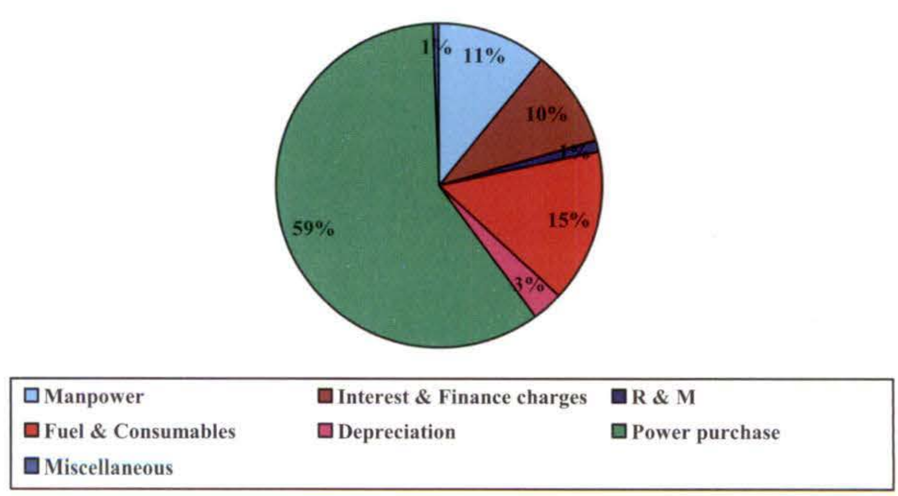
- The contribution per unit from purchase of power remained negative during the review period and increased from (-) ₹0.28 in 2005-06 to (-) ₹1.34 in 2009-10 against the positive contribution from own generation ranging between ₹1.61 to ₹0.98 during the review period. Further, the Board continued to depend heavily on purchase of power (55 *per cent* to 64 *per cent*), which led to increase in losses of the Board over the review period.

- We observed that the quantum of power purchased every year by the Board was more than what it itself generated annually. In view of the same, it is likely that in the future an increasing proportion of its income would go to meet its obligations on account of purchase of power. This will have an adverse impact on the Board's finances.

Elements of Cost

3.11 The cost of power purchased from central/private generating undertakings, fuel, consumables and manpower cost of own generating units constitute the major elements of costs. The percentage break-up of costs for 2009-10 is given below in the pie-chart.

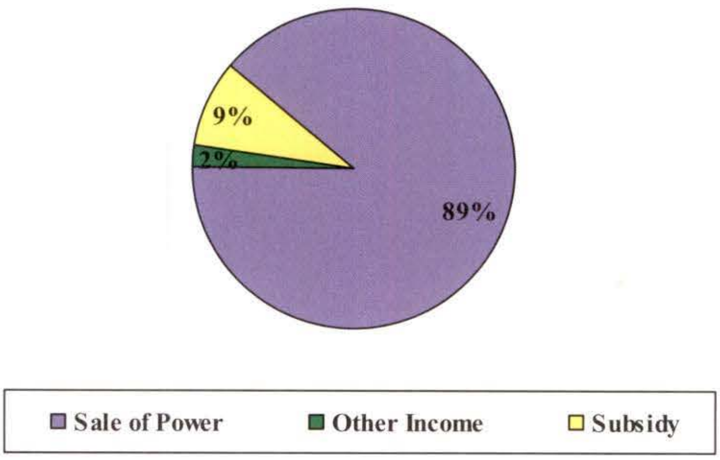
Components of various elements of cost



Elements of revenue

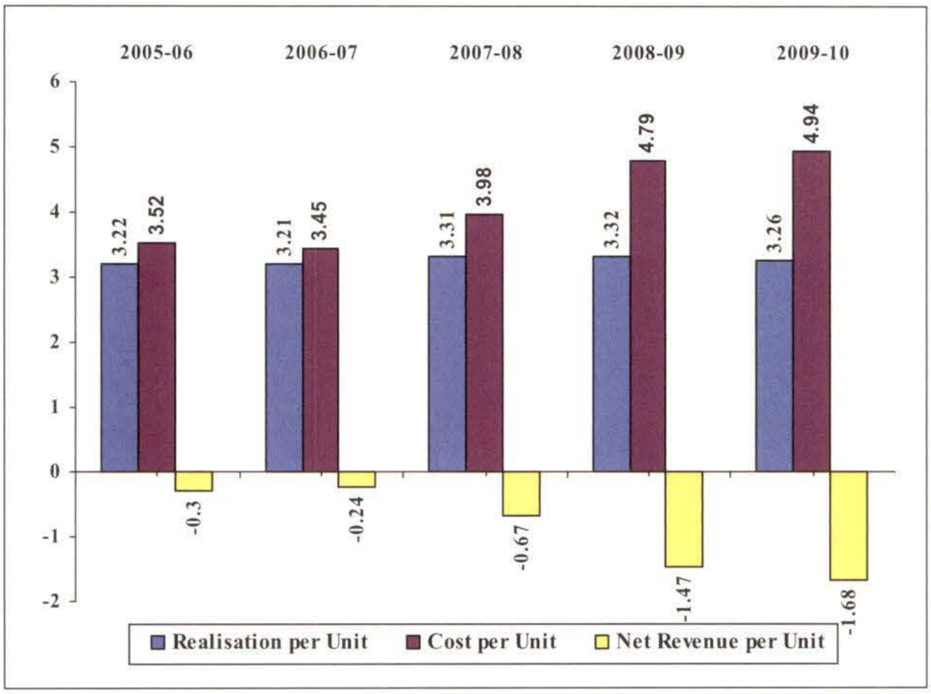
3.12 Sale of Power and subsidy constitute the major elements of revenue. The percentage break-up of revenue for 2009-10 is given below in the pie-chart.

Components of various elements of revenue



Recovery of cost of operation

3.13 During the last five years ending 2009-10, the Board was not able to recover its cost of operations as given in the graph below:



The main reasons for high cost of operation were increased dependence (from 7.29 *per cent* of the total power available for sale in 2005-06 to 19.38 *per cent* in 2009-10) on purchase of costlier power[£] from independent power producers and traders, poor capacity utilisation of thermal station at Ennore and gas station at Basin Bridge, high level of auxiliary consumption and high interest cost. The other reasons are O&M cost in excess of the norms and over staffing.

Further, as per the Board's commitment to the Ministry of Power, GOI, it should have reduced its Transmission and Distribution (T&D) losses to 15 *per cent* before December 2003, but the Board had been showing T&D losses at 18 *per cent* without any scientific study. Had the Board reduced the T&D losses to 15 *per cent,* it could have saved 9,454 MUs of energy and reduced its losses by ₹3,087.62 crore.

Audit Findings

3.14 We explained our objectives to the Board during an 'entry conference' held on 22 January 2010. Subsequently, our findings were reported to the Board and the State Government in June 2010 and discussed in an 'exit conference' held on 17 September 2010 which was attended by Chairman, Member (Generation) and Member (Distribution) of the Board. The Board replied to our findings in November 2010. The views expressed by them have been considered while finalising this review.

The operational performance of the Board for the five years ending 2009-10 given in the **Annexure – 14** was evaluated on various parameters as described below. It was also seen whether the Board was able to maintain its capacity with the growing demand for power. Our findings in this regard discussed in the subsequent paragraphs show that the losses were controllable and there was scope for improvement in performance.

Planning

3.15 During the review period 2005-10, the Board's own generation was substantially lower than the peak as well as average demand as shown below:

(In MW)

Year	Generation	Peak Demand	Average Demand	Percentage of actual generation to Peak Demand	Percentage of actual generation to Average Demand
2005-06	2,805	9,375	6,212	30	45
2006-07	3,092	8,860	6,988	35	44
2007-08	3,066	10,334	7,452	30	41

£ ₹4.87 per unit in 2006-07 to ₹6.31 per unit in 2008-09 against the average realisation up to ₹3.32 per unit during the above period.

Year	Generation	Peak Demand	Average Demand	Percentage of actual generation to Peak Demand	Percentage of actual generation to Average Demand
2008-09	3,051	9,799	7,842	31	39
2009-10	2,903	11,125	8,424	26	34

The actual generation was only 34 to 45 *per cent* of the average demand and 26 to 35 *per cent* of the peak demand. The total supply was not sufficient to meet the peak demand as shown below:

(in MW)

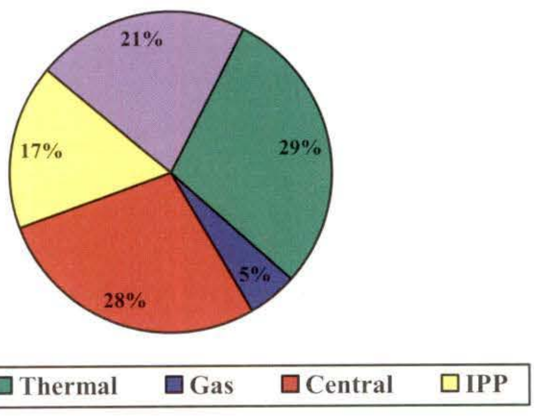
Year	Peak Demand	Peak Demand met	Sources of meeting peak demand		Peak Deficit (Percentage of Peak Demand)
			Own	Import	
2005-06	9,375	8,297	2,805	5,492	11
2006-07	8,860	8,624	3,092	5,532	3
2007-08	10,334	8,690	3,066	5,624	16
2008-09	9,799	9,211	3,051	6,160	6
2009-10	11,125	9,813	2,903	6,910	12

The Board was not able to meet 3 to 16 *per cent* of the peak demand during 2005-2010.

In 2005-06, 30 *per cent* of peak demand was met out of Board's own sources, but in 2009-10, it declined to 26 *per cent* due to inadequate capacity addition programme since 1995 onwards. Consequently, the Board had to rely on import of power from Central and private sources. Even after such import, there was a shortfall of 236 to 1,644 MW (about 3 to 16 *per cent* of the peak demand). Therefore, rotational load shedding was enforced.

Capacity additions

3.16 The State had total installed capacity of 9,531 MW at the start of 2005-06 which increased to 10,214 MW at the end of 2009-10. The break up of generating capacities, as on 31 March 2010, under Thermal, Hydro, Gas, Central, IPP and others is shown in the pie chart below:



To meet the generation requirement of 75,011 MUs in the State during 2009-10, a capacity addition of about 3,977 MW was required during 2005-06 to 2009-10 at 80 *per cent* PLF.

3.17 The projects categorised as 'Projects under Construction' (PUC) and 'Committed Projects∞' (CP) earmarked for capacity additions during review period according to NEP are detailed below.

(In MW)

Sector	Thermal	Hydro	Nuclear	Non-conventional energy	Total
PUC	417	60	1,015	0	1,492
CP	0	0	0	0	0
Uprating of existing stations	0	56	0	0	56
Total	**417**	**116**	**1,015**	**0**	**1,548**

The particulars of capacity additions envisaged, actual additions and peak demand *vis-a-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)	9,531	10,031	10,098	10,122	10,214
2.	Additions Planned for the year as per NE Plan(MW)(11th Plan) (including uprating of existing stations)	4	10	182	639	713
3.	Additions planned by the State (MW) included in 2. above	4	10	92	79	56
4.(a)	Actual Additions by the State (MW)	151♦	46⊗	1	92	-
4(b)	Share from CGSs &IPPs and others	349	21	23	---	---
5.	Capacity at the end of the year (MW) {1 + 4(a)+4(b)}	10,031	10,098	10,122	10,214	10,214
6.	Shortfall in capacity addition (MW) (3-4(a))	---	2	91	(+)13	56
7.	Energy requirement (MUs)	55,479	59,824	64,510	69,565	75,011

∞ National Electricity Plan defines Committed Projects as Projects for which the formal approval to take up the same has been granted by the CEA.

♦ Represents Pykara Ultimate Hydro Electric Projects (150 MW) and Perunchani Mini HEP(1 MW) planned by the State during earlier years.

⊗ This includes 34 MW relating to BKB-I (30 MW), Amaravathy Small HEP (4 MW) planned by the State during earlier years.

Sl. No	Description	2005-06	2006-07	2007-08	2008-09	2009-10 (Provisional)
8.	**Energy supplied (MUs)**	**54,380**	**61,170**	**64,430**	**64,715**	**70,457**
	a) Energy produced (MUs)	24,569	27,088	26,856	26,731	25,430
	b) Energy Purchased (MUs) (net of sale)	29,811	34,082	37,574	37,984	45,027
9.	**Surplus(+)/ Shortfall(-) in meeting demand (MUs) (7-8)**	**(-) 1,099**	**(+)1,346**	**(-)80**	**(-)4,850**	**(-)4,554**

As against the requirement of 3,977 MW, the Board planned for 241 MW and actually added 290 MW during 2005-2010.

To meet the estimated demand during 2005-10, a capacity addition of 3,977 MW was required, whereas 1,548 MW was planned during 2005-06 to 2009-10 under NEP (New projects: 1,492 MW and Uprating of existing power stations: 56 MW). Of this, the Board's share was 241 MW (including 33 MW uprating) and the balance capacity of 1,307 MW was to be contributed by the Central sector and IPPs. The Board's actual capacity addition was 290 MW[⊗]. Besides, there was increase of capacity of 393 MW[♣] contributed by the Central Generating Stations/IPPs and others. Thus, the total capacity addition (683 MW) was far less than the requirement of 3,977 MW. The reasons for shortfall in capacity addition against those planned by the State are given below:

- The Bhavani Kattalai Barrages II and III (2 x 30 MW) planned for commissioning in 2008-09 slipped its targeted date due to delay in award of work and further delay in execution of the work by the contractor as discussed in Paragraph 3.19.
- The uprating of Sholayar Power House-I by 14 MW and Periyar Power House by 28 MW planned under NEP for completion in 2008-09 and 2009-10 respectively, were neither included in State Plan nor taken up for implementation so far (November 2010).
- The uprating of Bhavani Barrage I and II (20 MW) and Periyar Vaigai Mini –I to IV (13 MW) planned for completion during 2008-10 are still under implementation (November 2010).

We further observed that the Board did not take up for capacity addition of the hydro projects as detailed below:

- The Kundah Pumped Storage Hydro Electric Project (500 MW) identified in 2005 was not taken up even after obtaining necessary

⊗ Comprising of 14 MW of Hydro projects and 92 MW of Gas project planned during the review period and 186 MW of Hydro projects which were pending from the earlier years less 2 MW deration in Non-conventional energy sources.

♣ The difference between the capacity of 4,524 MW at the end of 2009-10 and 4,131 MW at the beginning of 2005-06 contributed by CGSs/IPPs and others as mentioned in Annexure-14.

statutory/environmental clearances and acquisition of the land mainly due to its inability to mobilise the required fund of ₹488.84 crore for Stage-I of the project.

- The Board decided (July 2009) to execute the Kolli Hills Hydro Electric Project (20 MW) through private participation after having incurred preliminary expenditure of ₹12.26 crore between 1995-96 and 2007-08. There was no further progress in the project thereby blocking up ₹12.26 crore till date (May 2010).

- In addition, there were 28 small/mini hydro projects (capacity of 107 MW) which were proposed to be implemented through private promoters for which the policy decision was awaited from the State Government (November 2010).

The Board replied (November 2010) that it would add 8,376 MW of capacity in the next three to four years and there would not be shortfall of energy after commissioning of these projects. It further stated that the investment of ₹12.26 crore would be recovered from the prospective private promoters. We further noticed that:

- Board could not finalise exploration contracts within three months of the allotment (August 2006 and July 2007) of the two captive coal mines in Gare Pelma II and Mandhakini B with the Board's share of 893 million MT of coal as per GOI directions due to delay in incorporation of joint venture companies. These contracts were awarded only in March/January 2010. We further noticed that the Board's new thermal project at ETPS Annex (600 MW) was slated for completion in 2013 citing 'Mandhakini B' captive coal mine as fuel source. As the exploration of mines would normally take about six years from the date of award of contract (January 2010) the risk of not getting coal from allotted source by the prescribed dates is very high. This may lead to increased dependence on costly imported coal.

Optimum Utilisation of existing facilities

The Board took up life extension programme in respect of only two out of sixteen hydel stations, which have completed their normative life of 35 years.

3.18 A proper plan for carrying out timely repair and periodical maintenance and undertaking life extension programme/replacement of the facilities which are nearing completion of their age will ensure optimum utilisation of the existing facilities. Audit observed that, out of 16 hydro power stations which have completed the normative life of 35 years and required Life Extension Program (LEP), the Board has taken up LEP only in two hydro stations and in respect of balance stations has decided to postpone LEP beyond 2012 citing the need to maintain grid discipline and financial constraints.

We further noticed that the uprating works of Sholayar Power House-I from 70 MW to 84 MW was planned (March 2003) to be completed by 2008-09 at a cost of ₹40.68 crore by availing loans with three *per cent* interest subsidy from Power Finance Corporation. After calling for the tender (September 2003), the Board decided (April 2008) to execute the same in XII Plan due to receipt of higher rates in the quotation and to maintain grid discipline. However, the Board did not attempt to obtain fresh tender with reasonable rates before the expiry of the X Plan thereby depriving itself of not only the capacity addition of 14 MW but also the cheap financing option which expired at the end of X plan itself.

Project Management

Five projects completed during 2005-10 suffered time overrun ranging between 11 to 109 months with consequential cost overrun of ₹392.37 crore.

3.19 There were no thermal projects completed during the review period. The data on time/cost over-run of four hydro and one gas project completed and seven on-going projects are given in **Annexure-15**. It would be seen from the Annexure that in all the five projects completed, there were slippages in time schedule ranging between 11 and 109 months with consequential cost over-run of ₹392.37 crore. The delays also resulted in generation loss of 706.39 MUs in respect of completed projects valued at ₹230.69 crore. While the causes for time/cost over-run in respect of Pykara Ultimate Stage Hydro Electric Project and Bhavani Kattalai Barrage-I were discussed in the Report of the Comptroller and Auditor General of India for the year 2000-01 and 2005-06 (Commercial), Government of Tamil Nadu respectively, our findings in respect of balance projects are given below:

- The site for the Perunchani Power House was handed over to the contractor in December 1996 with the completion schedule of 24 months. But, the project was completed only in March 2006 with a delay of 86 months which was attributable to frequent stoppage of work by the contractor.

The Board replied that the main delays were attributed to the contractor for which maximum liquidated damages were imposed as per contract conditions. Further, the Power House site was flooded submerging the erected machineries during monsoon in November 2003. The reply was not convincing because the delays between 1996 and 2000 only were attributable to the contractor's inability to mobilise the resources. The Board had not analysed the reasons for subsequent delays upto March 2006 indicating ineffective follow up of the progress of work.

- Though the Board decided (March 2004) to execute Valuthur Phase-II Gas power project (92.2 MW) before expiry of Tenth plan period (March 2007), it could finalise the tender for execution of the project only in May 2006 due to non-fixing up of model of gas turbine. The work was commenced in May 2006 and was scheduled to be commissioned in February 2008. However, it was actually completed in February 2009 due to delay in execution of the civil works and problems faced during the trial run of the equipment *etc.*, resulting in loss of generation of 471 MUs valued at ₹156.37 crore. Subsequently, the plant tripped in December 2009 due to heavy vibration in the turbine which was not rectified till date (November 2010). The contractor attributed the cause of vibration to usage of contaminated gas due to the negligence of the Board. During the shut down of the plant, the Board suffered loss of generation of 604.77 MUs (from January 2010 till November 2010) valued at ₹197.15 crore.

- The project approval for Bhavani Kattalai Barrages II & III was obtained in April 2000 and November 2000 respectively, but both the projects commenced only in February 2006, due to delay of five years in the award of work by the Board and subsequent delay of 22/26 months in execution of the work, which was attributable to the contractors' slow progress in execution of the work. The projects were still under execution (November 2010).

The Board attributed the delay to a court case, decision on mode of execution, width of barrage gates and optimisation of barrages. The delays except the delay of one year due to court case illustrate that the Board had not professionalised the execution despite the experience in similar hydro projects.

- The scheduled completion of January 2009 to January 2010 in respect of Periyar Vaigai I to IV was revised to November 2010 to July 2011 due to delayed execution and non-awarding of contract for Power House super structure and tail race channel.

- There was a total delay of 33 months in Bhavani Barrages-I and II projects due to delay in commencement of barrage civil works (18 months), erection of cranes (14/15 months). The Power House super structure civil works for the two projects were awarded in December 2009/January 2010 and the execution has commenced only during August 2010 and October 2010 respectively.

The Board stated that the delay in respect of Bhavani Barrages I and II was on account of land acquisition, abnormal increase in cost of cement and steel in 2008 and 2009. The reply indicated that Board had not coordinated the land acquisition along with commencement of work. The increase in cement/steel price was a general issue which could not be a reason for delay in progress of work.

Contract Management of Projects

3.20 During the review period, contracts valuing ₹8,666.93 crore were executed in respect of eleven on-going projects (three thermal and eight hydro projects). Our analysis of the execution of two thermal projects and two hydro projects indicated that:

(a) Thermal Projects

- The contract for Unit-I of North Chennai Thermal Power Project (600 MW) was awarded (January 2008) to the sole bidder *viz.*, BHEL selected through International Competitive Bidding (ICB) for an Engineering, Procurement and Construction (EPC) cum Finance

Contract for a price of ₹2,450 crore. But, invitation of tender for EPC cum financial contract was in contravention of the National Electricity Policy which prohibits inclusion of financial packages in the EPC contracts to encourage competition.

- There were adequate infrastructural facilities available at the existing NCTPS for simultaneous implementation of both Unit-I and Unit-II (600 MW each). To become eligible for benefits of exemption from customs/central excise duties for Mega Power Projects (more than 1,000 MW) under the Foreign Trade Policy of GOI, the contracts should have been finalised only through ICB route. However, the Board later awarded (June 2008) the contract for Unit-II to BHEL on nomination basis for a price of ₹2,175 crore. As the contract for Unit-II was on nomination basis, the Board became ineligible for an estimated duty exemption of ₹133.26 crore. Had the Board planned for simultaneous implementation of both the units at the time of inviting bids through ICB route, it could have taken the benefits available for Mega Power Projects.

The Board replied that BHEL was selected on nomination basis to avoid loss of time and to get the benefit of common spares, *etc*. The reply was not convincing because considering the common facilities at NCTPS, the Board could have selected the contractor for both the projects through tender and reaped the benefits applicable for 'Mega power projects'.

(b) Hydel Projects

The project contracts provided for payment of escalation for the periods beyond the scheduled completion dates of the projects only when the delays were attributable to the Board. We observed that in two projects (Bhavani Kattalai Barrage – II and III), the Board paid escalation of ₹4.73 crore beyond the contracted amount of ₹797.18 crore. However, the reasons for delay in these contracts were not analysed by the Board.

Input Efficiency

Procedure for procurement of coal

3.21 The CEA fixes power generation targets considering the capacity of the thermal plants, average Plant Load Factor (PLF), and past performance. Till December 2008, the Board worked out coal requirement on the basis of generation targets and past consumption trends and conveyed to the Standing Linkage Committee (SLC) of the Ministry of Energy (MOE), GOI, which decided the source and quantity of coal on quarterly basis. Consequent to introduction of New Coal Distribution Policy of GOI (October 2007), the Board entered into (November 2008/April 2009) Fuel Supply Agreements (FSA) with Mahanadi Coalfields Limited (MCL) and Eastern Coalfields Limited (ECL). The position of coal linkages fixed till December 2008 and Annual Contracted Quantity (ACQ) thereafter as per Fuel Supply Agreements, coal received, generation targets and actual generation during the review period covering all the Thermal Power Stations of the Board was as under:

(Quantity in lakh MT)

Particulars	2005-06	2006-07	2007-08	2008-09	2009-10	Total
1. Coal Linkage /ACQ	149.2	146.5	181.8	166.3[∝]	138.9	782.7
2. Coal received against linkage/ACQ	132.1	132.6	133.4	132.7	127.9	658.7
3. Shortfall (1-2)	17.1	13.9	48.4	33.6	11.0	124.0
4. Import of coal by the Board	10.7	10.8	18.0	22.7	20.2	82.4
5. Total coal available (2+4)	142.8	143.4	151.4	155.4	148.1	741.1
6. Total shortfall with reference to linkage/ACQ (1-5)	6.4	3.1	30.4	10.9	(-) 9.2	41.6
7. Generation targets (MUs)	20,885	21,517	21,725	22,000	21,870	1,07,997
8. Actual generation achieved (MUs)	18,795	21,228	21,355	21,023	19,882	1,02,283
9. Shortfall in generation targets (MUs)	(-)2,090	(-)289	(-)370	(-) 977	(-)1,988	(-)5,714

Against the agreed quantity of 782.7 lakh MT, the Board received 741.1 lakh MT of coal leaving a shortfall of 41.6 lakh MT. The percentage of annual shortfall in receipt of coal ranged between 2.12 and 16.72. We observed that after entering into FSA, the linkage was reduced from 166.3 lakh MT in 2008-09 to 138.90 lakh MT in 2009-10 against which receipt of indigenous coal was 127.90 lakh MT.

Fuel supply arrangement

3.22 The analysis of FSA between the Board and MCL/ECL for supply of coal revealed that prior to introduction of FSA, the loading of optimum quantity of coal into the wagons was the responsibility of coal companies. However, in the FSA introduced after November 2008, the Board undertook the liability for over/under loading of coal with reference to the carrying capacity of the wagons enhanced from time to time by the Railways without corresponding modifications in FSA mentioning the enhanced capacity of wagons. A test check in Audit of the invoices for December 2008 revealed that the Board incurred additional expenditure of ₹50.63 lakh due to over/under-loading of coal.

The Board replied that the Ministry of Coal had been approached for the required amendment in the under/over loading clauses of the FSA as existing in the Model contract.

∝ From April 2008 to December 2008, the quantity of coal was fixed based on linkage quantity decided by GOI and from January to March 2009, the quantity of coal was fixed as per FSA.

Quality of Coal

3.23 Usage of envisaged grade of coal at the thermal stations ensures optimising generation of power and economising cost of generation. We observed that out of total quantity of 530.80 lakh MT of coal received during the period from 2005-06 to 2008-09 during SLC regime, 5.37 lakh MT of coal was not of the required grade but was inferior. Though the differential cost for grade slippage was recovered regularly, the statutory cess and royalty of ₹2.16 crore paid on the higher grade of coal could not be recovered due to non-availability of an enabling provision in the agreement.

The Board replied that necessary follow up for recovery of excess statutory levies was being taken up with the coal companies.

Loss of generation due to inadequate coal stock

There was loss of generation of 812.77 MUs during 2008-10 valued at ₹266.44 crore in thermal stations due to shortage of coal.

3.24 TTPS and MTPS were operated at partial loads during 2008-09 and 2009-10 due to shortage of coal at coal bunkers. At ETPS, the units were under forced shutdown for 2,794 hours during 2009-2010 due to similar shortage of coal resulting in loss of generation of 812.77 MUs valued at ₹266.44 crore as given in **Annexure-16**. This indicated defective planning in arranging availability of coal in the respective thermal stations and improper monitoring in feeding coal to coal bunkers.

The Board stated that loss of generation was due to non-availability of imported coal during 2008-09 and problems encountered in external coal handing system in 2009-10. However, we observed that the procurement of imported coal was an off-shoot of non-availability of indigenous coal in 2008-09. Further, the loss of generation on account of external coal handing system was also avoidable as discussed in the succeeding paragraphs.

System of Coal handling

There was no system for physical verification of coal at the loading points.

3.25 The Board did not have a system of assessing transit loss from loading point to the thermal stations even after the lapse was pointed out in the Report of the Comptroller and Auditor General of India for the year 2003-04 (Commercial), Government of Tamil Nadu. The Board carried out physical verification of coal stocked at generating stations annually. However, physical verification of coal stock at loading ports was not being carried out and is taken on book stock basis only. As such any variation in book stock and actual stock at loading ports remained unreconciled. A test check by the Board at Paradip Port between August 2008 and March 2010 showed variation of 53 to 99 *per cent* between book stock and actual stock. The Board attributed the non-conducting of physical verification at the loading ports to the non-closure of the handling contract (being under litigation in the Hon'ble Supreme Court since 2001). Even though the Board had obtained bank guarantee for the value of shortage, the shortage could not be recovered due to non-closure of the contract. However, considering the instances of huge shortage of coal in the last two years, there is an imminent need for the Board for working out the transit loss and recovering the excess transit loss from the contractors in case they were responsible.

The Board, while admitting the facts, replied that the present handling contract did not provide for periodical verification of coal stock. The fact remained that in such a situation, there was no protection of financial interest of the Board arising on account of shortage of coal.

(a) Coal handling at NCTPS

- A review of coal handling at NCTPS indicated that the percentage of 'hours of discharge operation' to the 'total hours of ship stay in the berth' deteriorated from 95.77 in 2005-06 to 66.31 in 2009-10 mainly due to frequent breakdown of conveyor belts carrying the coal from the Port-end to the power station/stock yard end. A test check in Audit of the entire 235 voyages made by two private vessels during 2005-2010 revealed that the Board had to incur idle hire charges amounting to ₹6.61 crore due to overstayal of ships because of delay in discharge.

While agreeing with the observations, Board stated that it was taking a number of remedial actions like outsourcing the operation and maintenance of External Coal Handling System, replacing worn out conveyor belts, *etc.*

- The operation and maintenance(O&M) of external coal handling systems at NCTPS was awarded (June 2006) to M/s Chennai Radha Engineering Works (REW) by offering minimum guaranteed quantity(MGQ)[≠] to be moved from the Port to NCTPS stockyard and from there to the two other power stations (ETPS and MTPS). During the contract period (June 2006 to December 2009), Board made payments for MGQ (343.50 lakh MT) against the actual quantity of 288.92 lakh MT, thereby it incurred unproductive expenditure of ₹4.03 crore.

The Board replied that no extra payment had been made to the contractor since it was done as per the contractual conditions. The fact, however, remained that the Board did not either ensure the movement of the MGQ to avoid such unproductive payments or take any effort for reducing the quantum of MGQ by amending the clause in the agreement.

Deficiencies in coal handling at NCTPS and TTPS led to extra expenditure of ₹20.58 crore.

- The contract with REW expired on 26 June 2009. To maintain continuity of operation beyond the expiry period of contract, the Board extended (July 2009) the contract with REW for three months up to September 2009 and further up to December 2009. However, the tender process for the next contract was not initiated till September 2009, the reasons for which were not on record. In the meantime, the Board decided (December 2009) to undertake the coal handling

≠ MGQ of 7.50 lakh MT per month from port to stock yard and 6.00 lakh MT per month from stock yard to MTPS and ETPS.

departmentally. During the period of departmental movement (till March 2010), the Board paid ₹0.83 crore towards idle hire charges to ships due to slow movement of coal and ₹0.99 crore for movement of coal by tippers to ease out critical coal stock, and also incurred ₹3.49 crore for diversion of coal from Tuticorin Port to MTPS. Had the Board arranged for a professional coal handling contract before December 2009, these expenditure could have been avoided.

The Board replied that the operation and maintenance of ECHS was carried out departmentally for effective utilisation of available departmental manpower. But the Board ventured into departmental movement without proper training of its staff, which led to the avoidable expenditure.

- A test check of freight charges for four months[∇] indicated that the Board paid idle railway freight amounting to ₹3.35 crore out of the total freight of ₹57.83 crore due to short loading of coal from NCTPS stockyard by the handling contractor. However, the Board failed to penalise the contractor for such under-loading.

The Board replied that continuous follow up would be taken with Railways to collect the excess freight. However, we are of the opinion that since the idle freight was caused by the handling contractor who failed to load the coal to the maximum capacity of wagon, the responsibility needed to be fixed on the handling contractor.

(b) Coal handling at TTPS

- A test check of discharge performance of two ships operating in Coal Jetty (CJ) - I carried out through Poompuhar Shipping Corporation Limited, a State Government Company and at CJ - II carried out by private agencies revealed that the average time taken for discharge at CJ – I was higher[¥] than that for discharge at CJ -II leading to extra expenditure of ₹5.31 crore (as worked out by Audit) on ship hire charges.

The Board replied that the additional expenditure incurred due to overstay of vessel at CJ -I was unavoidable due to reasons like size of the conveyor chutes at the jetty being smaller resulting in frequent choking of coal. The fact was that the Board itself had proposed (March 2004) to provide shore unloaders at a cost of ₹56 crore with a pay back period of 20 months for speedy discharge of coal. But the same was yet to be installed (November 2010).

The proposal for interconnectivity of the bunker conveyors among the five units of TTPS, put up for approval four times between February 2001 and May 2009 (latest cost ₹27.14 crore) did not materialise so far (November 2010). Due to absence of interconnection between the bunkers, Units-II and III were

∇ July 2006, 2007, 2008 and 2009.

¥ MV Akhil 64-109 hours at CJ-I and 58-72 hours at CJ-II, MV Gem of Paradip 90-120 hours at CJ-I and 67-91 hours at CJ-II.

under forced outage (189 hours during October – November 2006) on account of coal feeding problems in their conveyors. This resulted in generation loss of 39.73 MUs valued at ₹12.75 crore.

The Board stated that the tender for carrying out the above work was in progress (November 2010).

Extra expenditure on Import of coal

The Board incurred additional expenditure of ₹337.76 crore on import of coal as compared to another State PSU.

3.26 A comparative analysis of the cost of imported coal incurred by the Board with reference to the rates paid for the similar type/grade of coal imported by Tamil Nadu Newsprint and Papers Limited (TNPL – a deemed State Government Company) indicated that the Board had incurred an additional expenditure of ₹337.76 crore towards import of coal made through MMTC during the period 2007-08 to 2009-10.

The Board replied that it needed imported coal continuously compared to purchase of only 3 to 4 shipments in a year by TNPL in which the rates were decided on spot. It added that the imported coal with specified grindability factor of 45 to 60 was required by it whereas such specification was not mentioned by TNPL. However, both the Board and TNPL contracted the price based on the Gross Calorific Value (GCV), moisture and ash content of coal and not on grindability factor. Further, large quantities imported by the Board would have economies of scale compared to the small quantities imported by TNPL.

Excess consumption of coal

3.27 The consumption of coal depends on its calorific value. The norms fixed by TNERC for various thermal power generation stations for production of one unit of power in the State *vis-a-vis* the maximum and minimum consumption of coal during the period of five years ending 2009-10 is given in the table below:

(Kg/Kwhr)

Name of the station	Norms fixed by TNERC	Average minimum consumption during the year	Average maximum consumption during the year
TTPS	0.630	0.726 (2006-07)	0.777 (2007-08)
NCTPS	0.750	0.633 (2005-06)	0.698 (2009-10)
MTPS	0.750	0.642 (2005-06)	0.714 (2009-10)
ETPS	1.020	0.900 (2006-07)	1.010 (2009-10)

(Figures in bracket indicate the year in which the maximum/minimum consumption was obtained)

Excess consumption of 45.25 lakh MT of coal at TTPS during 2005-10 with reference to the norms worked out to ₹1,103.30 crore.

From the above table it may be seen that consumption of coal was within the norms fixed by TNERC in all the stations except at TTPS where it resulted in excess consumption of coal of 45.25 lakh MT valued at ₹1,103.30 crore as detailed below:

Sl No	Particulars	2005-06	2006-07	2007-08	2008-09	2009-10
1	Units generated (MUs)	7,674.14	8,083.29	7,974.38	7,850.33	7,166.61
2	Coal required as per norms (in lakh MT)	48.35	50.93	50.24	49.46	45.15
3	Coal consumed (in lakh MT)	56.96	58.67	61.96	58.19	53.60
4	Excess consumption (in lakh MT) (3 – 2)	8.61	7.74	11.72	8.73	8.45
5	Rate per MT (₹)	2,174	2,157	2,212	2,982	2,717
6	Coal consumed per unit (Kg.) [(3 x 100) / 1]	0.742	0.726	0.777	0.740	0.748
7	Value of excess coal (₹ in crore) (4 x 5)	187.18	166.95	259.25	260.33	229.59

The excess consumption was due to excess station heat rate and receipt of low grade coal. The first three units of the station were designed for using coal with GCV of 5,950 whereas the actual value was only around 3,360. Apart from this, the Thermal and Gas power stations also consumed excess fuel due to high heat rate of the Stations as indicated in **Annexure-17**. Consequently, these stations consumed excess fuel (coal-13.92 lakh MT, naptha–4,702 MT and natural gas-23 million sm^3) valued at ₹347.46 crore.

The Board replied that if only coal with calorific value nearer to design value along with lesser ash content was supplied, the coal consumption could be reduced. It also stated that a proposal had been sent to TNERC requesting to revise the Station Heat Rate and specific coal consumption of TTPS.

Energy Audit

3.28 Under Energy Conservation Act, 2001, the thermal and hydel power generating stations have been notified as the 'Designated Consumers' by the GOI and hence it has become mandatory for the Board to carry out energy audit on a regular basis to improve the efficiencies of generating stations and control input costs and report the energy conservation measures to the Bureau of Energy Efficiency. However, the Board had not conducted Energy Audit in any of its generating stations so far (November 2010).

The Board replied that it was proposing to form a centralised Energy Audit Wing for thermal stations.

Manpower Management

3.29 As per National Electricity Plan (April 2007), the norms of manpower per MW were as follows:

	Plan Period	Technical	Non Technical	Total
Thermal stations	X	1.15	0.61	1.76
	XI	1.03	0.55	1.58
Hydel stations	X	1.53	0.26	1.79
	XI	1.38	0.23	1.61
Gas Stations	X	0.36	0.17	0.53
	XI	0.32	0.15	0.47

The details of sanctioned strength, actual manpower, expenditure on salaries in respect of the generating stations are as given in **Annexure–18.** The Annexure shows that the actual manpower was more than the prescribed norm in thermal and gas stations during the period 2005-10 which resulted in extra expenditure of ₹279.65 crore.

The Board replied that the norms for thermal stations as per 10^{th} and 11^{th} Plan might not be applicable for its thermal plants which were designed before 30 years. In respect of gas stations, it stated that the actual manpower was below the norm of National Productivity Council.

Output Efficiency

Shortfall in generation

3.30 The annual targets for generation of power are fixed by the Board and approved by the CEA. We noticed that as against the targeted generation of 1,41,206 MUs, the actual generation was 1,42,480 MUs resulting in excess generation of 1,274 MUs as shown below:

Year	Target (MUs)	Actual (MUs)	Shortfall (-)/Excess(+) (MUs)
2005-06	26,907	26,915	(+)8
2006-07	27,925	29,481	(+)1,556
2007-08	27,837	29,241	(+)1,404
2008-09	28,733	28,983	(+)250
2009-10	29,804	27,860	(-)1,944
Total	**1,41,206**	**1,42,480**	**(+)1,274**

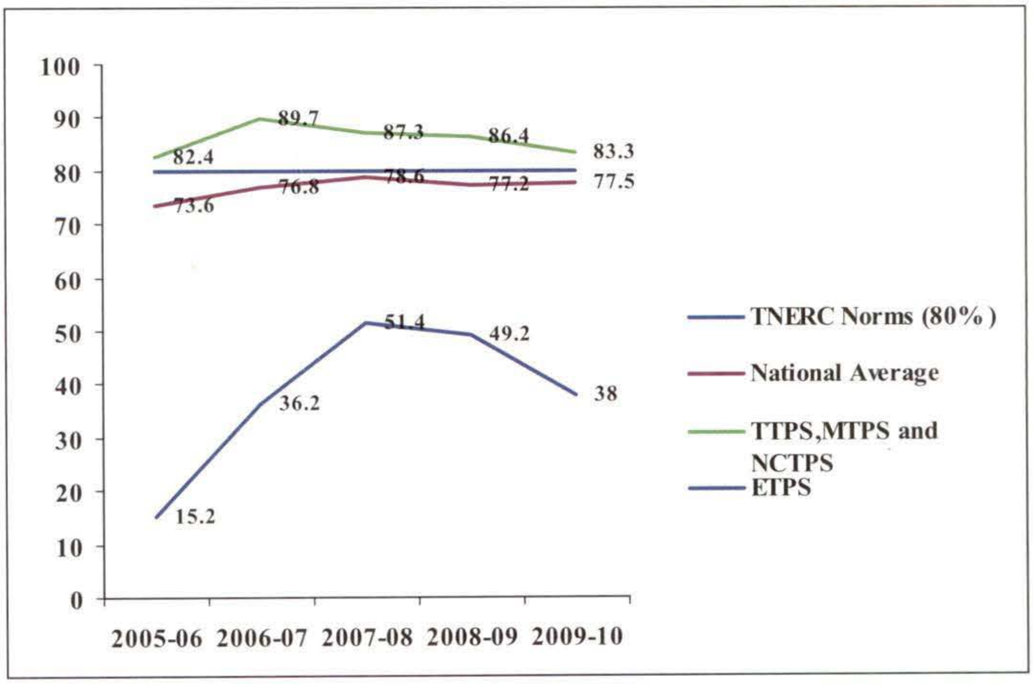
Detailed analysis of target *vis-a-vis* actual generation in thermal, gas and hydel stations revealed that during 2005-10, there was shortfall in generation in thermal and gas stations (5,714 MUs and 875 MUs respectively) and excess generation in Hydel stations (7,887 MUs) besides shortfall in others (Non-renewable) of 24 MUs. Considering the average PLF of 35 *per cent* achieved by the Hydel stations, the possible generation worked out to 6,705 MUs against which an average annual target of 4,400 MUs only was fixed indicating that the fixation of target was not realistic.

Since the generation targets were fixed by CEA based on past performance after considering the prevailing conditions of the stations, the shortfall in thermal and gas generation indicated that resources and capacity were not being utilised to the optimum level due to frequent breakdown of units in Gas stations and delay in timely rectification of defects as discussed subsequently.

Low Plant Load Factor

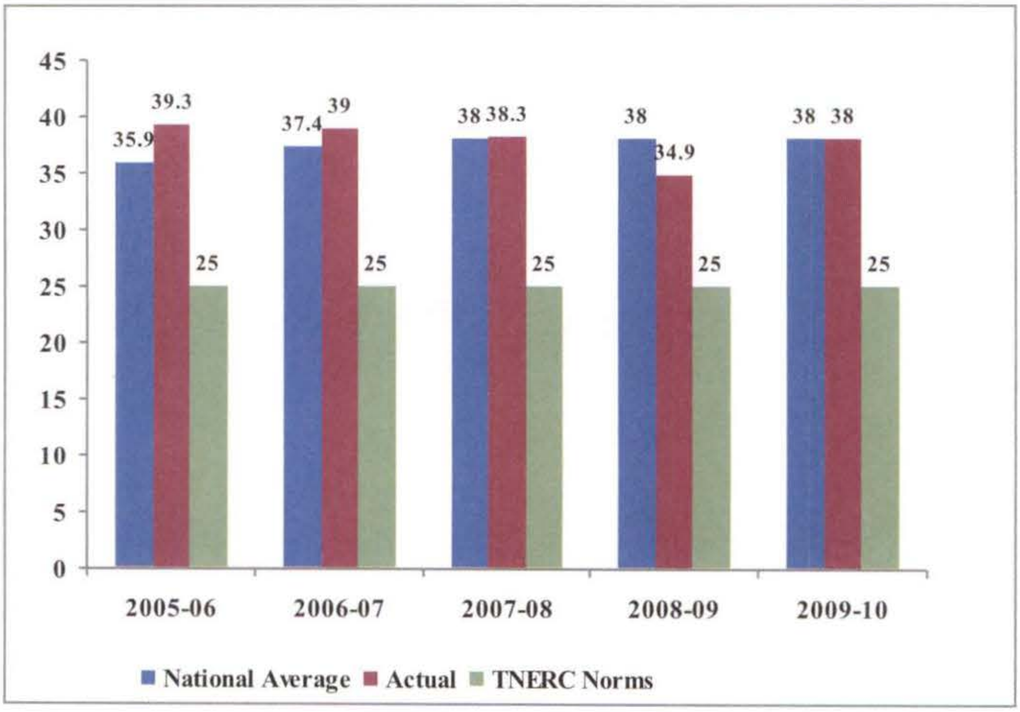
3.31 Plant load factor (PLF) refers to the ratio between the actual generation and the maximum possible generation at installed capacity. The following graphs indicate the actual performance of the generating stations in comparison with the CERC/TNERC norms and National average[♦].

a) Thermal Stations

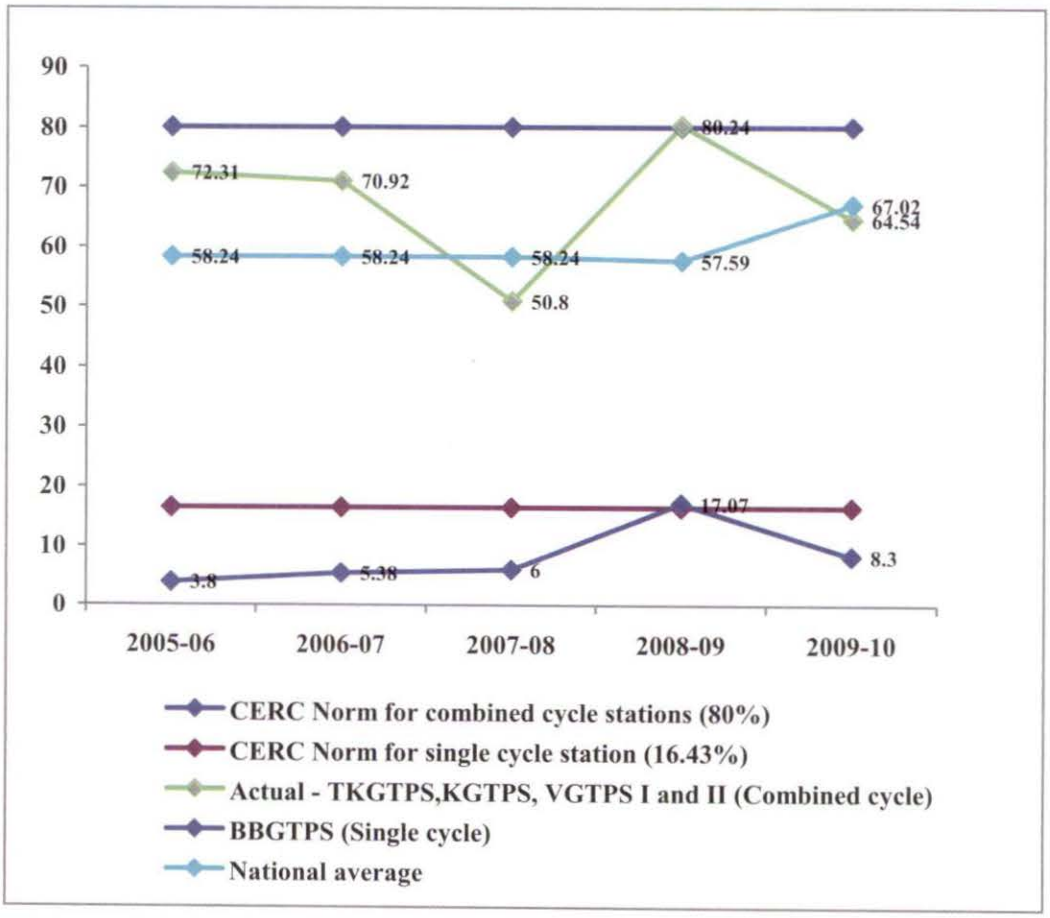


♦ National Average for Hydel and Gas Stations extrapolated based on available national averages.

b) Hydel stations



c) Gas Stations



The PLF of Guru Hargobind Singh Thermal Power Station was the highest among all State sector Power Stations (95.99 *per cent*).

Out of four thermal stations, three stations (TTPS, NCTPS and MTPS) were having PLF more than the national average and TNERC norms and only ETPS has been operating at far below the norm and national average. The reasons for lower PLF at ETPS, were low plant availability, low capacity utilisation and major shutdowns and delays in repairs and maintenance.

The Board replied that being an old station, outages occur at various equipments in ETPS decreasing the gross generation and stated that rectification works were being taken up to improve generation and PLF.

The average PLF of gas stations♣ (except BBGTPS) was lower than the norms except during 2008-09 which was attributable to under performance of gas turbine generator and short supply of contracted quantity of gas (TKGTPS), a major breakdown in 2006-07 and major overhauling in 2007-08 in KGTPS and complete breakdown of the VGTPS Unit-II during January 2010 after conducting performance guarantee test in June 2009.

We analysed the performance of ETPS and BBGTPS as regards PLF. The details of average realisation *vis-a-vis* average cost per unit, PLF achieved and the PLF at which ETPS and Basin Bridge Gas Station could break-even as worked out by us are as below:

Sl.No.	Description	2005-06		2006-07		2007-08		2008-09		2009-10	
		ETPS	BBGTPS	ETPS	BBGTPS	ETPS	BBGTPS	ETPS	BBGTPS	ETPS	BBGTPS
1	Average realisation (Paise per unit)	322	322	321	321	331	331	332	332	326	326
2	Average cost of generation (Paise per unit)♦	430	3149	327	2479	319	2414	392	1290	404	1151
3	Variable cost (Paise per unit)	288	810	253	1017	279	1157	247	985	239	934
4	Fixed cost per unit	142	2339	74	1462	40	1257	145	305	165	217
5	Contribution per unit (1-3)	34	(-)488	68	(-)696	52	(-)826	85	(-)653	87	(-)608
6	Net Generation (in MUs)	504	39.64	1230	56.24	1754	62.91	1656	178.33	1281	85.77

♣ 1. Basin Bridge Gas Turbine Power Station (BBGTPS), 2.Tirumakkottai Gas Turbine Power Station (TKGTPS), 3.Kuttalam Gas Turbine Power Station (KGTPS) and 4. Valuthur **Gas** Turbine Power Station (VGTPS).

♦ Average cost of generation as worked out by the Board differs from station to station.

Sl.No.	Description	2005-06		2006-07		2007-08		2008-09		2009-10	
		ETPS	BBGTPS	ETPS	BBGTPS	ETPS	BBGTPS	ETPS	BBGTPS	ETPS	BBGTPS
7	Actual PLF (%)	15.20	3.80	36.20	5.38	51.40	6.00	49.20	17.07	38.00	8.30
8	Fixed costs (₹. in crore) (4 X 6)	71.57	92.72	91.02	82.22	70.16	79.08	240.12	54.39	211.35	18.61
9	Break-even PLF level {(8/(5*6))*7}	63.48	N.A.[€]	39.39	N.A.	39.54	N.A.	83.93	N.A.	72.07	N.A.

ETPS could break even only at a very high PLF which is not possible considering its age and past performance. The low PLF of BBGTPS was due to operation of the Plant only for few hours in a day as a peak hour station. The proposal made (August 2007) by the Board for conversion of the plant into a combined cycle plant of 220 MW from the existing 120 MW and using alternative compatible natural gas fuel and to convert the existing peak load station into a base load station did not fructify so far (November 2010) due to non-availability of fuel linkage.

Plant availability

3.32 Plant availability means the ratio of actual hours operated to maximum possible hours available during certain period. TNERC has fixed a norm of 80 *per cent* plant availability for the thermal power stations and 85 *per cent* for hydel stations of the Board.

The details of total hours available, hours operated, planned outages, forced outages and overall plant availability in respect of thermal, hydel and gas stations of the Board are shown below:

Sl. No.	Particulars	2005-06	2006-07	2007-08	2008-09	2009-10
Thermal Stations						
1.	Total hours available	148920	148920	149328	148920	148920
2.	Operated hours	99213	117383	126045	126843	119380
3.	Planned outages (in hours)	23504	15055	10236	10263	9612
4.	Percentage of planned outages	15.78	10.11	6.85	6.89	6.45
5.	Forced outages (in hours)	26203	16482	13047	11814	19928
6.	Percentage of forced outages	17.60	11.07	8.74	7.93	13.39
7.	Plant availability (*per cent*)	66.62	78.82	84.41	85.18	80.16

€ Break even PLF could not be worked out due to negative contribution throughout the review period.

Sl. No.	Particulars	2005-06	2006-07	2007-08	2008-09	2009-10
Hydel Stations						
1.	Total hours available	330380	366110	384354	357441	323641
2.	Operated hours	252330	283576	277072	270436	240817
3.	Planned outages (in hours)	55991	48837	63631	52221	60406
4.	Percentage of planned outages	16.95	13.34	16.55	14.61	18.66
5.	Forced outages (in hours)	22059	33697	43651	34784	22418
6.	Percentage of forced outages	6.67	9.20	11.36	9.73	6.93
7.	Plant availability (*per cent*)	76.38	77.46	72.09	75.66	74.41
Gas stations						
1.	Total hours available♣	26280	26280	26352	29925	35040
2.	Operated hours	23848	22232	15939	27447	31575
3.	Planned outages (in hours)	760	2819	1873	630	1018
4.	Percentage of planned outages	2.90	10.73	7.11	2.11	2.91
5.	Forced outages (in hours)	1672	1229	8540	1848	2447
6.	Percentage of forced outages	6.35	4.67	32.41	6.17	6.98
7.	Plant availability (*per cent*)	90.75	84.60	60.48	91.72	90.11

It could be seen from the table above that the plant availability of the thermal stations was above norms except during 2005-06 and 2006-07 mainly due to the poor performance of ETPS and the fire accident at NCTPS. In the hydel stations, the plant availability decreased from 76.38 *per cent* in 2005-06 to 74.41 *per cent* in 2009-10 due to increase in forced outages. The performance of gas stations had already been commented in the Report of the Comptroller and Auditor General of India for the year 2007-08 (Commercial), Government of Tamil Nadu.

The overall plant availability for all the States as a whole was 82.67 *per cent* during 2008-09.

Low Capacity Utilisation

3.33 Capacity utilisation means the ratio of actual generation to possible generation during actual hours of operation. Based on national average PLF of 76.74 *per cent* (as applicable to thermal stations) and plant availability (80 *per cent*) as per norms of TNERC/CERC, the standard capacity utilisation factor works out to be 95.87 *per cent* for thermal power plants. For Hydel stations, the same was worked out to 43.68 *per cent* (National Average PLF 37.13 and Plant Availability factor 85 *per cent*). Our analysis of actual capacity utilisation for the generating stations (excluding ETPS and BBGTPS due to their very low PLF below break even point) during the review period was as below:

♣ Excluding BBGTPS which is a peak hour station, the performance of which is commented separately.

(In percent)

Year	Thermal		Hydel		Gas	
	Std. Capacity Utilisation	Actual Capacity Utilisation	Std. Capacity Utilisation	Actual Capacity Utilisation	Std. Capacity Utilisation	Actual Capacity Utilisation
2005-06	95.87	96.84	43.68	51.46	95.87*	79.46
2006-07		98.02		50.44		83.43
2007-08		97.53		53.12		84.67
2008-09		96.59		46.14		81.88
2009-10		93.04		48.90		71.71

We observed that the capacity utilisation of Hydel stations was above norms. However, there were instances of loss of generation to the extent of 192.39 MUs valued at ₹64.13 crore due to controllable factors as illustrated in **Annexure-19**.

The low capacity utilisation of gas stations was attributable to shortfall in supply of committed quantity of gas (up to 22 *per cent*) leading to generation loss of 2,114 MUs valued at ₹693 crore. Extension of planned maintenance at TTPS and TKGTPS also contributed to lower capacity utilisation during 2009-10.

Outages

The national average of energy loss on account of forced outages was 9.29 *per cent* during 2008-09. The State average for thermal stations was 11.74 *per cent* due to poor performance by ETPS.

3.34 Outages refer to the period for which the plant remained closed for attending planned/forced maintenance. Our analysis of the incidences of forced outages in the generating stations revealed the following:

(a) Thermal Stations

- The forced outages remained below the norm of 10 *per cent* fixed by CEA in all the five years in TTPS, MTPS and NCTPS (except during 2005-06 in NCTPS due to a fire accident). In ETPS, the same remained more than CEA norms in all the years under review. Compliance of the CEA norms would have entailed availability of plant for additional 43,600 operational hours at ETPS and 1,687 operational hours at NCTPS.

* The standard capacity utilisation applicable to thermal stations has been adopted for gas stations also.

- In ETPS, there was 65,512 hours of forced outages as shown below during 2005-10.

Year	2005-06	2006-07	2007-08	2008-09	2009-10
Total Hours available	43,800	43,800	43,920	43,800	43,800
Operated Hours	9,765	21,153	31,617	32,660	25,331
Planned outage	15,602	9,178	1,960	3,475	2,867
Forced outage	18,433	13,469	10,343	7,665	15,602
Percentage of operated hours to total hours	22.29	48.29	71.99	74.57	57.83
Percentage of forced outage to total hours	42.08	30.75	23.55	17.50	35.62

- The forced outage at ETPS was mainly due to trouble in turbine auxiliaries (50,513 hours) and in the boiler and its auxiliaries (5,816 hours).

The avoidable forced outage in NCTPS led to loss of generation of 436.81 MUs valued at ₹144.07 crore during 2006-09.

- The forced outages remained within norms at NCTPS in all the years except during 2005-06. However, the turbine installed in Unit-II of NCTPS was shut down between June 2006 and January 2009. It was designed by Siemens Limited and supplied by BHEL. Even though there was a generic defect in the turbine rotor, which persisted for ten years between 1998 and 2008, BHEL carried out piecemeal corrections without consultation with Siemens resulting in frequent shutdown of the unit. The problem was finally resolved by Siemens only in January 2009. Shutdown of the unit on this account resulted in loss of generation of 436.81 MUs of energy valued at ₹144.07 crore during the period June 2006 to January 2009.

(b) Hydel Stations

The Board had not fixed any standard for planned outages in hydro stations. We observed that, the planned outages increased from 55,991 hours in 2005-06 to 60,406 hours in 2009-10 (16.95 and 18.66 *per cent* of the total available hours). During the above period, the forced outages ranged from 22,059 hours in 2005-06 to 22,418 hours in 2009-10 (6.67 to 6.93 *per cent* of the total available hours). Consequently, the Board suffered avoidable loss of generation of 123.28 MUs valued at ₹40.69 crore in respect of illustrative cases mentioned in **Annexure-20.**

Auxiliary consumption of power

3.35 Energy consumed by power stations themselves for running their equipments and common services is called Auxiliary Consumption. The norms for auxiliary consumption fixed by TNERC *vis-a-vis* the actual auxiliary consumption in respect of the generating stations of the Board test checked by audit is given below:

Wanakbori Thermal Power Station owned by Gujarat State Electricity Corporation Limited had achieved the lowest auxiliary power consumption of 7.05 *per cent* during 2008-09.

Year	Thermal		Hydel		Gas	
	TNERC Norm	Actual ranged from	TNERC Norm	Actual	TNERC Norm	Actual
2005-06 to 2009-10	8.5% for stations without cooling towers and 9 % for stations with cooling towers.	7.94 % (TTPS) to 16.1% (ETPS)	0.2% with rotating exciters and 0.5 % for static exciters	0.25 to 2.32% in six stations with rotating exciters and 0.54 to 1.42% in six stations with static exciters.	3%	5.26% (VGTPS-II) to 7.13% (TGTPS)

The auxiliary consumption was more than the TNERC norms in respect of NCTPS and ETPS, resulting in lesser availability of 543 MUs of generated power (valued at ₹177.57 crore) to the grid. We further noticed that there was delay in replacement of Boiler Feed Pumps (BFP) with energy efficient upgraded BFP in all the five units of ETPS due to delay of 22 months in placing order (June 2006) from the date of proposal (August 2004) and subsequent delay in commissioning after receipt of equipments at ETPS up to 13 months. Consequently, there was loss of savings in auxiliary consumption of ₹3.20 crore as estimated by the Board for the 35 months.

The Board replied that it was taking remedial measures like reduction of load current for auxiliary units, *etc.*, at NCTPS and ETPS. It stated that the delay in commissioning of BFP at ETPS was due to procedural formalities for getting approval.

In respect of Hydel and Gas stations, the excess auxiliary consumption with reference to TNERC norms was worked out at 316.34 MUs valued at ₹104.06 crore which was attributable to the maintenance of auxiliaries even when plants were operated at partial loads, forced outages of generating units causing frequent startup, maintenance of auxiliaries at full level after restart of the power stations, which would take a minimum period up to six hours to obtain maximum generation.

Repairs & Maintenance

3.36 (a) Thermal stations

The Kukde Committee constituted by CEA recommended (May 2001) capital maintenance of boiler every alternate year with a shutdown period of 30 days and 15 days mini shutdown between the two capital overhauls. The Committee also recommended capital maintenance of turbo generators (including boilers) once in every five years with a 50 days shutdown period. We observed that the prescribed capital overhaul of units in TTPS, NCTPS, MTPS and ETPS was done after a delay ranging from 3 to 84 months as detailed in **Annexure-21**. At NCTPS, the time taken for overhaul was within norms. However in three Stations, TTPS, MTPS and ETPS, the excess time taken for annual overhaul of boilers, turbo generators beyond the time recommended by Kukde Committee led to loss of generation of 226.24 MUs valued at ₹73.45 crore. We further observed that the capital overhaul of Unit-IV of TTPS, required to be done once in five years, was last carried out in 1999. Delay in commencement of capital works in respect of Unit-I of TTPS by BHEL after release of the unit (11 days) and delay in agreeing to additional scope of work (12 days) caused loss of generation of 115.92 MUs valued at ₹37.79 crore.

The Board replied that R&M works were delayed due to grid conditions, non-availability of critical spares, rotors and non-carrying out Residual Life Assessment (RLA) studies, *etc.* However, if the Board had adhered to the R&M schedules with advance planning for procurement of critical spares, the same could have reduced the forced outages as discussed under Paragraph 3.32 and increase the overall capacity utilisation of the plant.

(b) Hydel stations

In Pillur, Kundah forebay and Pykara reservoirs in Kundha region, 5,827 Mcft of the surplus water was let out from the reservoir without any generation during 2005-06 to 2009-10 due to silt leading to loss of generation of 42.33 MUs valued at ₹13.88 crore. The desilting work in Pillur Dam was foreclosed (October 2009) due to objection raised by Forest Department as the Board did not obtain the requisite permission. The reason for such lapse of the Board was not on record.

The Board replied that desilting of Pillur and Kundah forebay had been proposed for execution during 2011-12 with funding by World Bank.

(c) Gas stations

As per the OEM's specification of the gas stations, the maintenance inspection was to be carried out after completion of every 8,000/24,000 hours. We noticed that the Board had not installed a supervisory mechanism to ensure timely inspection as prescribed. Consequently, the requisite inspections were not carried out in TKGTPS since 2005 (except carrying out inspection of combustion in July 2006). In addition, the major inspection to be carried out once after 48,000 fired hours was carried out in December 2007/January 2008 only after noticing vibration in the Gas Turbine. The major inspection for the Gas Turbine in VGTPS Phase-I was not carried out so far (March 2010) despite the unit crossing (March 2009) 48,000 fired hours prescribed for such inspection and the Board was aware of similar damages in turbine parts in TKGTPS in September 2007.

The Board maintained that the rotor problem in respect of TKGTPS did not relate to carrying out the required maintenance schedule and further stated that major inspection for VGTPS gas station was proposed in January 2011. The fact, however, remained that the maintenance schedules were not adhered to on both the occasions.

Renovation and Modernisation

3.37 Renovation & Modernisation (R&M) activities are aimed at overcoming problems in operating units caused due to generic defects, design deficiency and ageing by re-equipping, modifying, augmenting them with latest technology/systems. Refurbishment activities are aimed at extending economic life of the units by 15 to 20 years which have served for more than 20 years or operating at PLF below 40 *per cent*. Residual Life Assessment (RLA) study is also conducted for all Refurbishment activities and in major R&M works. During 2005-10, TTPS and ETPS carried out major R&M activities in their units. Our analysis of R&M activities revealed the following:

The renovation and modernisation carried out in ETPS and TTPS at a total cost of ₹373.63 crore remained largely unfruitful.

- The average PLF of ETPS during the five years up to 1999-2000 was 45.78 *per cent.* To improve the PLF, the Board carried out R&M works in all the five units of ETPS during September 1999 to January 2007 in the areas of boiler, turbine and generator at a cost of ₹322.71 crore. However, the Board did not fix any benchmark for evaluating the post R&M performance. The actual PLF and auxiliary consumption after R&M during 2007-2010 ranged between 38 to 51.4 *per cent* and 13.7 to 14.6 *per cent* respectively against the TNERC norm (after completion of R&M) of 80 *per cent* PLF and 8.5 *per cent* of auxiliary consumption. This implied that R&M carried out remained largely unfruitful.

- Similarly, the expenditure (₹50.92 crore) on R&M works carried out during 2005-10 in the Units-I, II and III of TTPS was also not fruitful as there was no appreciable improvement in PLF, auxiliary consumption, heat rate *etc.*, as detailed in the following table:

Year	Auxiliary consumption (in *Percent*)			Heat rate (in Kcl/Kwh)			PLF (in *Percent*)		
	I	II	III	I	II	III	I	II	III
2005-06	7.55	7.91	8.12	2525	2500	2500	84.5	83.7	79.4
2006-07	7.67	7.82	7.72	2526	2498	2495	86.2	86.4	85.8
2007-08	7.85	8.00	7.79	2581	2575	2574	80.6	83.9	88.4
2008-09	7.90	7.82	7.74	2605	2560	2611	82.5	75.8	86.1
2009-10	8.39	7.76	8.35	2600	2560	2615	71.83	85.33	82.93

- The Board carried out the Renovation and Modernisation & Uprating (RMU) works in Papanasam Hydro Power House (October 2005) and Mettur Dam Power House (April 2007) at a total cost of ₹52.80 crore.

However, the Board did not evaluate the guaranteed "weighted average efficiency" (89.83 *per cent* of the rated capacity) of Papanasam Power House so as to assess the effectiveness of the RMU. Further, the Board failed to levy Liquidated Damages (LD) of ₹2.76 crore (₹0.98 crore Papanasam PH and ₹1.78 crore for Mettur Dam PH) for the delay in completion of the work.

The Board replied that the weighted average efficiency of 90.106 recorded on 31 January 2009 was higher than the guaranteed efficiency. It further stated that LD worked out to ₹0.98 crore in respect of Papanasam Power House and ₹1.78 crore in respect of Mettur Power House would be recovered on closure of the work order. However, the actual efficiency mentioned by the Board was worked out by the contractor which included an uncertainty factor of 2.67 *per cent* without any basis. Due to this, the desired generation level might not be attained.

Excess O&M expenditure over norms

3.38 The norm for O&M expenditure fixed by CERC *vis-a-vis* actual expenditure in respect of thermal, hydro and gas stations during the review period is detailed below. The Manpower cost and Repairs and Maintenance cost have been separately discussed vide Paragraphs 3.29 and 3.36 respectively.

(₹ in lakh)

Sl.No.	Stations	2005-06	2006-07	2007-08	2008-09	2009-10
1.	**Thermal Stations**					
	Norm per MW	10.82	11.25	11.70	12.17	18.20
	Actual per MW: TTPS	8.83	8.41	10.05	11.20	12.24
	NCTPS	20.03	28.60	30.10	28.05	25.66
	ETPS	16.52	17.16	21.47	32.13	31.00
	MTPS	18.60	20.79	8.77	19.35	15.74
2.	**Hydel Stations**					
	Norm per MW	7.33	7.73	8.20	8.53	8.87
	Actual per MW	8.62	8.60	7.47	8.45	7.37
3.	**Gas Stations**					
	Norm per MW	5.41	5.62	5.85	6.08	14.80
	Actual per MW	6.59	8.34	16.15	10.40	15.82

From the above, it could be seen that the norm for O&M expenses was not adhered to in any of the thermal stations of the Board except TTPS for the period 2005-10 and MTPS for 2007-08 and 2009-10. Expenditure at NCTPS was above norms even during 2005-06 when Unit-II was under forced outage due to fire accident for four months. Consequently, the Board incurred ₹684.50 crore over and above the norms of CERC. In respect of Gas power stations, the extra expenditure over and above the norms for the period 2005-06 to 2009-10 worked out to ₹83.76 crore. However, the Board did not analyse the reasons for excess expenditure over the norms of CERC.

The Board attributed the reasons for excess O&M cost to inflation, carrying major repairs, *etc.*, and low load operation of hydro generators. In respect of thermal stations, it stated that based on the budget committee's recommendations, the O&M expenditure for 2009-10 was brought down to ₹375.10 crore from ₹434.86 crore in 2008-09.

Financial Management

3.39 The main sources of funds for operation of the Board are realisation from sale of power, subsidy from State Government, loans from State Government/Banks/ Financial Institutions (FI), *etc.* These funds were mainly utilised to meet payment of power purchase bills, cost of fuel, 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 Board for the years 2005-06 to 2009-10 are given below:

(Amount-₹ in crore)

S.No.	Particulars	2005-06	2006-07	2007-08	2008-09	2009-10[£]
	Sources					
1.	Net Profit/(loss)	(-)1,328.99	(-)1,218.94	(-)3,512.08	(-)7,771.39	(-)9,680.25
2.	Add: Adjustments	2,266.50	1,087.31	1,430.44	2,096.74	6,447.27
3.	Funds from operations (1+2)	937.51	(-)131.63	(-)2,081.64	(-)5,674.65	(-)3,232.98
4.	Cash deficit	705.77	2,220.48	4,602.96	8,413.60	7,664.75
5.	**Total (3+4)**	**1,643.28**	**2,088.85**	**2,521.32**	**2,738.95**	**4,431.77**
	Utilisation					
6.	Capital expenditure	1,569.62	2,093.92	2,333.17	2,706.26	4,146.91
7.	Investments	73.66	(-)5.07	188.15	32.69	284.86
8.	**Total**	**1,643.28**	**2,088.85**	**2,521.32**	**2,738.95**	**4,431.77**

The cash deficit was overcome by increased borrowings in the form of cash credit/loans from commercial banks/FIs, which amounted to ₹9,583.68 crore in 2005-06 and increased to ₹32,039.26 crore in 2009-10. Therefore, there is an urgent need to optimise internal resource generation by reducing excess

£ Figures are provisional.

fuel consumption, forced outages, auxiliary consumption, O&M and Manpower cost, *etc*.

Claims and Dues

3.40 The Board sells energy to its consumers at the rates specified by TNERC from time to time. TNERC fixed (April 2003) the tariff rates after considering various economic and other factors which was revised with effect from September 2010. Generally sale price does not cover the total input costs. The differential amount is claimed as subsidy from the State Government. The table below gives the details of subsidy claims raised and realised.

(₹ in crore)

Details	2005-06	2006-07	2007-08	2008-09	2009-10	Total
Subsidy claims towards tariff concession	1,179.49	1,330.10	1,457.02	1,831.61	1,672.17	7,470.39
Subsidy received towards tariff concession	1,161.15	1,340.38	1,433.16	1,834.57	1,698.93	7,468.19

As per the TNERC Regulations 2005, the Board should earn a reasonable rate of return (which has been estimated as three *per cent* on net fixed assets by the Board). Accordingly, the Board has been claiming the revenue gap from the State Government which amounted to ₹10,090.10 crore during 2005-09. However, the Government had not so far committed to reimburse the same (November 2010).

Tariff Fixation

The Board did not file annual tariff revision petitions between September 2002 and February 2010.

3.41 As per the TNERC's Regulations, the Board is required to file the application with TNERC for tariff revision 120 days before the commencement of the respective year. However, the Board did not file this application on annual basis but filed the Aggregate Revenue Requirement (ARR)$^{\Sigma}$ along with tariff revision petition only in February 2010 after a lapse of more than seven years from the date of filing (September 2002) of previous tariff petition. Based on the application, the TNERC had revised the tariff with effect from 1 August 2010. The delay in filing ARR was already commented in the Report of the Comptroller and Auditor General of India for the year ended 2005- 2006 (Commercial), Government of Tamil Nadu.

The Board replied that it did not file annual tariff petition for want of Government's clearance. The reply was not convincing because as per the TNERC regulations, the Board was not required to get the clearance from the State Government before filing the application for tariff revision.

We further noticed that the Board had not filed its Business plan containing its five years projections with the TNERC so far (April 2010) despite receipt of

Σ Which will explain the details of operating cost of the Board.

reminders from TNERC for such non-compliance. A business plan with projection up to 2012 prepared (2009) by the Board at a cost of ₹10 lakh was not approved by its Members so far (April 2010). Specific reasons for (i) non-filing of Business plan and (ii) delay up to February 2010 in filing ARR/Tariff revision petition were not available on record.

Environment Issues

3.42 To minimise the adverse impact on the environment, the Ministry of Environment and Forest (MOE&F), GOI and Central Pollution Control Board are vested with powers and various statutes. At the State level, Tamil Nadu Pollution Control Board (TNPCB) is the regulating agency to ensure compliance with the provisions of these Acts and statutes. Our scrutiny relating to compliance with the provisions of various Acts in this regard revealed the following:

Operation of plant without consent

3.43 For operation of thermal power stations, the consent of TNPCB is mandatory. Consequent upon expiry (30 September 2008 – TTPS and 30 September 2009 – NCTPS) of consent order, TNPCB issued notices between October 2009 and February 2010 to these stations for remittance of consent fee of ₹60.75 lakh for renewal of consent. But the Board neither remitted the fees nor obtained renewal of TNPCB's consent so far (April 2010).

The Board replied that action was being taken to remit the consent fee demanded by TNPCB.

Air pollution

3.44 Coal ash is a pollutant under certain conditions when it is airborne and its concentration in a given volume of atmosphere is high. Electrostatic Precipitator (ESP) is used to reduce dust concentration in flue gases. The ESPs at none of the thermal stations were able to achieve the norms fixed by TNPCB due to usage of poor quality of coal with ash content of around 45 *per cent*. It was noticed that the emission levels of two thermal stations *viz*., TTPS (2500 mg/Nm^3 during February 2010) and MTPS (575 mg/Nm^3 during June 2005) were the highest as against the norm of 150 mg/Nm^3 during the period under review.

We further noticed that:

- In TTPS, though there was a proposal (November 2006) to install Ammonia injection system in Unit-III to reduce the levels of Suspended Particulate Matter (SPM), it was not installed so far (November 2010).
- The TNPCB observed (May 2008) that TTPS had not brought down emission levels and issued direction to improve/maintain ESPs to meet

the emission standards. However, it remained above the norms till date (November 2010).

The Board replied that the emission levels of all the units of TTPS (except Unit-III) have come down after carrying out overhauls in Unit-I and Unit-II and due to usage of imported coal in Unit-IV and Unit-V. However, the emission levels were still higher than the norms as on March 2010. In respect of Unit-III of TTPS, the Board stated that the emission level would get reduced after the forthcoming capital overhaul in 2010-11.

Installation of on-line monitoring equipment

3.45 As per the provisions of the Environment (Protection) Act, 1986, thermal power stations should provide on-line monitoring systems to record SPM levels. Online monitoring and other equipments purchased and installed at a cost of ₹34.05 lakh at TTPS and NCTPS were not functioning effectively with the result that SPM data were being collected manually. Further, the Board evaluated the SPM levels based on manual reading only. At ETPS, online monitoring system has not yet been installed (March 2010).

The Board replied that the equipments were working satisfactorily (except at Unit-III of TTPS). It was further stated that at ETPS, action was being taken to install online monitoring system. However, we observed that the Board was relying on manual data for evaluating SPM levels instead of on-line monitoring system.

Use of high ash content coal

3.46 As per MOE&F notification (June 1988 and September 1997) coal based power stations located in urban, sensitive and critically polluted areas are required to use coal having less than 34 *per cent* ash on an annual weighted average basis. Despite being highlighted in the Report of the Comptroller and Auditor General of India for the year ended 2003-2004 (Commercial), Government of Tamil Nadu, the benefits of usage of washed coal, the thermal stations continued to use high ash content coal. The thermal stations of the Board consumed 65.68 million MT of indigenous coal during 2005-10, whose weighted average ash content ranged from 37.18 to 43.50 *per cent.*

The Board replied that the pros and cons of usage of washed coal would be assessed before taking a decision in this regard.

Ash disposal

3.47 The four thermal stations of the Board generated an annual quantity of 56 lakh MT of fly ash. For disposal of fly ash, the Board entered into Memoranda of Understanding (MOU) (February 2003) with cement companies for provision of 'Pressurised dense fly ash collection system' for removal of fly ash. While 80 *per cent* of the collected fly ash would be lifted by these cement companies at the rate of ₹60 per MT, the remaining

20 *per cent* was to be given to Small Scale Units free of cost. Our scrutiny of disposal of fly ash revealed the following:

- There was a shortfall in removal of committed quantity of fly ash by the cement companies to the extent of 39.40 lakh MT resulting in foregoing of revenue of ₹23.64 crore during 2005-10. Despite continued shortfall, Board decided to levy penalty (₹5.70 crore) as per the terms of MOU only from April 2008 but such levy was challenged by the allottees in Court (May 2010) due to absence of clear terms of quantity and manner of levy of penalty in the MOU. The uncollected fly ash of 39.40 lakh MT in the four thermal power stations had to be pumped into ash dyke to convert the same into ash slurry by incurring extra expenditure of ₹31.52 crore. Further, there was accumulation of 710.88 lakh MT of wet ash in land as of October 2009 against MOE&F's guidelines which prescribed phasing out such accumulation before 2009 itself.

- As per design calculations, the ESP hoppers should collect fly ash equivalent to 70 *per cent* of the total ash generated. But the fly ash collection at NCTPS was around 59.52 *per cent* only. This resulted in loss of revenue to the Board amounting to ₹2.93 crore being the difference between the collectible ash at 70 *per cent* and the actual collection of 59.52 *per cent*.

The Board replied that the short collection of fly ash was due to inherent deficiency of Duct hoppers at NCTPS.

Monitoring by top management

3.48 There has to be a Management Information System (MIS) to report on achievement of targets and norms. The achievements need to be reviewed to address deficiencies and also to set targets for subsequent years. Our review of the system existing in this regard revealed the following:

- The details of generation by hydro generating units reflected in the records of Board's headquarters did not tally with any of its four hydro generation circle offices indicating that monitoring for collection of data was not effective.

- There was no system in place to get the final project cost approved by the competent authority immediately after the completion of the hydro projects.

The Board stated that the observation was noted for future guidance.

- The Aggregate Revenue Requirement was filed with TNERC belatedly by the Board only in 2010 after a lapse of more than seven years.

The matter was referred to Government in June 2010; their reply was awaited (November 2010).

Acknowledgement

We acknowledge the co-operation and assistance extended by the staff and the management of the Board in conducting this Performance Review.

Conclusion

- **The Board's actual generation which was at 45 *per cent* of the average demand in 2005-06, slipped down to 34 *per cent* in 2009-10 due to addition of only 290 MW during the last five years up to 2009-10 against the planned addition of 1,548 MW and requirement of 3,977 MW.**

- **The Board carried out life extension programmes in only two hydel stations out of 16 stations which have completed their normative life of 35 years.**

- **Inefficient planning by the Board for simultaneous implementation of both the units of NCTPS at the time of inviting bids led to foregoing of estimated duty exemption of ₹133.26 crore.**

- **ETPS and BBGTPS continued to be unviable due to ineffective renovation and modernisation of the thermal plant and non-conversion of gas plant from single cycle mode to combined cycle mode.**

- **The Board suffered generation loss of 812.77 MUs during 2008-10 valued at ₹266.44 crore due to shortage of coal at coal bunkers. Besides, problems in handling coal and excess consumption of coal in thermal stations persisted during 2005-2010.**

- **Manpower in excess of CEA norms at the generation stations during 2005-10 resulted in extra expenditure of ₹279.65 crore.**

- **The PLF of the generation stations of the Board remained more than the national average PLF during the review period except in ETPS and BBGTPS.**

- **Excess auxiliary consumption than TNERC norms during the review period resulted in lesser availability of 859.34 MUs of generated power valued at ₹281.63 crore.**

- **Despite the continuous loss, the Board did not file the application for the tariff revision annually as required.**

- **On the environmental side, the Board did not adhere to the provisions of various Acts, regulations and norms as prescribed resulting in adverse impact on the environment.**

Recommendations

The Board must

- **take up capacity addition to the levels of demand to avoid load shedding.**
- **avoid delays in pre-construction activities and delays in execution by proper monitoring of the projects.**
- **take up renovation and modernisation programmes and preventive maintenance as scheduled for optimising the existing generation capacity.**
- **plan for availability of adequate coal and avoid shortages besides improving the coal handling system.**
- **rationalise deployment of manpower at generation stations for its optimum utilisation.**
- **minimise forced outages and reduce the auxiliary consumption to be within the norms.**
- **ensure compliance of pollution control norms by the thermal stations.**

CHAPTER - IV

4 Transaction Audit Observations

Important audit findings noticed as a result of test check of transactions made by the State Government companies/Statutory corporations are included in this Chapter.

Government companies

Poompuhar Shipping Corporation Limited

4.1 Avoidable extra expenditure

The Company incurred an avoidable expenditure of ₹56.37 crore due to delay in purchase of spares, incorrect selection of shipping yard, non-rectification of the problems in cranes and turbo engines and delay in finalising the dry docking yard.

The Company organises ocean movement of coal required by the Thermal Power Stations of Tamil Nadu Electricity Board (Board) to the discharge ports at Chennai and Tuticorin. As the port at Tuticorin does not have shore crane facility, the unloading of coal is required to be carried out only through the vessels having crane facility. The Company owns three vessels *viz.*, Tamil Anna, Tamil Periyar and Tamil Kamaraj with crane facilities. The cost of transportation of coal to Tuticorin by the Company's own vessels was always cheaper (with an estimated savings of ₹80 to ₹319 per MT) during the three years up to 2009-10 as compared to transportation through hired vessels. Hence, it was imperative on the part of the Company to utilise optimally its own vessels in Tuticorin sector to reap the cost advantage. We observed (April 2010) that the discharged quantity of coal during the three years up to 2009-10 was continuously declining as detailed below:

(Quantity in lakh MT)

Sl. No.	Year	Total quantity discharged	Quantity discharged by own vessels				Quantity discharged by hired vessels	Percentage to total quantity (own vessels)	Percentage to total quantity (hired vessels)
			Anna	Periyar	Kamaraj	Total			
1.	2007-08	52.21	NIL	6.18	8.67	14.85	37.36	28.44	71.56
2.	2008-09	42.41	NIL	5.37	6.14	11.51	30.90	27.14	72.86
3.	2009-10	45.05	0.92	NIL	3.35	4.27	40.78	9.48	90.52

The factors attributed for the declining performance of the Company's own vessels in Tuticorin sector are discussed below:

MV Tamil Anna

- The replacement for worn out slew bearings[Ω] of Crane No.2 and 6 of this vessel became necessary in February 2005 and the spares were available only with the 'original equipment manufacturer' (OEM), who insisted on a lead time of six months for supply of spares. Even though these spares were required before the envisaged dry docking between September and November 2005, the Company decided (June 2005) to procure necessary spares for repair of these cranes and delayed placement of purchase orders up to September 2005. The dry docking in November 2005 was completed without carrying out repairs to the cranes.
- The Company did not take delivery of the spares till February/March 2008 which were ready for despatch in April 2006 due to non-identification of the shipyard for carrying out the repairs till February 2007. Further, even after identification of Hindustan Shipyard Limited, Vishakapatnam (HSL) for carrying out the repairs, non-delivery of the vessel up to February 2008 also contributed to the delay. However, the Company had no recorded reasons for the delay.
- The vessel, when faced (February 2008) with an emergency situation due to problem in turbo generator of the engine, was immediately sent to HSL to carry out the necessary engine repair as well as the pending crane repair work. But HSL was not capable of carrying out major repairs and it took an abnormally longer time of five months (February to July 2008) against the stipulated time of 60 days and carried out partial repairing which resulted in problems of synchronising the cranes with the lower speed level of the main engine.
- Even during post inspection (August 2008) of the repair works, the OEM listed out 122 items of essential spares for carrying out various repairs on cranes and engine works during the dry docking between October and December 2008. However, the requisite repairs could not be completed within the dry docking period for want of necessary spares.

In view of the above reasons, the vessel which had the crane facility could not be operated in Tuticorin sector during the period March 2007 till date (December 2010) and was utilised in other sector. Consequently, the Company discharged coal through hiring of vessels which resulted in an avoidable extra expenditure of ₹50.29 crore[♥] during the period 2007-08 to 2009-10 considering the fact that this own vessel had discharged an average of 10.49 lakh MT every year during the period 2004-07.

Ω Slew bearing enables the crane to rotate on all directions.

♥ Being the differential hire charges in respect of the vessels with crane facilities and the vessels without crane facilities for the dischargeable quantity of 31.47 lakh MT during the three years upto 2009-10, excluding the scheduled time of 110 days allowed for major repair and dry docking during 2007-08 and 2008-09.

MV Tamil Periyar

- The Company invited (June 2007) global tenders for dry docking of the above vessel during the period September 2007 and evaluated (September 2007) the offer of Cosco Shipyard Group Company Limited (Cosco), China for a price of ₹21.16 crore as the lowest tenderer. The Cosco wanted to finalise the tender by 26 September 2007 as it had subsequent commitment with other shipping Company. The Company could not finalise the tender till October 2007 because it held several discussions with Cosco for alteration in the quoted terms of penalty for delay in dry docking and release of part payments, *etc*. Though the tender was valid up to 3 November 2007, Cosco withdrew (October 2007) their offer citing the Company's slow response and non-availability of their shipping yard.
- The Company negotiated with second lowest tenderer and issued a work order (25 December 2007) for a price of ₹21.58 crore and thereafter the vessel reached the shipyard on 3 January 2008. Thus, by not finalising the tender of the lowest offer, the Company incurred an avoidable extra expenditure of ₹42 lakh. The dry docking was completed on 10 March 2008 taking 68 days against the quoted period of 42 days. The delay was mainly due to delay in receipt of spares (16 February 2008), delay in arranging the letter of credit (LC) and also delay in finalising the final bill of dry docking.

This avoidable delay of 26 days resulted in an avoidable expenditure of ₹5.66 crore, being the hire charges paid to a private vessel during the said period.

Thus, the Company incurred an overall avoidable extra expenditure of ₹56.37 crore due to delay in decision making, delays in arranging procurement of spares and non-execution of repairs.

The Company stated (July 2010) that the required spares for the cranes of Tamil Anna were not readily available due to obsolete model of the cranes. It also added that the delay in carrying out repairs was due to follow-up of stringent tender procedures and non-availability of infrastructure facilities with the Indian ship yards. In respect of Tamil Periyar, the Company stated that the cancellation of the L-1 firm was at their instance. The replies of the Company were not correct as the Company noticed the problems of Tamil Anna in February 2005 itself but delayed the placement of purchase orders up to August 2005. Further, the Company unnecessarily delayed delivery of its vessel till February 2008 after identification of the shipyard and even did not procure engine spares before the second dry docking. Further, in respect of Tamil Periyar, the lowest firm backed out from executing the dry docking on account of the Company's slow response to the modified terms of offer.

The matter was reported to the Government in May 2010; its reply was awaited (November 2010).

4.2 Lapses in contract management of chartered vessels

While inviting/evaluating tenders for spot chartering of the vessels, the Company deviated from the tender rules, terms and conditions, allowed unwarranted extensions at higher rates of charter hire charges and did not levy liquidated damages for the delays in delivery of the vessels. These factors contributed to an avoidable extra expenditure of ₹26.76 crore.

The Company is engaged in ocean movement of coal on behalf of Tamil Nadu Electricity Board and has been chartering private vessels every year on time[♦]/spot[∝] chartering. We assessed (between December 2009 and February 2010) the effectiveness of the tender system of spot chartering vessels and their efficiency and economy of operations for three years up to 2009-10 and observed as under:

Non-compliance with the tender procedures

(i) As per the Tamil Nadu Transparency in Tender Rules, 2000 (Tender Rules), the tender inviting authority should allow a minimum of 30 days for the tenderers to submit their quotations in respect of tender value exceeding ₹ two crore. Any reduction in the stipulated time has to be authorised by the competent authority with reasons recorded. Between March 2007 and November 2009, the Company invited tenders for 18 spot chartering exceeding ₹ two crore each but allowed only 6 to 23 days without any valid reasons and authorisation by the competent authority. Thereby, it lost the opportunity to get competitive offers and received repetitive offers mainly from four ship owners, who were in charter agreement with the Company continuously for more than two years.

?

The Company replied (July 2010) that the Government (June 1991) had exempted it from following tender procedure. The reply was not correct as the said deviation was allowed as a short term measure only in exceptional circumstances that too with proper justification. Further, the Tender Rules 2000, which emanates from Tender Act of 2000, had also superseded Government's earlier orders issued in 1991.

(ii) The Tender Rules also prescribe that the governance of tender finalisation should be by a Committee, which include the State Port Officer (SPO), Tamil Nadu Maritime Board as an independent member of the Company's tender Committee. We observed that during the above period in all the 18 cases, the SPO did not participate in any of the tender committee meetings resulting in non-availability of independent opinion from an expert as envisaged. The Company, however, did not initiate any action for nominating an alternate independent officer in his place.

The Company replied (July 2010) that its tender committee would be re-constituted.

♦ In time charter, the Company hires private vessels for a period of one year and above.

∝ In spot charter, the hiring of private vessels is upto a maximum of six months.

2002

2002

Deficiencies in evaluation of tenders

(i) We noticed that two vessels *viz.*, M.V. Goodlight and M.V. Goodseason were disqualified during evaluation in January 2008 and January 2009, on account of overage of 29 years and 24 years respectively. Further, M.V.Goodseason was also found to be not suitable for loading at Haldia Port. These vessels were, however, chartered by the Company during the subsequent periods[€] by relaxing the norms for age at 20 years of the vessel and usage of vessel in other ports except in Haldia. This indicated absence of standard procedure for technical evaluation of the vessels' capability.

The Company replied (July 2010) that the said vessels were qualified in the next tender considering their suitability for Paradip to Ennore sector. However, the facts remained that these vessels became suitable only after relaxation of tender conditions. This was advantageous to the tenderers rather than to the Company and was not a sound tender practice.

(ii) The terms and conditions of the tender required that vessels with crane facilities should not be more than 25 years old unless they had been in the Company's charter previously for a minimum of three continuous months. Despite this, the Company selected (October 2008) MV Chennai Perumai, a crane fitted vessel, which was more than 25 years old and also had not been in the Company's charter from May 2002 onwards. While in operation after October 2008, the Company found that the vessel was not capable of operation with crane facilities as was originally envisaged due to repair in cranes of the vessel. Consequently, the vessel performed its operation without crane facilities resulting in an extra expenditure of ₹5.15 crore[♦].

The Company replied (July 2010) that MV Chennai Perumai was diverted to Ennore to avoid bunching of vessels at Tuticorin. The reply was not correct because after the failure of crane of MV Chennai Perumai, the Company forcibly utilised it in Ennore sector, where there was no requirement for vessels with crane facility. This was not a financially prudent decision and resulted in extra expenditure of ₹5.15 crore.

Deficiencies in contract management

The charter party agreement provided for levy of liquidated damages (LD) for belated delivery of vessels within the specified lay days[♣] or the mutually agreed dates. We observed that the provision for delivery of vessel at a mutually agreed date was defective as the Company intended to take delivery of the vessels only within the specified lay days. On seven occasions, the ship owners failed to deliver the vessels within the lay days with delays ranging from 1 to 19 days. However, the Company did not levy LD amounting to ₹12.38 crore for such delays for want of enabling provisions in the charter party agreements.

€ M.V.Goodlight – December 2008 to July 2009; M.V.Goodseason – December 2009.

♦ The differential cost of operation with crane and without crane facility at the rate of Rs.151 per MT for handling 3.41 lakh MT.

♣ The lay days are normally for a period of 10 to 15 days as indicated in the tender during which the Company proposes to take over the chartered vessel as a replacement for the existing vessel.

KD

Despite the downward trend in the charter hire charges in 2008-09 in the shipping industry, the Company did not exercise its contractual right to reduce the contract period and invite fresh tenders to reap the benefits of reduction on three occasions as discussed below:

(i) The Company floated (7 November 2008) a tender for spot chartering for three months between 20 December 2008 and 5 January 2009 and hired MV Goodlight and MV Gem of Paradip at ₹5.10 lakh per day and ₹5.50 lakh per day respectively during December 2008. The Company also engaged MV APJ Jad (November 2008) on spot charter basis of ₹9.10 lakh per day. As this vessel was delivered to the Company only on 20 December 2008 after a delay of 20 days, the Company should have either cancelled the spot charter of APJ Jad quoting their delay or prevailed upon the vessel owner to accept the latest finalised rate. Failure to exercise either of the options resulted in an avoidable extra expenditure of ₹5.95 crore.

(ii) The Company spot chartered (July 2008) two vessels, MV Good Pacific and MV Good Princess at a hire charge of ₹21.75 lakh per day. These vessels were added to the Company's fleet between 10 and 13 August 2008. They were redelivered on 15 and 16 November 2008 after exercising ten days extension on expiry of charter period. In the subsequent tender (October 2008), the owner of the above vessels quoted a lower rate of ₹6.85 lakh per day. Despite availability of these vessels at lower rates, the Company extended the services for ten days in November 2008, which was not a financially prudent decision. This resulted in an avoidable extra expenditure of ₹2.63 crore.

(iii) The Company allowed extension of service for two hired vessels *viz.*, M.V.Gem of Paradip and M.V.Good Princess for one month in November 2008 and 10 days in February 2009, respectively.. But the company obtained similar other vessels with lower hire rates in the subsequent tenders, which were finalised prior to the date of award of extension. Thus, extension allowed to these vessels was unwarranted and resulted in avoidable extra expenditure of ₹64.98 lakh.

The Company replied (July 2010) that the extensions were allowed based on the directions of TNEB due to their critical stock position. The fact remained that the same vessels or alternate vessels were available for discharge operations in next tender without any break period. Had the Company taken a commercially prudent decision not to allow extension when a lower subsequent quote was available, the same would have financially benefited the Company.

Non-availing of speed claim

The Company introduced (March 2008) a clause in the charter party in respect of long term charter for recovering speed loss based on the speed reports obtained from Weather News London. Accordingly it recovered ₹4.06 crore for excess fuel consumption due to lesser speed of the vessels than the declared one by the Weather News London. However, the same clause was not introduced in respect of spot charter vessels and thereby the Company continued to accept the speed reports of the vessel owners without any independent verification.

The Company replied (July 2010) that it had included the said clause from July 2010.

We conclude that the Company deviated from the tender rules/terms and conditions of tender while inviting tender and its evaluations. The contract agreements were defective as these did not safeguard the financial interest of the Company during delayed delivery of vessels besides the Company did not protect its financial interest while extending the charter period.

We also recommend that the Company may allow the time limit as prescribed in the tender rules for submission of tenders to get competitive offers and also include and enforce penal clauses in agreements to discourage non-supply of vessels within the stipulated lay days.

The matter was reported to the Government in May 2010; its reply was awaited (November 2010).

Arasu Cable TV Corporation Limited

4.3 *Dismal performance*

The Company created unfruitful infrastructure worth ₹28.28 crore and incurred cash loss of ₹8.11 crore during its three years of commercial operations up to October 2010.

Formation of the Company

The Government, with an objective of providing high quality TV signals at reasonable cost to the public through the Local Cable Operators (LCO), formed (October 2007) the Company to function as a Multi System Operator (MSO). After obtaining (April 2008) the provisional permission from the Ministry of Information and Broadcasting, Government of India (GOI) to operate as a MSO, the Company started (July 2008) its functions with the Government's investment in the form of share capital (₹25 crore) and loan (₹36.35 crore). Our assessment about the effectiveness of the business operations of the Company is given below:

Defective planning

The project proposals approved (July 2008) by the Government indicated that the Company's estimated project cost of ₹91.59 crore would be paid back in four years and three months subject to achievement of anticipated connections.[♦] The operation of cable TV services within the State was a highly competitive business and dominated by the private MSOs like Sumangali Cable Vision, Hathway *etc.* As a new entrant to the business, the Company should have obtained firm commitment from the LCOs for assured patronage and agreements from the popular channels for telecasting their programmes by the Company. However, the Company commenced its commercial operations (July 2008) without any tie up arrangement with either of them leading to its dismal performance.

♦ 15.20 lakh cable connection in the first year of operation with 5 *per cent* cumulative annual growth.

Implementation of the project

The Company procured (March 2008) four digital head ends* at a cost of ₹28.08 crore, and established them in Coimbatore, Thanjavur, Tirunelveli and Vellore between July and December 2008. It obtained (July 2008) cable connectivity through dark fibre cable for a route length of 821 KMs from Rail Tel Corporation of India Limited at an annual lease charge of ₹2.05 crore,$^{\Sigma}$ against which the Company had incurred ₹2.16 crore till January 2010. It also obtained (July 2008) distribution rights of pay channels like Zee TV, BBC, Raj TV, *etc*. However, the rights for other popular channels owned by Sun, Star and Sony TV were not available to the Company as the broadcasters refused to part with the signals.

We observed (April 2010) that the Company purchased high cost digital heads considering their clarity and superiority over the conventional analog system. But such clarity of the digital signals could be received by cable especially in Conditional Access System (CAS) areas only through High Definition Set Top Boxes (HDSTB), the cost of which was estimated at ₹ 15,000 per HDSTB which would have factored in additional investment of ₹142.50 crore• towards the investment on HDSTB. However, the Company included an investment of ₹13.75 crore only in the project proposals and later on the Company recorded (March 2009) that it would be impossible to break even considering the investment on HDSTB.

Revenue earnings

After installation of the digital heads, the Company started with a baby step and procured a consumer base of only 34,350 in August 2008 which expanded to 55,705 in October 2010. But it could not expand further due to non-availability of popular channels. The Company, which anticipated a revenue of ₹241.21 crore in three years of operation up to 2010-11, actually earned only ₹2.48 crore from August 2008 to October 2010. Even out of this small amount, the Company could not realise ₹95.50 lakh from LCOs till date (November 2010). To earn this revenue, the Company incurred ₹10.59 crore being the payments made to pay channels (₹2.71 crore), lease charges for fibre cables (₹2.16 crore) and establishment, rent and other incidentals (₹5.72 crore). Thus, the overall operations of the Company resulted in a cash loss of ₹8.11 crore. Due to plummeting consumer patronage, the Company was forced to not only surrender fibre cable connectivity for the route length of 680 KMs but also stopped (August 2009) procuring pay channels.

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* The point from where audio/video signals are transmitted to LCOs.

Σ ₹25,000 per KM for 821 KMs.

• Calculated at the rate of ₹15,000 per HDSTB for the estimated consumer base of 95,000 cable homes in CAS areas during the first year of operation.

Conclusion

The Company ventured into a highly competitive business and commenced its commercial operations immediately after the clearance of the proposal by the project investment committee in the same month. However, in the absence of proper strategy to procure telecasting rights of popular channels and increasing the consumer base and firm agreements with LCOs for assured patronage resulted in a cash loss of ₹8.11 crore, besides unfruitful creation of infrastructure worth ₹28.28 crore.

The Government stated (August 2010) that its aim of formation of this Company was not to augment the revenue but to provide high quality television signals at reasonable cost to public. The fact, however, remained that even this objective was not achieved as the Company did not make headway in enlarging the customer base as envisaged till date (November 2010) resulting in continued poor performance.

Electronics Corporation of Tamil Nadu Limited

4.4 *Idle investment*

The Company purchased land in two phases in quick succession without conducting any feasibility study and ascertaining the marketability of the land which resulted in idle investment of ₹20.00 crore.

The Company which is engaged in development of software applications also took up (August 2006) promotion of Information Technology (IT) parks in Tier-I and II cities such as Coimbatore, Madurai, Tirunelveli, *etc.*, as per the directives of the Government of Tamil Nadu. Based on spot assessment of the land available at the Industrial Growth Centre, Gangaikondan in Tirunelveli district belonging to State Industries Promotion Corporation of Tamil Nadu Limited (SIPCOT), the Company acquired 500 acres of land in two phases♦ on 99 years lease basis. The plot cost of ₹3 crore was paid by the Company in April 2007. Similarly, the plot cost of ₹20 crore for the land acquired in the second phase was paid in July 2008. In addition, the Company also incurred a part payment of ₹5.19 crore towards construction of an IT building complex and development for the first phase of the industrial area.

We observed (April 2010) that acquisition of 400 acres of land in the second phase was hasty as the SIPCOT, which was holding the land (1,240 acres) since 1995-97, could sell only 152.74 acres up to March 2009 due to absence of demand as it was a rocky terrain requiring blasting for commencing developmental activity. However, the Company took over the land in the first phase without any independent feasibility study on suitability of the land and also purchased the land in second phase without ensuring the saleability of the land of the first phase. The Company also did not obtain approval of the project investment committee for both the purchases, though it was necessary for every investment in excess of ₹2 crore by a State PSU.

♦ 100 acres in April 2007 at ₹3.00 lakh per acre and 400 acres in July 2007 at ₹5.00 lakh per acre.

The Company made provisional allotment of 27 acres of land to two entrepreneurs (May 2010) from the first phase of land but the actual sale for this allotment has not been completed till date (November 2010). Further, the entire land taken over in 2007 also remained unsold till date (November 2010).

Thus, purchase of land in the second phase without ascertaining the marketability of the land resulted in idle investment of ₹20.00 crore.

The matter was reported to the Company/Government in May 2010; their replies were awaited (November 2010).

State Industries Promotion Corporation of Tamil Nadu Limited

4.5 Loss of revenue

The Company lost revenue of ₹8.32 crore due to charging the pre-revised price to a land allottee even though it allotted the land after revision of the land price.

M/s Allison Transmission India (Private) Limited (Allison) applied (May 2008) for allotment of around 30 acres of industrial land at the Company's Industrial Growth Centre at Oragadam. The Company, 'in-principle', agreed (June 2008) to allot 27.50 acres to Allison without mentioning the cost of the land.

The Board of Directors (BOD) of the Company noted (September 2008) the increasing demand for the industrial plots in and around Chennai and the additional liability on account of enhanced compensation payable to land owners. Accordingly, the BOD decided (September 2008) to revise the land cost at Oragadam from ₹30.00 lakh per acre to ₹60.00 lakh per acre in view of the market value of the land.

The Government issued (October 2008) orders sanctioning structured package of assistance to Allison which included allotment of the required land on a 99 years' lease basis as per the usual terms of allotment and usual price and payment terms of the Company. Before the Company communicated the price of the land, Allison represented (October 2008) to the Government for retention of the pre-revised price of ₹30.00 lakh per acre. The Government endorsed (November 2008) Allison's representation to the Company for consideration and to take a decision. The BOD, however, approved (December 2008) the allotment of 27.74 acres of land at a price of ₹30 lakh per acre to Allison stating that at the time of issuing 'in-principle' allotment, the prevailing price at Oragadam growth centre was ₹30 lakh per acre. Based on the firm letter of allotment (December 2008), Allison paid ₹8.32 crore (December 2008) towards the cost of the land.

We observed (December 2009) that the decision of the Company to allot the land at pre-revised price of ₹30 lakh per acre was not justified since the Company had decided the upward revision of the land cost taking into consideration increase in the market price and various other factors prior to issue of firm allotment to Allison. Therefore, the allotment of land to Allison at the pre-revised rate of ₹30 lakh per acre was not in the financial interest of the Company.

The Government replied (July 2010) that the decision to revise the cost of the plot from ₹30 lakh to ₹60 lakh per acre was taken in September 2008 and the same was applicable to all pending applications. It added that Allison's application dated 17 May 2008 could not be treated as pending since an 'in principle' allotment was issued in June 2008 itself and the Company had omitted to mention the land price in the 'in principle' letter of allotment.

The reply was not acceptable because the revision of land prices had been in the offing since November 2007. The Company had been adopting the revised price, wherever the final allotment had not been made till the revision of the price. Therefore, the Company's decision to charge the pre-revised price after revising the cost of the plot was not a financially prudent decision. Thus, by not collecting the revised price, the Company had foregone the revenue of ₹8.32 crore.

4.6 Non-collection of service tax

Service tax of ₹70.28 lakh as per Finance Act was not collected. There is a further liability for payment of interest of ₹14.82 lakh and penalty of ₹74.27 lakh due to non-registration under service tax and non-collection of service tax.

The Company is engaged in acquisition and development of land with necessary infrastructure facilities for allotment to entrepreneurs. The infrastructure facilities at the industrial complexes include construction of roads, sewerage systems, street lights, water supply system, *etc.* The Company undertakes maintenance of the industrial complexes as per the terms of agreement with the industrial units and is entitled to recover general maintenance charges. The maintenance expenditure is initially incurred by the Company and subsequently recovered from the allottees on pro rata basis.

The Government of India (GOI) through amendment to the Finance Act (Act) under Section 65 (105) (zzg) of the Act, had brought the maintenance of immovable properties within the ambit of service tax with effect from 16 June 2005. However, the Company has not registered as a service provider of the taxable services as per Section 69 of the Act. As per Section 77 of the Act, such non-registration entailed levy of penalty of ₹200 per day during such failure continues. Thus, the Company was liable to pay penalty of ₹3.99 lakh[€] for non-registration.

€ Penalty at the rate of ₹200 per day from 16 June 2005 to November 2010.

The Company earned an income of ₹6.09 crore through the above service during the period from 2005-06 to 2009-10. As a provider of taxable service, the Company has to pay service tax to the GOI by collecting the same from its clients with effect from July 2005. Since, the Company had not collected the same from its clients; it became liable to pay service tax of ₹70.28 lakh to GOI without collection of the same from their clients. Besides, the Company was liable to pay interest of ₹14.82 lakh under Section 75 of the Act. The Company has also become liable for levy of penalty under Section 78 of the Act, which shall be equivalent to 100 *per cent* of the service tax not remitted to GOI.

The Company replied (June 2010) that the infrastructure assets including land in its industrial complexes continued to be their property and only the right of enjoyment has been given to the allottees by way of lease agreement. Since the maintenance of the assets was the Company's responsibility, the above service did not fall under the ambit of maintenance and services and hence, applicability of service tax did not arise.

The reply of the Company was not factually correct as the infrastructure assets leased out for a period of 99 years would tantamount to sale as per the opinion of Institute of Chartered Accountants of India and the maintenance and repair expenditure initially incurred by the Company is subsequently recovered from the allottees. Such recovery is treated as income of the Company and hence would attract Service Tax.

The matter was reported to the Government in May 2010; its reply was awaited (November 2010).

Perambalur Sugar Mills Limited

4.7 Avoidable expenditure

The Company did not enforce completion schedule of godown construction as per the terms of the contract, which resulted in avoidable interest/storage charges of ₹35.72 lakh.

The Company's godowns of 26,100 MT capacity within its factory premises at Perambalur were not sufficient for storage of the entire sugar during the annual crushing season (October to May). Therefore, the Company was dependent on hiring additional capacity. The Company decided (December 2006) to construct additional godown capacity of 4,500 MT and awarded (February 2007) the construction work at a cost of ₹48.67 lakh with scheduled completion by July 2007.

We noticed (September 2009) that due to slow progress of the work by the contractor even the foundation work was not completed by July 2007. We further noticed that the Company had not entered into a formal agreement with the contractor while awarding (February 2007) the work and entered into an agreement only in December 2007. The agreement stipulated that the work was to be completed within four months from the date of handing over of the site though the site was handed over to the contractor in February 2007 itself. The contractor was given a revised completion schedule up to April 2008. However, the construction was completed in June 2009 at a cost of ₹48.24 lakh. The reason for delay in construction was lack of monitoring by the Company. Thus due to delay in construction, between August 2007 and June 2009, the

Company, which was having huge accumulated losses, engaged a godown at Tiruchirappali, belonging to the Central Warehousing Corporation at a cost of ₹25.59 lakh. Since the Company had incurred the cost of construction out of overdraft facilities, the delay in construction also resulted in avoidable interest of ₹10.13 lakh[♦]. Thus, the Company had incurred an overall avoidable expenditure of ₹35.72 lakh.

The Government replied (August 2010) that its efforts to engage a civil engineer to supervise the godown construction did not materialise and for the delay in construction, a sum of ₹2.43 lakh had been recovered as per the provisions of the agreement. The fact remained that the delay in construction of a much needed facility and poor monitoring by the Company had resulted in avoidable expenditure of ₹35.72 lakh.

Tamil Nadu State Construction Corporation Limited

4.8 Delay in finalisation of accounts

The Company has delayed the finalisation of accounts from the year 2002-03 due to non-availability of experienced staff. Consequently, utilisation of the advance of ₹5.25 crore given by the Government could not be vouchsafed in audit.

Section 210 of the Companies Act, 1956 read with Sections 166 and 216 casts the duty on the Board of Directors of the Company to place the accounts of the Company along with the auditor's report including supplementary comments of the CAG in the Annual General Meeting of the share holders within six months of the close of the financial year. As per Section 210 (5), if any person, being the Director of a Company, fails to take all reasonable steps to comply with the provisions of Section 210, he shall be punishable with imprisonment for a term, which may extend to six months or with fine which may extend to ₹10,000 or both. Similar provision exists under Section 210(6) in respect of a person, who is not a Director but is charged with the duty of ensuring compliance with Section 210.

In spite of above provisions in the Companies Act, the Company has not been finalising its accounts in time and there were arrears in finalisation of its accounts since 2002-03 for eight years as on 30 September 2010. The Government extended ways and means advance of ₹5.25 crore between September 2002 to March 2005 for which the accounts were not finalised.

The number of staff which was at 252 in 2004 was reduced to 13 in May 2010. The reason for drastic reduction of staff strength was the inability of the Company to pay their salary due to financial crunch. Consequently, 80 employees of the Company opted (October 2004) for Voluntary Retirement Scheme (VRS) and another 80 employees were sent to other Government organisations/Departments. Therefore, there was absence of skilled employees for finalisation of accounts, which resulted in accumulation of arrears in finalisation of accounts.

♦ At 10.5 *per cent* for two years from July 2007 to June 2009 on ₹48.24 lakh.

In the absence of accounts and subsequent audit, it cannot be ensured that the investments and expenditure incurred have been properly accounted for and the purpose of the investments has been achieved. Thus, the Government's investment in the Company remains outside the scrutiny of the State Legislature. Further, the delay in finalisation of accounts is fraught with the risk of fraud and leakage of public money remaining undetected, apart from violation of the provisions of the Companies Act.

The Government admitted (July 2010) that the delay was due to non-availability of staff and it assured to clear the backlog in a time bound manner.

It is recommended that the Government and the Company management may:

- consider outsourcing the work of preparation of accounts to clear the arrears and
- make a time-bound programme to clear the arrears and monitor it on continuous basis.

Statutory Corporation

Tamil Nadu Electricity Board

4.9 Short collection of Electricity Tax

Computation of Electricity Tax after deducting night hour rebate and Power Factor incentive by wrongly interpreting Tamil Nadu Tax on Consumption or Sale of Electricity Act, 2003 resulted in short collection of tax of ₹38.85 crore.

The Tamil Nadu Tax on Consumption or Sale of Electricity Act, 2003 (Act) notified (June 2003) by the State Government provided for payment of Electricity Tax (Tax) at five *per cent* of the net charge[°] of the electricity sold during the previous month.

In the meantime, Tamil Nadu Electricity Regulatory Commission introduced (16 March 2003) incentives in the form of a rebate, for every increase of 0.01 in Power Factor (PF) exceeding the PF of 0.95, at 0.5 *per cent* of the current consumption charges. The Commission also allowed reduction of 5 *per cent* on the energy charges for the consumption during 22.00 hours to 05.00 hours by the High Tension industrial services.

Even though the Board initially calculated (June 2003) tax on energy consumption without both the rebate for night hour consumption and the PF incentive for levy of tax, it *suo motu* changed the method of computation of tax from July 2003 onwards and levied the same on the consumption charges after allowing both the rebates based on representations from consumers.

Subsequently, it sought (September 2003 and December 2003) clarifications from the Chief Electrical Inspector to Government (CEIG) as to whether the tax could be levied prior to deduction of incentives or otherwise. The Board was directed (December 2003) to address the Government for the required clarification.

However, the Board continued to levy tax after deduction of both the night hour consumption rebate and the PF incentive and issued (January 2004) a circular intimating the change in the method of computation of tax. The Board addressed (September 2007) the Government for necessary clarification as per the opinion of CEIG. The Government clarified (December 2009) that tax has to be calculated before deduction of rebate for PF. Based on the above, the Board issued (July 2010) orders for collection of tax before deduction of the rebates.

As such, failure of the Board to take timely action to obtain clarification by referring the issue to the Government and their unilateral action to levy tax after

° The net charge is the balance amount remaining after deduction of prompt payment rebate, quantum of fuel surcharge or other charges comprising of demand charge and power factor surcharge from the gross amount of the bill.

allowing the rebates has resulted in short collection of tax amounting to ₹38.85 crore for the period from 2003-04 to 2009-10.

The Board replied (April 2008) that as per provisions of the Act, levy of tax was only for the realisable amount and clarifications had been sought (September 2007) from the Government as opined by the CEIG.

The reply was not convincing because the provisions of the Act for collection of tax required proper interpretation at the Government level. But the Board delayed getting the required clarification from January 2004 to September 2007 resulting in short collection of Tax.

The matter was reported to the Government in September 2010; its reply was awaited (November 2010).

4.10 Avoidable extra expenditure

The Board failed to analyse the capabilities of the lowest tenderer resulting in avoidable extra expenditure of ₹7.07 crore.

The Board floated (May 2005) a tender for purchase of twelve Auto Transformers (AT) of 100 MVA, 230/110/11 KV capacity. As per the tender requirements, the tenderer should be a manufacturer of AT and should have supplied AT of similar/higher capacity to any of the State Electricity Boards (SEBs)/Power Utilities/Generating companies. The AT should have been in successful operation for a minimum of two years. Any tenderer who did not satisfy the above conditions would be treated as a 'new entrant' and the Board reserved the right to place orders up to 10 *per cent* of the tendered quantity, if he happened to be the lowest tenderer.

The technical and price bids were opened in July and September 2005 respectively. Transformers and Rectifiers (India) Limited, Ahmedabad (T&R), who offered to supply all the 12 ATs at an all inclusive price of ₹3.80 crore per AT was the lowest tenderer (L-1). The Board, however, decided to treat T&R as a 'new entrant' since they had not supplied AT of that specification earlier. Accordingly, the Board placed (November/December 2005) orders for only five ATs on T&R and two[♦] other 'new entrant' firms. The Board also decided to retender the balance quantity.

In a fresh tender floated in December 2005 for purchase of 12 ATs with similar specifications as that of May 2005, T&R was again the lowest tenderer at an all inclusive price of ₹4.81 crore per AT (excluding erection charges).

The Board, which had classified T&R as a 'new entrant' in July 2005, treated them as a regular supplier against this tender in view of the earlier supply order of November 2005. The Board placed (August 2006) 60 *per cent* of the tendered quantity (seven ATs) on T&R and placed orders for balance five ATs on L-2 at the unit price of ₹5.05 crore per AT. The ATs were supplied between April 2007 and January 2008.

We noticed (January 2010) that the Board erred in evaluating the capabilities of lowest tenderer. Prior to May 2005, T&R had already manufactured and

♦ Indotec Transformers Limited and Kanohar.

supplied (April 2002) two ATs♣ to Gujarat SEB and received (March 2005) orders for two ATs♦ and six ATs € from Power Grid Corporation of India. Thus, T&R, who was to be classified as a regular manufacturer as per the tender specifications in both the tenders was treated as 'new entrant' in September 2005. Had the Board classified T&R as a regular supplier in September 2005 itself and purchased seven ATs at an all inclusive price of ₹3.80 crore per AT instead of purchasing them at a higher cost of ₹4.81 crore (all inclusive price) per AT from the same supplier, it could have avoided the extra expenditure of ₹7.07 crore.

The matter was reported to the Government/Board in April 2010. Their replies were awaited (November 2010).

4.11 Loss of revenue due to delay in extending additional load

The Board took 60 to 284 days over and above the prescribed time for effecting new service connections and supply of additional load resulting in loss of revenue of ₹4.73 crore.

Section 43(1) of the Electricity Act, 2003, read with Regulation 4 of Tamil Nadu Electricity Distribution Standards of Performance Regulation, 2004 (Regulations) issued (September 2004) by the Tamil Nadu Electricity Regulatory Commission (TNERC) stipulate that the Board shall provide High Tension (HT) and Extra High Tension (EHT) service connection to a consumer within 150 days of receipt of application wherever such service connection involves extension and improvement to the Board's facilities. In case of extension of additional load without involving any extension or improvement work, the same was to be effected within 30 days. To adhere to the time schedule given by the TNERC, the Board had also issued (May 2005) a flow chart stipulating a time schedule for activities involved in the service connection.

We noticed that the Board did not adhere to the time schedule while giving new service connections/extension of additional loads in respect of three HT consumers as detailed below:

Details of events	Name of the Consumer			
	BYD Electronics India Private Limited (10,500 KVA)	Hyundai Motor India Limited (7,000KVA)	Hyundai Motor India Limited (5,000KVA)	Jet Associates (10,500 KVA)
Date of submission of application	25.01.2008	03.04.2007	06.06.2008	07.11.2007
Date of registration of application	03.03.2008	24.05.2007	08.07.2008	23.02.2008
Date of sanction	02.09.2008	26.06.2007	27.09.2008	21.05.2008

♣ 100 MVA 220/60 KV capacity.

♦ 100 MVA/220/132 KV capacity.

€ 220/3/132/3KV capacity.

Details of events	Name of the Consumer			
	BYD Electronics India Private Limited (10,500 KVA)	Hyundai Motor India Limited (7,000KVA)	Hyundai Motor India Limited (5,000KVA)	Jet Associates (10,500 KVA)
Date of supply	21.7.2009	30.06.2007	17.10.2008	15.06.2009
Total time taken	548 days	90 days	137 days	559 days
Total time allowed	150 days	30 days	30 days	150 days
Excess time taken	398 days	60 days	107 days	409 days
Unavoidable excess time	114 days	---	---	204 days
Avoidable excess time	284 days	60 days	107 days	205 days

The Board took excess time for extension of supply in all the three cases. Our analysis of the controllable factors attributable to the delay is given below:

Jet Associates

The Board took 113 days for taking up line extension, from the date of registration mainly on account of delay in preparing the feasibility report and obtaining sanction for which the time allowed was only 23 days as per TNERC's regulations. As against the time limit of 127 days for carrying out line extension work, the Board took 353 days including 101 days for solving a dispute over the land required for carrying out the line extension works. A delay of 60 days was attributable to processing the tender for award of deposit works and another 65 days in procuring current transformer and execution of work for which there were no valid reasons on record. This resulted in Board foregoing revenue in the form of Maximum Demand Charges amounting to ₹1.93 crore.

BYD Electronics India Private Limited

As against the time limit of one day for registration of application, the Board took 38 days. It took another 75 days for preparation of feasibility report and sanction of the estimate for which the time allowed was only 15 days. In addition, the Board took 308 days for carrying out the line extension work and affecting the supply against the time limit of 127 days. The extra time was attributable to absence of control over procurement and delay in execution of the line extension work. Consequently, the Board had foregone revenue in the form of maximum demand charges of ₹1.94 crore.

Hyundai Motor Limited

There was a total delay of 60 to 102 days in effecting the additional loads of 7,000 KVA and 5,000 KVA respectively, as brought out in the table. These delays at every stage were purely procedural delays as no line extension work was involved. Consequently, the Board had incurred an avoidable revenue loss of ₹86 lakh being the maximum demand charges payable by the consumer.

Thus, the Board has forgone overall revenue loss of ₹4.73 crore due to non-adhering to time schedule in effecting the new/extending service connections.

The matter was reported to the Board/Government in May 2010; their replies were awaited (November 2010).

4.12 Loss due to non-implementation of tariff

Failure/delay in imposing tariff provisions for levy of higher tariff charges for electricity consumption by the commercial establishments within software parks resulted in non-recovery of ₹2.63 crore.

As per the tariff orders prescribed by the Tamil Nadu Electricity Regulatory Commission (TNERC) with effect from 16 June 2003, software industries are classifiable under High Tension Industrial Tariff (HT-I)*. TNERC also clarified (June 2003) that any HT-I consumer extending electricity supply to other consumers within their premises for any commercial purpose has to install a separate meter at these commercial establishments. Such arrangement would enable the Board to bill the commercial consumption under Low Tension Commercial Tariff∝.

We noticed (April 2010) that the Board had extended HT service connections to 97 IT industries/software parks throughout the State by March 2009. Many of these software parks had commercial establishments like catering services, ATM counters, bank branches, departmental stores, *etc*., within their premises. The Board did not insist upon installation of separate meters to assess their electricity consumption and bill them under the LT Commercial Tariff. This failure resulted in loss of revenue of ₹2.63 crore as detailed below:

(1) Tidel Park Limited, Chennai (TPL) had a HT service connection with a sanctioned demand of 9,200 KVA since June 2000. The Board (September 2006) found that TPL had leased out space to commercial establishments and directed (October 2006) TPL to install separate LT meters for these commercial establishments. Even after obtaining the details of connected load of 518 KW in April 2007 itself, the Board delayed raising demand under LT Commercial Tariff up to February 2008. When Board raised a consolidated demand for ₹2.13 crore for the period from April 2003 to July 2007, TPL, however, refused (March 2008) to pay the tariff arrears contending that the same were not recoverable from its former clients, who had already vacated the premises. Consequently, the amount remains unsettled till date (November 2010).

This demand was also in direct contravention of TNERC orders, which had already imposed (June 2003) an embargo for recovery of any arrears of over two years unless the arrears was shown recoverable continuously from the month in which it became first due. Accordingly, out of the above claim of

* Under HT Tariff-I, the current consumption charges per unit of power is ₹3.50 in addition to payment of demand charges for higher of 90 *per cent* of sanctioned demand or actual demand.

∝ The rate per unit under Low Tension Commercial Tariff is ₹5.30 per unit for first 100 units and thereafter ₹5.80 per unit.

₹2.13 crore, the arrears of ₹1.50 crore pertaining to April 2003 to February 2006 had already become time barred by the time the Board raised the demand. However, TPL had not even settled the balance recoverable amount of ₹62.88 lakh till date (November 2010). Thus, the delay in claiming the arrears even after detection of unauthorised commercial service connection rendered ₹1.50 crore as time barred and irrecoverable.

(2) During inspection, the Board detected (December 2009) that four such IT companies of Chennai had permitted commercial enterprises with a connected load of 307 KW to run their business inside their premises. Accordingly, the Board worked out the extra levy of ₹1.13 crore[€] on unauthorised usage of electricity for commercial purposes but could not recover the amount as these companies refused to pay the amount. The Government requested (December 2009) the Board to reconsider the issue. Thereafter, the Board decided (March 2010) to bill these facilities under the category of HT tariff on the ground that they are predominantly for the use of the employees of the IT companies.

We observed (April 2010) that the applicability of LT commercial tariff to these commercial enterprises emerged from the TNERC's tariff regulations and the Board had no authority to allow extra concessions to the IT consumers on its own. Thus, by violating the tariff regulations of TNERC, the Board passed on an unintended benefit of ₹1.13 crore to these IT companies.

Thus, the Board's failure to assess the current consumption of commercial establishments regularly by installing meters coupled with belated action for recovering the arrears and unwarranted concessions even after noticing the violations led to loss of revenue of ₹2.63 crore.

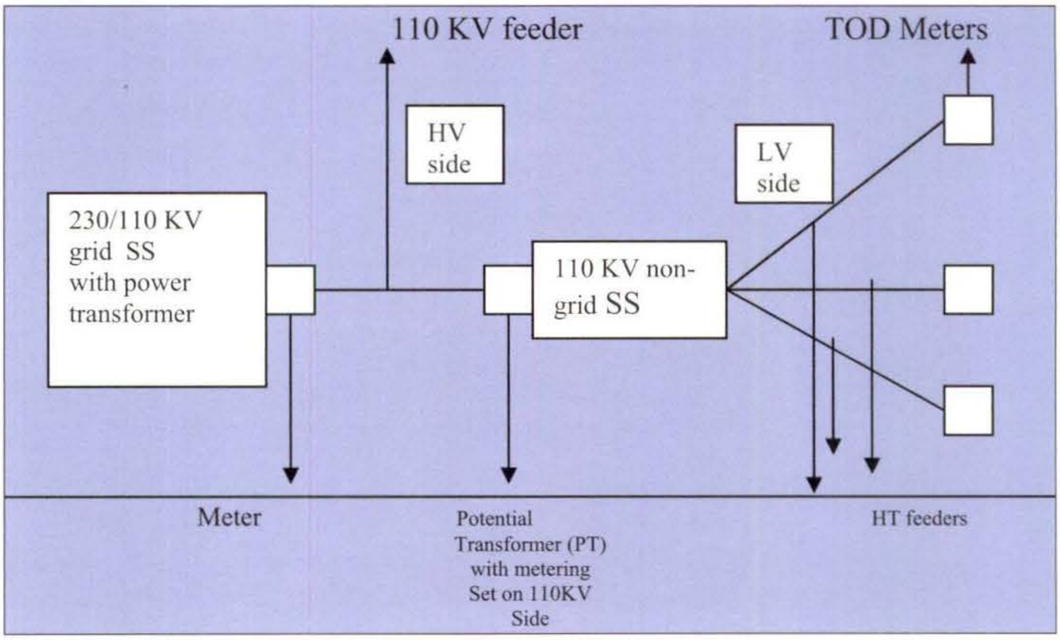
The matter was reported to the Government/Board in April 2010. Their replies were awaited (November 2010).

4.13 Unwarranted installation of potential transformers

Disregarding its own decisions, the Board installed unwarranted 252 potential transformers worth ₹2.30 crore in non-grid sub-stations.

The Tamil Nadu Electricity Board (TNEB) has established two broad categories of sub-station (SS) *viz.*, grid SS and non-grid SS for transmission of power. In Non- Grid SS, the standard arrangement is to provide meters on all out going HT feeders for assessing line losses. In addition to the above arrangement, the Board had been using potential transformers (PT) along with meters in 110 KV non-grid SS, which enabled measurement of power on the HV side whenever the power was received at a voltage level higher than the handling capacity of the power transformers. A flow chart of metering arrangements at grid and non-grid SS is given below:

€ Calculated by the Board for 12 months prior to the date of detection (December 2009) as per Electricity Act, 2003.



The Transmission and Planning Wings of the Board observed (June 2001) that installation of PT had a limited role of determining the power transformer losses and was superfluous as the losses were specified and guaranteed by the suppliers of power transformers themselves. The Board further observed that metering of 110 KV feeders of 230/110 KV SS also facilitated determination of transmission loss including transformer loss, which was the difference between the incoming energy at 110 KV feeders and the sum of all outgoing HT feeders. Based on the above proposal, the Chairman of the Board decided (August 2001) to dispense with PTs in non-grid SS with immediate effect.

We noticed (May 2008) that the Planning Wing of the Board was oblivious of the Chairman's directions and continued to issue sanction orders for installation of PTs in non-grid 110 KV SS across the State. The data furnished by all the six General Construction Circles (GCC) revealed that during the period from September 2002 to October 2008, 252 PTs were installed in 83 non-grid 110 KV SS resulting in an avoidable expenditure of ₹2.30 crore. However, GCC, Madurai had not installed PTs in 40 out of 44 non-grid SS during the above period, which indicated that installation of PTs in non-grid SS was unwarranted. Consequent on pointing out the non-compliance of the Chairman's directions by Audit, the Chief Engineer (Transmission) issued (June 2009) directions to the Distribution Circles to release the PTs so erected and hand them over to the GCC's stores.

This failure of the Board to ensure strict implementation of its decision not to install PTs in non-grid SS resulted in unwarranted investment of ₹2.30 crore.

The matter was reported to the Government/Board in April 2010. Their replies were awaited (November 2010).

4.14 Failure to deduct income tax at source

The Board failed to deduct income tax at source from the payments made towards infrastructure works for wind energy evacuation. Consequently, the Board was liable to pay ₹2.07 crore towards income tax and interest.

The Board, since July 2003, had been awarding to the Wind Energy Developers (WED) execution of infrastructure works such as dedicated wind farm sub stations (SS), erection of transformers within SS, laying of high tension lines *etc.* The Board authorised the WEDs to execute the works initially at their cost subject to reimbursement through the infrastructure development charges payable by them to the Board. On successful completion/commissioning of the works by the developers, the Board capitalised these as its assets. Thus, the above arrangement between the Board and the wind energy developers constitutes a composite works contract.

Under section 194 (C) (1) of the Income tax Act, 1961 (Act) any person responsible for paying any sum to the contractor for carrying out any work in pursuance of the contract between them shall deduct two *per cent* of such sum as income tax at source (TDS). Section 201 (1A) of the Act further provides for levy of interest at one *per cent* per month or part thereof from the date on which the tax was deductible till the date of actual payment.

We noticed (February 2010) that between December 2003 and March 2009 the wind energy developers had executed 47 works in Tirunelveli and Udumalpet wind energy distribution circles and the cost of the work portion was ₹130.78 crore. Out of these works, the Board had so far (December 2009) reimbursed ₹79.32 crore in respect of 34 works without deducting TDS amounting to ₹1.59 crore, thereby violating the provisions of IT Act. Consequently, the Board was liable to pay income tax of ₹1.59 crore and an interest of ₹48.50 lakh under section 201 (1A) of the Act, for not collecting TDS. This failure of the Board to collect TDS from the windmill developers had resulted in unwarranted tax/interest liability of ₹2.07 crore

The Board in their initial reply (August 2010) has stated that the notices had been issued to respective companies for recovery of TDS.

The matter was reported to the Government/Board in April 2010. Their replies were awaited (November 2010).

4.15 Unintended benefit to an independent power producer

The Board did not collect the charges for the excess over the sanctioned demand as per tariff regulations and incorrectly refunded the penalty for low power factor, thereby extending an unintended benefit of ₹1.59 crore to a supplier of power.

The tariff schedule for High Tension Service Connection (HTSC) comprises Current Consumption (CC) charges and maximum demand (MD) charges. The MD charges for any month would be levied on the demand recorded in a month or 90 *per cent* of the sanctioned demand, whichever was higher. As per the Tamil Nadu Electricity Supply Code of September 2004, whenever the recorded demand of HTSC exceeded the sanctioned demand, the excess demand shall be charged at double the normal rate of demand charges. The code also provided for levy of penalty for non-achievement of 90 *per cent* of the power factor of the load.

The Board entered (September 2003) into a Power Purchase Agreement (PPA) with ABAN Power Company Limited (ABAN), Chennai for purchase of power at pre-determined tariff rates obtained through competitive bidding. As per the PPA, the Board was to provide necessary power required for commissioning of the project and such power was to be billed under HT tariff-III (commercial establishment). Further, on ABAN's request (December 2004), the Board effected an HTSC on 31 December 2004 for a sanctioned load of 2,000 KVA. ABAN availed the power up to 11 August 2005. For this period, the Board collected ₹77.58 lakh as MD charges and ₹77.33 lakh as penalty for low power factor (LPF).

We noticed (January 2010) that the recorded demand of ABAN was always higher than the sanctioned demand ranging between 2,360 KVA to 5,160 KVA during the above period (except in June 2005). Though ABAN was liable to pay double the normal rate for the excess demand/billable demand amounting to ₹81.60 lakh, the Board did not levy the appropriate charges so far (November 2010).

In respect of LPF, though the Board collected penalty of ₹77.33 lakh along with the monthly bills but refunded (January 2006) the same stating that such penalty would ultimately result in an additional burden to itself as the tariff payable to ABAN was based on the capital cost up to the date of commercial operations. The contention of the Board was not correct as the PPA with ABAN provided for payment of pre-determined tariff rates for purchase of power (levelised tariff), which was not related to the actual capital cost.

Hence, the Board should have levied both the penalty for LPF and the appropriate demand charges for excess over the sanctioned demand as per the HT tariff. Further in respect of another Independent Power Producer, *viz.*, Arkay Energy Limited, Ramnad district, the Board had collected penalty for LPF as per the tariff rules.

The Government replied (May 2010) that based on the audit observation, the Board had decided to recover the LPF charges and shortfall in MD charges. It further stated that the same could not be recovered because ABAN had approached (April 2010) the High Court, Chennai against the recovery.

Thus, non-adherence to the tariff rules while collecting the tariff charges and incorrect refund of LPF penalty resulted in unintended benefit of ₹1.59 crore to an IPP.

4.16 Avoidable loss of interest

Failure to demand documentary evidence of monthly claims of independent power producer as per power purchase agreement resulted in overpayments and consequential loss of interest.

The Board had been purchasing power from PPN Power Generating Company Limited, Quaid-e-Mileth district (PPN) an Independent Power Producer (IPP) since April 2001. As per the Power Purchase Agreement (PPA) entered into (January 1997) with PPN, the Board had to pay fixed capacity charges, variable fuel cost and incentive charges accrued in the previous months as stated in the invoice. The Board, however, was entitled to have access to all the relevant information/records of PPN to confirm the accuracy of the invoices before making payments based on invoice. In case the Board had chosen to treat any claim as 'disputed claim' due to non-production of documentary evidence for such claims *etc*., the same should be recorded as such to enable refund of excess claims, if any, along with interest at the rates of cash credit interest charged by the State Bank of India plus 0.5 *per cent*. In addition to the above, an annual invoice indicating the sum receivable for the year *vis-a-vis* the actual monthly payments received was to be furnished to the Board by PPN.

We noticed (July 2009) that though the Board had been making payments on monthly bills since 2001-02, it neither demanded documentary evidence for the monthly claims nor the annual invoices after close of every financial year. PPN submitted its annual invoices for the years 2001-02 to 2006-07, for the first time only in July 2007. A scrutiny of annual invoices submitted by PPN and the payments made by the Board against the monthly invoices revealed that the Board had admitted ₹4.97 crore towards other finance charges (OFC) during 2001-02 to 2006-07 against ₹2.41 crore actually admissible to PPN. The overpayment of OFC, which was an element of debt repayment could have been avoided had the Board called for documentary evidence for such payments. However, the Board neither called for proof of actual expenditure nor treated the claim for OFC as "disputed" as per the terms of the PPA. As a result, the Board could recover the excess payment of OFC charges amounting to ₹2.56 crore in the forthcoming bills of PPN, but could not claim interest of ₹1.07 crore on the excess OFC of ₹2.56 crore.

Thus, Board's failure to demand documentary evidence for monthly claims as per the terms of agreement resulted in loss of interest of ₹1.07 crore.

We recommend that the Board should obtain the documentary evidence for the payments made from all the power suppliers to ensure that payments are made as per the terms of the contract.

The matter was reported to the Government/Board in April 2010. Their replies were awaited (November 2010).

General

4.17 Follow-up action on Audit Reports

Explanatory notes outstanding

4.17.1 The Audit Reports of the CAG represents 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 Tamil Nadu had issued instructions (January 1991) to all Administrative Departments to submit explanatory notes indicating a corrective/remedial action taken or proposed to be taken on the 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 1999-2000, 2000-01, 2001-02, 2002-03, 2003-04, 2004-05, 2005-06, 2006-07, 2007-08 and 2008-09 were presented to the State Legislature in September 2001, May 2002, May 2003, July 2004, September 2005, August 2006, May 2007, May 2008, July 2009 and May 2010 respectively. Ten out of 21 departments, which were commented upon, had not submitted explanatory notes on 39 out of 133 paragraphs/reviews, as of 30 November 2010, as indicated below:

Year of Audit Report (Commercial)	Total number of paragraphs/review in the Audit Report	Number of paragraphs/reviews for which explanatory notes were not received♥
1999-2000	28	1
2000-01	25	1
2001-02	32	1
2007-08	24	12
2008-09	24	24
TOTAL	**133**	**39**

Department-wise analysis is given in the **Annexure-22**. The Energy Department is responsible for non-submission of large number of explanatory notes.

♥ Paras/reviews for which no explanatory notes were received but discussed by COPU are excluded.

Compliance with the Reports of Committee on Public Undertakings (COPU)

4.17.2 The action taken notes to the paragraphs included in the Report of the COPU are to be furnished by the concerned departments within six weeks from the date of presentation of these reports to the State Legislature. Replies to 50 paragraphs pertaining to 15 Reports of COPU presented to the State Legislature between January 2003 and May 2010 had not been received as of 30 November 2010 as indicated below:

Year of COPU Report	Total number of Reports involved	Number of paragraphs in respect of which replies were not received
2002-03	5	5
2003-04	3	5
2004-05	2	3
2006-07	2	5
2009-10	3	32
TOTAL	**15**	**50**

Response to inspection reports, draft paragraphs and reviews

4.17.3 Audit observations noticed during audit and not settled on the spot are communicated to the heads of the Public Sector Undertakings (PSUs) and departments of the State Government through inspection reports. The heads of PSUs are required to furnish replies to the inspection reports through the respective heads of departments within a period of six weeks. Inspection reports issued up to March 2010 pertaining to 55 PSUs disclosed that 2,658 paragraphs relating to 675 inspection reports remained outstanding at the end of September 2010; of these, 62 inspection reports containing 193 paragraphs had not been replied to for more than two years. Department-wise break-up of inspection reports and audit observations outstanding as on 30 September 2010 are given in **Annexure-23.**

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 11 draft paragraphs and two reviews forwarded to the various departments during the period from April to December 2010, as detailed in **Annexure-24**, had not been replied so far (December 2010).

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

Chennai
The 19 MAY 2011

(SUBHASHINI SRINIVASAN)
Principal Accountant General
(Commercial and Receipt Audit),
Tamil Nadu

Countersigned

New Delhi
The 24 MAY 2011

(VINOD RAI)
Comptroller and Auditor General of India

ANNEXURES

ANNEXURE-1

(Referred to in paragraph 1.7)

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

(Figures in column 5(a) to 6(d) are ₹ in crore)

Sl. No.	Sector and name of the Company	Name of the Department	Month and year of incorpo-ration	Paid-up capital				Loans outstanding at the close of 2009-10				Debt equity ratio 2009-10 (previous year)	Manpower
				State Govern-ment	Central Govern-ment	Others	Total	State Govern-ment	Central Govern-ment	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.	Tamil Nadu Fisheries Development Corporation Limited (TN Fisheries)	Fisheries	April 1974	4.46	---	---	4.46	---	---	---	---	---- (0.05:1)	179
2.	Tamil Nadu Forest Plantation Corporation Limited (TAFCORN)	Environment and Forest	June 1974	3.76	---	---	3.76	---	---	---	---	---	408
3.	Tamil Nadu Tea Plantation Corporation Limited (TANTEA)	Environment and Forest	August 1975	5.96	---	---	5.96	---	---	---	---	---	6,762
4.	Arasu Rubber Corporation Limited (ARC)	Environment and Forest	August 1984	8.45	---	---	8.45	---	---	---	---	---	1,979
	Sector wise total			**22.63**	**---**	**---**	**22.63**	**---**	**---**	**---**	**---**	**---**	**9,328**
	FINANCE												
5.	Tamil Nadu Industrial Investment Corporation Limited (TIIC)	Micro, Small and Medium Enterprises	March 1949	266.02	---	17.47	283.49	---	---	248.27	248.27	0.88:1 (1.16:1)	591

Sl. No.	Sector and name of the Company	Name of the Department	Month and year of incorpo-ration	Paid-up capital				Loans outstanding at the close of 2009-10				Debt equity ratio 2009-10 (previous year)	Manpower
				State Govern-ment	Central Govern-ment	Others	Total	State Govern-ment	Central Govern-ment	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.	Tamil Nadu Handloom Development Corporation Limited (TN Handloom)	Handloom, Handicrafts, Textiles and Khadi	September 1964	4.29	---	---	4.29	---	---	---	---	---	17
7.	Tamil Nadu Small Industries Development Corporation Limited (TNSIDCO)	Micro, Small and Medium Enterprises	March 1970	8.70	---	---	8.70	---	---	---	---	---	446
8.	Tamil Nadu Adi-dravidar Housing and Development Corporation Limited (TAHDCO)	Adi-dravidar and Tribal Welfare	February 1974	50.18	44.94	---	95.12	0.09	---	---	0.09	---	372
9.	Tamil Nadu Transport Development Finance Corporation Limited (TDFC)	Transport	March 1975	43.03	---	18.71	61.74	---	---	30.00	30.00	0.49:1 (0.65:1)	36
10.	Tamil Nadu Backward Classes Economic Development Corporation Limited (TABCEDCO)	Backward Classes and Most backward classes Welfare	November 1981	12.27	---	---	12.27	---	---	---	---	---	18
11.	Tamil Nadu Corporation for Development of Women Limited (TN Women)	Social Welfare and Noon-meal programme	December 1983	0.40	0.38	---	0.78	---	---	---	---	---	550
12.	Tamil Nadu Urban Finance and Infrastructure Development Corporation Limited (TUFIDCO)	Municipal Adminis-tration and Water Supply	March 1990	31.02	---	0.98	32.00	---	---	368.20	368.20	11.51:1 (15.33:1)	35

Sl. No.	Sector and name of the Company	Name of the Department	Month and year of incorpo-ration	Paid-up capital				Loans outstanding at the close of 2009-10				Debt equity ratio 2009-10 (previous year)	Manpower
				State Govern-ment	Central Govern-ment	Others	Total	State Govern-ment	Central Govern-ment	Others	Total		
(1)	(2)	(3)	(4)	5 (a)	5 (b)	5 (c)	5 (d)	6 (a)	6 (b)	6 (c)	6 (d)	(7)	(8)
13.	Tamil Nadu Minorities Economic Development Corporation Limited (TAMCO)	Backward Classes and Most backward classes Welfare	August 1999	2.05	---	---	2.05	--	---	---	---	--- (14.73:1)	9
	Sector wise total			**417.96**	**45.32**	**37.16**	**500.44**	**0.09**	**---**	**646.47**	**646.56**	**1.29:1**	**2,074**
	INFRASTRUCTURE												
14.	Tamil Nadu Industrial Development Corporation Limited (TIDCO)	Industries	May 1965	72.03	---	---	72.03	175.59	---	---	175.59	2.44:1 (3.83:1)	78
15.	State Industries Promotion Corporation of Tamil Nadu Limited (SIPCOT)	Industries	March 1971	123.91	---	---	123.91	100.00	---	---	100.00	0.81:1	293
16.	Tamil Nadu State Construction Corporation Limited (TN State Construction)	Public works	February 1980	5.00	---	---	5.00	1.00	---	---	1.00	0.20:1	91
17.	Tamil Nadu Police Housing Corporation Limited (TN Police Housing)	Home	April 1981	1.00	---	---	1.00	---	---	---	----	---	275
18.	Tidel Park Limited (TIDEL, Chennai)	Information Technology	December 1997	---	---	44.00	44.00	---	---	---	---	---	29
19.	Tamil Nadu Rural Housing and Infrastructure Development Corporation Limited (TN Rural Housing)	Rural Development and Panchayat Raj	January 1999	3.00	---	---	3.00	---	---	---	---	---	

Sl. No.	Sector and name of the Company	Name of the Department	Month and year of incorpo-ration	Paid-up capital				Loans outstanding at the close of 2009-10				Debt equity ratio 2009-10 (previous year)	Manpower
				State Govern-ment	Central Govern-ment	Others	Total	State Govern-ment	Central Govern-ment	Others	Total		
(1)	(2)	(3)	(4)	5 (a)	5 (b)	5 (c)	5 (d)	6 (a)	6 (b)	6 (c)	6 (d)	(7)	(8)
20.	Nilakottai Food Park Limited (Nilakottai)	Industries	April 2004	---	---	0.68	0.68	---	---	---	---	---	
21.	Guindy Industrial Estate Infrastructure Upgradation Company (Guindy Estate)	Micro, Small and Medium Enterprises	June 2004	---	---	0.01	0.01	---	---	---	---	---	4
22	Tamil Nadu Road Infrastructure Development Corporation (TN Road)	Highways	March 2005	5.00	---	---	5.00	---	---	---	---	---	16
23.	Tidel Park Coimbatore Limited (TIDEL,Coimbatore)	Information Technology	June 2007	---	---	90.00	90.00	---	---	112.05	112.05	1.25:1 (0.92:1)	4
24	Adyar Poonga	Municipal Adminis-tration and Water Supply	October 2008	0.10	---	---	0.10	---	---	---	---	---	2
	Sector wise total			**210.04**	**---**	**134.69**	**344.73**	**276.59**	**---**	**112.05**	**388.64**	**1.13:1**	**792**
	MANUFACTURING												
25.	Southern Structurals Limited (SSL)	Industries	October 1956	34.35	0.04	0.15	34.54	70.43	---	---	70.43	2.04:1 (2.03:1)	
26.	Tamil Nadu Small Industries Corporation Limited (TANSI)	Micro, Small and Medium Enterprises	September 1965	20.00	---	---	20.00	17.20	---	---	17.20	0.86:1 (0.97:1)	211

Sl. No.	Sector and name of the Company	Name of the Department	Month and year of incorpo-ration	Paid-up capital				Loans outstanding at the close of 2009-10				Debt equity ratio 2009-10 (previous year)	Manpower
				State Govern-ment	Central Govern-ment	Others	Total	State Govern-ment	Central Govern-ment	Others	Total		
(1)	(2)	(3)	(4)	5 (a)	5 (b)	5 (c)	5 (d)	6 (a)	6 (b)	6 (c)	6 (d)	(7)	(8)
27.	Tamil Nadu Textiles Corporation Limited (TN Textiles)	Handloom, Handicrafts, Textiles and Khadi	April 1969	1.54	---	---	1.54	1.12	---	---	1.12	0.73:1 (0.73:1)	144
28.	Tamil Nadu Zari Limited (TN Zari)	Handloom, Handicrafts, Textiles and Khadi	December 1971	0.34	---	---	0.34	---	---	---	---	---	118
29.	Tamil Nadu Handicrafts Development Corporation Limited (TN Handrcrafts)	Handloom, Handicrafts, Textiles and Khadi	July 1973	2.05	1.16	0.01	3.22	---	---	---	---	--- (0.16:1)	145
30.	Tamil Nadu Salt Corporation Limited (TN Salt)	Industries	July 1974	3.17	---	---	3.17	---	---	---	---	---	61
31.	Tamil Nadu Sugar Corporation Limited (TASCO)	Industries	October 1974	6.79	---	1.00	7.79	34.50	---	25.56	60.06	7.71:1 (7.71:1)	400
32.	Tamil Nadu Cements Corporation Limited (TANCEM)	Industries	February 1976	37.42	---	---	37.42	---	---	---	---	--- (0.19:1)	1,123
33.	Perambalur Sugar Mills Limited (PSM) (subsidiary of TASCO)	Industries	July 1976	---	---	4.17	4.17	11.32	---	28.42	39.74	9.53:1 (9.53:1)	381
34.	State Engineering and Servicing Company of Tamil Nadu Limited (SESCOT) (subsidiary of TANSI)	Micro, Small and Medium Enterprises	April 1977	---	---	0.50	0.50	---	---	2.29	2.29	4.58:1 (14.32:1)	
35.	Tamil Nadu Minerals Limited (TAMIN)	Industries	April 1978	15.74	---	---	15.74	---	---	---	---	---	1,610

Sl. No.	Sector and name of the Company	Name of the Department	Month and year of incorpo-ration	Paid-up capital				Loans outstanding at the close of 2009-10				Debt equity ratio 2009-10 (previous year)	Manpower
				State Govern-ment	Central Govern-ment	Others	Total	State Govern-ment	Central Govern-ment	Others	Total		
(1)	(2)	(3)	(4)	5 (a)	5 (b)	5 (c)	5 (d)	6 (a)	6 (b)	6 (c)	6 (d)	(7)	(8)
36.	Tamil Nadu Magnesite Limited (TANMAG)	Industries	January 1979	16.65	---	---	16.65	---	---	---	---	--- (0.05:1)	468
37.	Tamil Nadu Telecommunication Limited (TTL)	Industries	April 1979	---	---	22.67	22.67	---	---	26.09	26.09	1.15:1 (1.08:1)	80
38.	Tamil Nadu Industrial Explosives Limited (TIEL)	Industries	February 1983	22.14	---	4.89	27.03	66.81	---	---	66.81	2.47:1 (0.47:1)	553
39.	Tamil Nadu Medicinal Plant Farms and Herbal Medicine Corporation Limited (TAMPCOL)	Indian Medicine and Homeopathy	September 1983	1.00	---	---	1.00	---	---	---	---	---	109
40.	Tamil Nadu Leather Development Corporation Limited (TALCO)	Micro, Small and Medium Enterprises	March 1983	2.50	---	---	2.50	23.76	---	0.85	24.61	9.84:1	1
41.	Tamil Nadu Paints and Allied Products Limited (TAPAP)	Micro, Small and Medium Enterprises	November 1985	---	---	0.02	0.02	---	---	---	---	---	11
42.	Tamil Nadu Newsprint and Papers Limited (TNPL)	Industries	May 1988	24.45	---	44.93	69.38	---	---	1,002.96	1,002.96	14.46:1 (6.94:1)	1,823
	Sector wise total			**188.14**	**1.20**	**78.34**	**267.68**	**225.14**	**---**	**1,086.17**	**1,311.31**	**4.90:1**	**7,238**
	POWER												
43.	Tamil Nadu Power Finance and Infrastructure Development Corporation Limited (TN Powerfin)	Energy	June 1991	50.00	---	---	50.00	---	---	---	---	--- (4.91:1)	22

Sl. No.	Sector and name of the Company	Name of the Department	Month and year of incorpo-ration	Paid-up capital				Loans outstanding at the close of 2009-10				Debt equity ratio 2009-10 (previous year)	Manpower
				State Govern-ment	Central Govern-ment	Others	Total	State Govern-ment	Central Govern-ment	Others	Total		
(1)	(2)	(3)	(4)	5 (a)	5 (b)	5 (c)	5 (d)	6 (a)	6 (b)	6 (c)	6 (d)	(7)	(8)
44.	Udangudi Power Corporation Limited (Udangudi Power)	Energy	December 2008	---	----	10.00	10.00	---	---	---	---	---	
45.	Tamil Nadu Transmission Corporation Limited (TANTRANSCO)	Energy	June 2009	0.05	---	---	0.05	---	---	---	---	---	
46.	Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO)	Energy	December 2009	0.05	---	---	0.05	---	---	---	---	---	
	Sector wise total			**50.10**	**0.00**	**10.00**	**60.10**	**---**	**---**	**---**	**---**	**---**	**22**
	SERVICE												
47.	Tamil Nadu Tourism Development Corporation Limited (TTDC)	Information and Tourism	June 1971	10.43	---	---	10.43	---	---	---	---	--- (0.35:1)	572
48.	Tamil Nadu Civil Supplies Corporation Limited (TNCSC)	Co-operation, Food and Consumer Protection	April 1972	43.75	---	---	43.75	---	---	---	---	---	18,288
49.	Poompuhar Shipping Corporation Limited (PSC)	Highways & Minor Ports	April 1974	20.53	---	---	20.53	----	---	---	---	---	138
50.	Electronics Corporation of Tamil Nadu Limited (ELCOT)	Information Technology	March 1977	25.93	---	---	25.93	---	---	---	---	---	185
51.	Overseas Manpower Corporation Limited (OMPC)	Labour & Employment	November 1978	0.15	---	---	0.15	---	---	---	---	---	18
52.	Tamil Nadu State Marketing Corporation Limited (TASMAC)	Prohibition & Excise	May 1983	15.00	---	---	15.00	---	---	---	---	---	30,499
53.	Pallavan Transport Consultancy Services Limited (PTCS)	Transport	February 1984	---	---	0.10	0.10	---	---	---	---	---	11

Sl. No.	Sector and name of the Company	Name of the Department	Month and year of incorpo-ration	Paid-up capital				Loans outstanding at the close of 2009-10				Debt equity ratio 2009-10 (previous year)	Manpower
				State Govern-ment	Central Govern-ment	Others	Total	State Govern-ment	Central Govern-ment	Others	Total		
(1)	(2)	(3)	(4)	5 (a)	5 (b)	5 (c)	5 (d)	6 (a)	6 (b)	6 (c)	6 (d)	(7)	(8)
54.	Tamil Nadu Medical Services Corporation Limited (TN Medical)	Health & Family Welfare	July 1994	4.04	--	---	4.04	---	---	---	---	---	188
55.	Tamil Nadu Ex-servicemen's Corporation Limited (TEXCO)	Public (Ex-servicemen)	January 1986	0.23	---	---	0.23	---	---	---	---	---	64
56.	Metropolitan Transport Corporation Limited (MTC)	Transport	October 2001	429.78	---	---	429.78	---	---	95.24	95.24	0.22:1 (0.76:1)	23,000
57.	State Express Transport Corporation Limited (SETC)	Transport	January 2002	202.00	---	---	202.00	96.04	---	173.42	269.46	1.33:1 (0.97:1)	7,262
58.	Tamil Nadu State Transport Corporation (Coimbatore) Limited (TNSTC, Coimbatore)	Transport	December 2003	142.83	---	---	142.83	28.77	---	53.91	82.68	0.58:1 (0.67:1)	18,114
59.	Tamil Nadu State Transport Corporation (Kumbakonam) Limited (TNSTC, Kumbakonam)	Transport	December 2003	122.59	---	---	122.59	---	---	99.71	99.71	0.81:1 (1.06:1)	21,278
60.	Tamil Nadu State Transport Corporation (Salem) Limited (TNSTC, Salem)	Transport	December 2003	54.60	---	---	54.60	---	---	---	---	--- (1.70:1)	12,724
61.	Tamil Nadu State Transport Corporation (Villupuram) Limited (TNSTC, Villupuram)	Transport	December 2003	77.60	---	---	77.60	---	---	100.50	100.50	1.30:1 (1.66:1)	21,117
62.	Tamil Nadu State Transport Corporation (Madurai) Limited (TNSTC, Madurai)	Transport	January 2004	359.41	---	---	359.41	---	---	90.55	90.55	0.25:1 (0.28:1)	25,941

Sl. No.	Sector and name of the Company	Name of the Department	Month and year of incorpo-ration	Paid-up capital				Loans outstanding at the close of 2009-10				Debt equity ratio 2009-10 (previous year)	Manpower
				State Govern-ment	Central Govern-ment	Others	Total	State Govern-ment	Central Govern-ment	Others	Total		
(1)	(2)	(3)	(4)	5 (a)	5 (b)	5 (c)	5 (d)	6 (a)	6 (b)	6 (c)	6 (d)	(7)	(8)
63.	Arasu Cable TV Corporation Limited (Arasu Cable TV)	Information Technology	October 2007	25.00	---	---	25.00	20.85	---	---	20.85	0.83:1 (1.45:1)	24
64.	Chennai Metro Rail Limited (Chennai Metro)	Transport	December 2007	210.00	51.79	---	261.79	841.00	---	100.00	941.00	3.59:1 (10.00:1)	43
	Sector wise total			**1,743.87**	**51.79**	**0.10**	**1,795.76**	**986.66**	**---**	**713.33**	**1,699.99**	**0.95:1**	**1,79,466**
	Total A (All sector wise working Government companies)			**2,632.74**	**98.31**	**260.29**	**2,991.34**	**1,488.48**	**---**	**2,558.02**	**4,046.50**	**1.35:1**	**1,97,120**
B.	**Working Statutory Corporations**												
	POWER												
1.	Tamil Nadu Electricity Board (TNEB)	Energy	July 1957	2,470.50	---	---	2,470.50	---	---	26,805.29	26,805.29	10.85:1 (9.88:1)	81,852
	Sector wise total			**2,470.50**	**---**	**---**	**2,470.50**	**---**	**---**	**26,805.29**	**26,805.29**	**10.85:1**	**81,852**
	SERVICE												
2.	Tamil Nadu Warehousing Corporation (TANWARE)	Co-operation, Food and Consumer Protection	May 1958	3.81	3.80	---	7.61	---	----	---	---	---	491
	Sector wise total			**3.81**	**3.80**	**---**	**7.61**	**---**	**----**	**---**	**---**	**---**	**491**
	Total B (All sector wise working Statutory Corporations)			**2,474.31**	**3.80**	**---**	**2,478.11**	**---**	**---**	**26,805.29**	**26,805.29**	**10.82:1**	**82,343**
	Grand total (A+B)			**5,107.05**	**102.11**	**260.29**	**5,469.45**	**1,488.48**	**---**	**29,363.31**	**30,851.79**	**5.64:1**	**2,79,463**

Sl. No.	Sector and name of the Company	Name of the Department	Month and year of incorpo-ration	Paid-up capital				Loans outstanding at the close of 2009-10				Debt equity ratio 2009-10 (previous year)	Manpower
				State Govern-ment	Central Govern-ment	Others	Total	State Gover n-ment	Central Govern-ment	Others	Total		
(1)	(2)	(3)	(4)	5 (a)	5 (b)	5 (c)	5 (d)	6 (a)	6 (b)	6 (c)	6 (d)	(7)	(8)
C.	**Non-working Government companies**												
	AGRICULTURE & ALLIED												
1.	Tamil Nadu Agro Industries Development Corporation Limited (TN AGRO)	Agriculture	July 1966	6.01 (1.03)	---	---	6.01 (1.03)	20.73	---	---	20.73	4.16:1 (4.16:1)	---
2.	Tamil Nadu Poultry Development Corporation Limited (TAPCO)	Animal Husbandry & Fisheries	July 1973	1.27	--	---	1.27	---	---	---	---	--- (4.50:1)	---
3.	Tamil Nadu State Farms Corporation Limited (TN State Farms)	Agriculture	December 1974	1.55	---	---	1.55	---	---	---	---	---	---
4.	Tamil Nadu Sugarcane Farms Corporation Limited (TN Sugarcane)	Agriculture	February 1975	0.28	---	---	0.28	---	---	---	---	---	---
	Sector wise total			**9.11 (1.03)**	**---**	**---**	**9.11 (1.03)**	**20.73**	**---**	**---**	**20.73**	**2.28:1**	**---**
	FINANCE												
5.	The Chit Corporation of Tamil Nadu Limited (TN Chit)	Commercial Taxes	January 1984	0.06	---	---	0.06	---	---	---	---	---	---
	Sector wise total			**0.06**	**---**	**---**	**0.06**	**---**	**---**	**---**	**---**	**---**	
	INFRASTRUCTURE												
6.	Tamil Nadu Magnesium and Marine Chemicals Limited (TMML)	Industries	March 1997	---	---	3.62	3.62	---	---	---	---	---	---
	Sector wise total			**---**	**---**	**3.62**	**3.62**	**---**	**---**	**---**	**---**	**---**	

Sl. No.	Sector and name of the Company	Name of the Department	Month and year of incorpo-ration	Paid-up capital				Loans outstanding at the close of 2009-10				Debt equity ratio 2009-10 (previous year)	Manpower
				State Govern-ment	Central Govern-ment	Others	Total	State Govern-ment	Central Govern-ment	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												
7.	Tamil Nadu Steels Limited (TN Steels)	Industries	September 1981	3.92	---	---	3.92	5.84	---	4.66	10.50	2.68:1 (2.68:1)	----
8.	Tamil Nadu Graphites Limited (TN Graphites)	Industries	March 1997	0.10	---	---	0.10	---	---	---	---	---	---
	Sector wise total			**4.02**	**---**	**---**	**4.02**	**5.84**	**---**	**4.66**	**10.50**	**2.61:1**	
	SERVICE												
9.	Tamil Nadu Film Development Corporation Limited (TN Film)	Information & Tourism	April 1972	13.91	---	---	13.91	19.53	---	---	19.53	1.40:1 (1.40:1)	---
10.	Tamil Nadu Goods Transport Corporation Limited (TN Goods)	Transport	March 1975	0.27	---	0.06	0.33	---	---	---	---	---	---
11.	Tamil Nadu Institute of Information Technology (TANITEC)	Higher Education	February 1988	5.10	---	---	5.10	---	---	---	---	---	---
	Sector wise total			**19.28**	**---**	**0.06**	**19.34**	**19.53**	**---**	**---**	**19.53**	**1.01:1**	**---**
Total C (All sector wise Non-working Government companies)				**32.47 (1.03)**	**---**	**3.68**	**36.15 (1.03)**	**46.10**	**---**	**4.66**	**50.76**	**1.45:1**	**---**
	Grand total (A+B+C)			**5,139.52 (1.03)**	**102.11**	**263.97**	**5,505.60 (1.03)**	**1,534.58**	**---**	**29,367.97**	**30,902.55**	**5.61:1**	**2,79,463**

Note

Above includes Section 619-B Companies at Sl.No.18, 20, 21, 23, 37, 42

Paid-up capital includes share application money.

Loans outstanding at the close of 2009-10 represent long-term loans only.

ANNEXURE-2

(Referred to in paragraph 1.15)

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

(Figures in columns 5(a) to 11 are ₹ in crore)

Sl. No.	Sector and Name of the Company	Period of accounts	Year in which finalised	Net Profit(+)/Loss(-)				Turnover	Impact of Account comments	Paid-up capital	Accumulated profit(+)/ Loss (-)	Capital employed#	Return on capital employed$	Percentage return on capital employed
				Net profit/loss before interest and 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)
A	**Working Government companies**													
	AGRICULTURE & ALLIED													
1.	TN Fisheries	2008-09	2009-10	0.47	---	0.22	0.25	253.10		4.46	(-)1.94	3.73	0.25	6.70
2.	TAFCORN	2009-10	2010-11	11.58	2.50	0.47	8.61	48.65		3.76	67.50	73.47	11.11	15.12
3.	TANTEA	2009-10	2010-11	12.46	---	1.99	10.47	74.77		5.96	(-)0.32	9.69	10.47	108.05
4.	ARC	2009-10	2010-11	2.65	0.07	0.42	2.16	25.52		8.45	(-)12.41	14.37	2.23	15.52
	Sector wise total			**27.16**	**2.57**	**3.10**	**21.49**	**402.04**		**22.63**	**52.83**	**101.26**	**24.06**	**23.76**
	FINANCE													
5.	TIIC	2009-10	2010-11	115.39	69.77	0.78	44.84	189.56		283.49	(-)201.16	1,134.06	114.61	10.11
6.	TN Handloom	2007-08	2009-10	(-)0.53	0.36	---	(-)0.89	0.89		4.29	(-)2.22	(-)9.96	(-)0.53	---
7.	TNSIDCO	2009-10	2010-11	13.84	---	0.30	13.54	116.81		8.70	58.89	61.32	13.54	22.08
8.	TAHDCO	2008-09	2009-10	(-)4.90	0.92	0.32	(-)6.14	14.73		95.12	14.80	143.14	(-)5.22	---
9.	TDFC	2009-10	2010-11	109.72	105.75	0.05	3.92	114.10		61.74	73.26	1,148.53	109.67	9.55

Sl. No.	Sector and Name of the Company	Period of accounts	Year in which finalised	Net Profit(+)/Loss(-)				Turnover	Impact of Account comments	Paid-up capital	Accumulated profit(+)/ Loss (-)	Capital employed#	Return on capital employed$	Percentage return on capital employed
				Net profit/loss before interest and 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)
10.	TABCEDCO	2009-10	2010-11	3.45	1.28	0.02	2.15	5.70		12.27	7.20	94.11	3.43	3.64
11	TN Women	2008-09	2009-10	2.18	---	0.73	1.45	126.47		0.78	4.14	4.20	1.45	34.52
12.	TUFIDCO	2009-10	2010-11	56.66	46.95	0.22	9.49	60.34		32.00	49.06	699.88	56.44	8.06
13.	TAMCO	2009-10	2010-11	1.02	0.42	0.05	0.55	1.88		2.05	1.65	44.17	0.97	2.20
	Sector wise total			**296.83**	**225.45**	**2.47**	**68.91**	**630.48**		**500.44**	**5.62**	**3,319.45**	**294.36**	**8.87**
	INFRASTRUCTURE													
14.	TIDCO	2009-10	2010-11	48.80	23.56	0.16	25.08	60.61		72.03	88.08	182.93	48.64	26.59
15.	SIPCOT	2009-10	2010-11	67.87	0.90	4.65	62.32	229.51		123.91	214.74	396.81	63.22	15.93
16.	TN State Construction	2001-02	2004-05	(-)5.32	0.96	0.20	(-)6.48	---		5.00	(-)26.44	80.14	(-)5.52	---
17.	TN Police Housing	2009-10	2010-11	5.78	0.18	0.29	5.31	14.00		1.00	13.58	24.45	5.49	22.45
18.	TIDEL, Chennai	2009-10	2010-11	47.09	---	9.04	38.05	72.68		44.00	181.52	205.35	38.05	18.53
19.	TN Rural Housing	2004-05	2005-06	20.17	20.09	---	0.08	---		3.00	(-)0.55	178.97	20.17	11.27
20.	Nilakottai	2008-09	2009-10	0.08	---	---	0.08	0.14		0.68	0.08	0.73	0.08	10.96
21.	Guindy Estate	2009-10	2010-11	(-)6.66	---	---	(-)6.66	0.74		0.01	---	1.01	(-)6.66	---
22.	TN Road	2008-09	2009-10	0.46	---	0.06	0.40	0.61		5.00	0.59	5.58	0.40	7.17
23.	TIDEL, Coimbatore	2009-10	2010-11	---	---	---	---	---		90.00	---	200.33	---	---
24.	Adyar Poonga	2009-10	2010-11	(-)0.01	---	---	(-)0.01	---		0.10	(-)0.02	0.08	(-)0.01	---
	Sector wise total			**178.26**	**45.69**	**14.40**	**118.17**	**378.29**		**344.73**	**471.58**	**1,276.38**	**163.86**	**12.84**
	MANUFACTURING													
25.	SSL	2006-07	2009-10	2.32	10.55	0.14	(-)8.37	---		34.54	(-)156.80	1.30	2.18	167.69
26.	TANSI	2009-10	2010-11	22.00	1.45	0.35	20.20	276.94		20.00	50.86	284.09	21.65	7.62
27.	TN Textiles	2009-10	2010-11	(-)0.85	---	0.03	(-)0.88	21.01		1.54	(-)1.10	1.37	(-)0.88	---

Sl. No.	Sector and Name of the Company	Period of accounts	Year in which finalised	Net Profit(+)/Loss(-)				Turnover	Impact of Account comments	Paid-up capital	Accumulated profit(+)/ Loss (-)	Capital employed[#]	Return on capital employed[$]	Percentage return on capital employed
				Net profit/loss before interest and depre-ciation	Interest	Depreciation	Net profit/loss							
(1)	(2)	(3)	(4)	5 (a)	5 (b)	5 (c)	5 (d)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
28.	TN Zari	2009-10	2010-11	0.29	0.03	0.15	0.11	29.93		0.34	2.52	3.06	0.14	4.58
29.	TN Handicrafts	2009-10	2010-11	0.45	0.02	0.18	0.25	22.40		3.22	1.50	5.35	0.27	5.05
30.	TN Salt	2009-10	2010-11	0.91	---	0.34	0.57	17.65		3.17	6.40	10.48	0.57	5.44
31.	TASCO	2009-10	2010-11	35.78	10.10	0.52	25.16	129.43		7.79	(-)93.86	63.25	35.26	55.75
32.	TANCEM	2009-10	2010-11	30.73	0.60	2.35	27.78	249.23		37.42	(-)15.50	80.40	28.38	35.30
33.	PSM	2009-10	2010-11	15.84	10.65	0.53	4.66	87.65		4.17	(-)130.02	20.89	15.31	73.29
34.	SESCOT	2009-10	2010-11	---	0.46	---	(-)0.46	---		0.50	(-)20.09	(-)0.15	---	---
35.	TAMIN	2009-10	2010-11	2.85	0.54	2.14	0.17	110.41		15.74	82.69	96.91	0.71	0.73
36.	TANMAG	2009-10	2010-11	16.43	5.18	1.02	10.23	79.25		16.65	(-)15.24	8.63	15.41	178.56
37.	TTL	2009-10	2010-11	1.93	1.64	2.39	(-)2.10	35.03		22.66	(-)46.79	16.04	(-)0.46	---
38.	TIEL	2008-09	2009-10	(-)4.96	2.05	1.08	(-)8.09	41.34		27.03	(-)72.09	25.41	(-)6.04	---
39.	TAMPCOL	2009-10	2010-11	3.00	---	0.43	2.57	18.56		1.00	9.83	12.59	2.57	20.41
40.	TALCO	2009-10	2010-11	(-)0.02	1.49	---	(-)1.51	---		2.50	(-)30.18	(-)1.56	(-)0.02	---
41.	TAPAP	2009-10	2010-11	0.39	0.11	0.01	0.27	3.63		0.02	0.65	0.71	0.38	53.52
42.	TNPL	2009-10	2010-11	287.80	46.18	115.56	126.06	1,025.68		69.38	541.07	2,366.14	172.24	7.28
	Sector wise total			**414.89**	**91.05**	**127.22**	**196.62**	**2,148.14**		**267.67**	**113.85**	**2,994.91**	**287.67**	**9.61**
	POWER													
43	TN Powerfin	2009-10	2010-11	499.34	452.99	5.05	41.30	516.14		50.00	131.90	4,380.83	494.29	11.28
44.	Udangudi Power	2009-10	2010-11	0.33	---	---	0.33	0.47		10.00	0.32	10.32	0.33	3.20
45.	TANTRANSCO	---	---	---	---	---	---	---		0.05	---	---	---	---
46.	TANGEDCO	---	---	---	---	---	---	---		0.05	---	---	---	---
	Sector wise total			**499.67**	**452.99**	**5.05**	**41.63**	**516.61**		**60.10**	**132.22**	**4,391.15**	**494.62**	**11.26**

Sl. No.	Sector and Name of the Company	Period of accounts	Year in which finalised	Net Profit(+)/Loss(-)				Turnover	Impact of Account comments	Paid-up capital	Accumu-lated profit(+)/ Loss (-)	Capital employed[#]	Return on capital employed[$]	Percentage return on capital employed
				Net profit/loss before interest and depre-ciation	Interest	Depreciation	Net profit/loss							
(1)	(2)	(3)	(4)	5 (a)	5 (b)	5 (c)	5 (d)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	SERVICE													
47.	TTDC	2009-10	2010-11	6.44	0.26	4.60	1.58	74.76		10.43	12.74	32.10	1.84	5.73
48.	TNCSC	2008-09	2009-10	73.49	68.90	4.59	---	6,945.91		39.01	---	1,319.22	68.90	5.22
49.	PSC	2008-09	2009-10	3.22	1.19	0.53	1.50	683.68		20.53	(-)10.10	32.53	2.69	8.27
50.	ELCOT	2008-09	2009-10	20.96	8.43	2.82	9.71	29.52		25.93	21.98	389.46	18.14	4.66
51.	OMPC	2008-09	2009-10	0.11	---	0.16	(-)0.05	2.12		0.15	0.47	0.57	(-)0.05	---
52.	TASMAC	2009-10	2010-11	26.72	23.08	1.62	2.02	14,926.24		15.00	2.54	150.83	25.10	16.64
53.	PTCS	2009-10	2010-11	0.15	---	0.02	0.13	1.00		0.10	(-)0.73	(-)0.40	0.13	---
54.	TN Medical	2009-10	2010-11	5.07	---	4.86	0.21	30.43		4.04	11.17	434.28	0.21	0.05
55.	MTC	2009-10	2010-11	43.75	36.97	105.29	(-)98.51	785.01		429.78	(-)860.02	164.99	(-)61.54	---
56.	SETC	2009-10	2010-11	(-)41.12	28.05	31.65	(-)100.82	339.18		202.00	(-)694.67	(-)156.80	(-)72.77	---
57.	TEXCO	2009-10	2010-11	5.53	---	0.09	5.44	71.28		0.23	39.76	40.00	5.44	13.60
58.	TNSTC, Coimbatore	2009-10	2010-11	(-)84.75	21.45	35.22	(-)141.42	718..02		142.83	(-)659.12	(-)242.29	(-)119.97	---
59	TNSTC, Kumbakonam	2009-10	2010-11	(-)12.20	24.55	48.56	(-)85.31	922.03		122.59	(-)505.90	(-)137.92	(-)60.76	---
60.	TNSTC, Salem	2009-10	2010-11	(-)28.84	15.47	32.25	(-)76.56	536.88		54.60	(-)325.80	(-)112.47	(-)61.09	---
61.	TNSTC, Villupuram	2009-10	2010-11	(-)4.44	14.31	46.86	(-)65.61	925.58		77.60	(-)311.20	(-)65.67	(-)51.30	---
62.	TNSTC, Madurai	2009-10	2010-11	(-)45.07	48.10	73.30	(-)166.47	1,064.87		359.41	(-)1,258.96	(-)315.51	(-)118.37	---
63.	Arasu Cable TV	---	---	First Account not finalised						---	---	---	---	---
64	Chennai Metro	2009-10	2010-11	---	---	---	---	---		261.79	---	1,214.26	---	---
	Sector wise total			**(-)30.98**	**290.76**	**392.42**	**(-)714.16**	**28,056.51**		**1,766.02**	**(-)4,537.84**	**2,747.18**	**(-)423.40**	**---**
	Total A (all sector wise working Government companies)			**1,385.83**	**1,108.51**	**544.66**	**(-)267.34**	**32,132.07**		**2,961.59**	**(-)3,761.74**	**14,830.33**	**841.17**	**5.67**

Sl. No.	Sector and Name of the Company	Period of accounts	Year in which finalised	Net Profit(+)/Loss(-)				Turnover	Impact of Account comments	Paid-up capital	Accumulated profit(+)/ Loss (-)	Capital employed[#]	Return on capital employed[$]	Percentage return on capital employed
				Net profit/loss before interest and depre-ciation	Interest	Depre-ciation	Net profit/loss							
(1)	(2)	(3)	(4)	5 (a)	5 (b)	5 (c)	5 (d)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
B	**Working Statutory corporations**													
	POWER													
1.	TNEB	2008-09	2010-11	(-)4,719.67	2,276.24	775.48	(-)7,771.39	15,425.60		2,470.50	(-)17,413.92	15,253.96	(-)5,495.15	---
	Sector wise total			**(-)4,719.67**	**2,276.24**	**775.48**	**(-)7,771.39**	**15,425.60**		**2,470.50**	**(-)17,413.92**	**15,253.96**	**(-)5,495.15**	**---**
	SERVICE													
2.	TANWARE	2008-09	2009-10	3.98	---	1.02	2.96	20.72		7.61	44.09	54.96	2.96	5.39
	Sector wise total			**3.98**	**---**	**1.02**	**2.96**	**20.72**		**7.61**	**44.09**	**54.96**	**2.96**	**5.39**
	Total B (all sector wise working Statutory corporations)			**(-)4,715.69**	**2,276.24**	**776.50**	**(-)7,768.43**	**15,446.32**		**2,478.11**	**(-)17,369.83**	**15,308.92**	**(-)5,492.19**	**---**
	Total (A+B)			**(-)3,329.86**	**3,384.75**	**1,321.16**	**(-)8,035.77**	**47,578.39**		**5,439.70**	**(-)21,131.57**	**30,139.25**	**(-)4,651.02**	**---**
C.	**Non orking Government companies**													
	AGRICULTURE & ALLIED													
1.	TN Agro	2002-03	2003-04	(-)3.74	3.70	---	(-)7.44	---		6.01	(-)42.91	5.32	(-)3.74	---
2.	TAPCO	2008-09	2009-10	(-)0.01	---	---	(-)0.01	---		1.27	(-)10.36	(-)0.63	(-)0.01	---
3.	TN State Farms	2009-10	2010-11	---	---	---	---	---		1.55	(-)1.55	---	---	---
4.	TN Sugarcane	2004-05	2009-10	---	---	---	---	---		0.28	(-)0.18	0.09	---	---
	Sector wise total			**(-)3.75**	**3.70**	**---**	**(-)7.45**	**---**		**9.11**	**(-)55.00**	**4.78**	**(-)3.75**	**---**

Sl. No.	Sector and Name of the Company	Period of accounts	Year in which finalised	Net Profit(+)/Loss(-)				Turnover	Impact of Account comments	Paid-up capital	Accumulated profit(+)/ Loss (-)	Capital employed#	Return on capital employed$	Percentage return on capital employed
				Net profit/loss before interest and 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)
	FINANCE													
5.	TN Chit	2007-08	2009-10	---	0.04	---	(-)0.04	---		0.06	(-)0.92	0.25	---	---
	Sector wise total			**---**	**0.04**	**---**	**(-)0.04**	**---**		**0.06**	**(-)0.92**	**0.25**	**---**	**---**
	INFRASTRUCTURE													
6.	TMML	1999-00	2000-01	(-)3.81	---	---	(-)3.81	---		3.62	(-)15.51	1.40	(-)3.81	---
	Sector wise total			**(-)3.81**	**---**	**---**	**(-)3.81**	**---**		**3.62**	**(-)15.51**	**1.40**	**(-)3.81**	**---**
	MANUFACTURING													
7.	TN Steels	1999-00	2000-01	(-)0.80	8.61	---	(-)9.41	---		3.92	(-)71.31	(-)20.54	(-)0.80	---
8.	TN Graphites	2009-10	2010-11	---	---	---	---	---		0.10	0.09	0.01	---	---
	Sector wise total			**(-)0.80**	**8.61**		**(-)9.41**	**---**		**4.02**	**(-)71.22**	**(-)20.53**	**(-)0.80**	**---**
	SERVICE													
9.	TN Film	2008-09	2009-10	(-)5.95	---	---	(-)5.95	0.15		13.91	(-)16.74	16.69	(-)5.95	---
10.	TN Goods	1989-90		0.07	0.07	---	---	---		0.33	(-)1.33	(-)0.30	0.07	---
11.	TANITEC	2003-04	2004-05	0.03	---	---	0.03	0.04		5.10	(-)5.10	---	0.03	---
	Sector wise total			**(-)5.85**	**0.07**	**---**	**(-)5.92**	**0.19**		**19.34**	**(-)23.17**	**16.39**	**(-)5.85**	**---**
	Total C (all sector wise Non working Government companies)			**(-)14.21**	**12.42**	**---**	**(-)26.63**	**0.19**		**36.15**	**(-)165.82**	**2.29**	**(-)14.21**	**---**
	Total (A+B+C)			**(-)3,344.07**	**3,397.17**	**1,321.16**	**(-)8,062.40**	**47,578.58**		**5,475.85**	**(-)21,297.39**	**30,141.54**	**(-)4,665.23**	**---**

NOTE:

Capital employed represents net fixed assets (including capital work-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 refinances).

$ Return on capital employed has been worked out by adding profit and interest charged to profit and loss account.

ANNEXURE-3

(Referred to in paragraph 1.10)

Statement showing equity / loans received out of budget, 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

(Figures in columns 3(a) to 6(d) are ₹ in crore)

Sl. No.	Sector and Name of the Company	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	Central Government	State Government	Others	Total	Received	Commitment	Loans repayment written off	Loan 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 (c)	6 (d)
	Working Government companies												
	AGRICULTURE AND ALLIED												
1.	TN Fisheries	---	---	---	---	0.47 (S)	0.47 (S)	---	---	---	---	---	---
2.	TAFCORN	---	---	1.49 (G) 1.49 (S)	---	---	1.49 (G) 1.49 (S)	---	---	---	---	---	---
3.	TANTEA	---	---	0.11 (S)	---	---	0.11 (S)	---	---	---	---	---	---
	Sector wise total	**---**	**---**	**1.49 (G) 1.60 (S)**	**---**	**0.47 (S)**	**1.49 (G) 2.07 (S)**	**---**	**---**	**---**	**---**	**---**	**---**
	FINANCE												
4.	TIIC	---	---	---	5.00 (S)	---	5.00 (S)	---	396.58	---	---	---	---
5.	TN Handloom	1.62	---	---	---	---	---	5.50	5.50	---	---	---	---
6.	TNSIDCO	---	---	0.76 (G)	0.20 (G)	--	0.96 (G)	---	---	---	---	---	---
7.	TAHDCO	---	---	59.18 (G) 59.18 (S)	24.44 (S)	---	59.18 (G) 83.62 (S)	---	21.32	---	---	---	---

Sl. No.	Sector and Name of the Company	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	Central Government	State Government	Others	Total	Received	Commitment	Loans repayment written off	Loan 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 (c)	6 (d)
8.	TDFC	---	---	---	---	---	---	---	30.00	---	---	---	---
9.	TABCEDCO	---	---	---	---	---	---	30.15	77.23	---	---	---	---
10.	TN Women	---	---	---	108.96 (G)	---	108.96 (G)	---	---	---	---	---	---
11.	TUFIDCO	---	---	434.44 (G)	171.45 (G)	---	605.89 (G)	---	---	---	----	---	---
12.	TAMCO	---	---	---	0.58 (S)	---	0.58 (S)	40.00	44.91	---	---	---	---
	Sector wise total	**1.62**	**---**	**494.38 (G) 59.18 (S)**	**280.61 (G) 30.02 (S)**	**---**	**774.99 (G) 89.20 (S)**	**75.65**	**575.54**	**---**	**---**	**---**	**---**
	INFRASTRUCTURE												
13.	TIDCO	---	---	10.00 (G)	50.00 (G)	---	60.00 (G)	---	6.67	---	---	---	---
14.	SIPCOT	---	100.00	21.07 (G)	114.00 (S)	---	21.07 (G) 114.00 (S)	---	---	---	---	---	---
15.	GIE&IUC	---	---	2.50 (G)	---	---	2.50 (G)	---	---	---	---	---	---
	Sector wise total	**0.00**	**100.00**	**33.57 (G)**	**50.00 (G) 114.00 (S)**	**---**	**83.57 (G) 114.00 (S)**	**---**	**6.67**	**---**	**---**	**---**	**---**
	MANUFACTURING												
16.	SSL	---	0.43	---	---	---	---	---	---	---	---	---	---
17.	TN Handicrafts	---	---	0.78 (G)	0.04 (G)	---	0.82 (G)	---	---	---	---	---	---
18.	TASCO	---	---	---	---	---	---	22.61	7.01	---	---	---	---
19.	PSM	---	---	---	---	---	---	27.74	15.47	---	---	---	---
	Sector wise total	**---**	**0.43**	**0.78 (G)**	**0.04 (G)**	**---**	**0.82 (G)**	**50.35**	**22.48**	**---**	**---**	**---**	**---**

Sl. No.	Sector and Name of the Company	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	Central Government	State Government	Others	Total	Received	Commitment	Loans repayment written off	Loan 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 (c)	6 (d)
	POWER												
20.	TNPOWERFIN	28.00	---	---	---	---	---	----	---	---	28.00	---	28.00
21.	TANTRANSCO	0.05	---	---	---	---	---	---	---	---	---	---	---
22.	TANGEDCO	0.05	--	---	---	---	---	---	---	---	---	---	---
	Sector wise total	**28.10**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**28.00**	**---**	**28.00**
	SERVICE												
23.	TNCSC	4.74	---	520.01 (S)	4,160.00 (S)	---	4,680.01 (S)	---	66.00	---	---	---	---
24.	PSC	--	--	0.16 (G)	---	---	0.16 (G)	---	---	---	---	---	---
25.	ELCOT	---	---	---	6.76 (G)	---	6.76 (G)	---	---	---	---	---	---
26.	OMPC	---	---	0.01 (G)	---	---	0.01 (G)	---	---	---	---	---	---
27.	TASMAC	---	---	---	---	---	---	---	25.00	---	---	---	---
28.	MTC	36.81	---	51.79 (S)	---	---	51.79 (S)	---	---	---	---	---	---
29.	SETC	13.00	15.46	---	---	---	---	---	---	---	---	---	---
30.	TNSTC, Coimbatore	25.44	20.81	22.19 (S)	37.95 (S)	---	60.14 (S)	---	---	---	---	---	---
31.	TNSTC, Kumbakonam	2.75	---	---	57.21 (S)	---	57.21 (S)	---	---	---	---	---	---
32.	TNSTC, Salem	2.75	---	---	29.44 (S)	---	29.44 (S)	---	---	---	---	---	---
33.	TNSTC, Madurai	41.50	---	22.19 (G)	0.50 (G) 70.64 (S)	---	22.69 (G) 70.64 (S)	---	0.75	---	---	---	---
34.	Chennai Metro	160.00	341.00	---	---	---	---	---	---	---	---	---	---
	Sector wise total	**286.99**	**377.27**	**22.36 (G) 593.99 (S)**	**7.26 (G) 4,355.24 (S)**	**---**	**29.62 (G) 4,949.23 (S)**	**---**	**91.75**	**---**	**---**	**---**	**---**
	Grand Total (A)	**316.71**	**477.70**	**552.58 (G) 654.77 (S)**	**337.91 (G) 4,499.26 (S)**	**0.47 (S)**	**890.49 (G) 5,154.50 (S)**	**126.00**	**696.44**	**---**	**28.00**	**---**	**28.00**

Sl. No.	Sector and Name of the Company	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	Central Government	State Government	Others	Total	Received	Commitment	Loans repayment written off	Loan 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 (c)	6 (d)
	STATUTORY CORPORATION												
	POWER												
1.	TNEB	420.50	---	---	1,672.17 (S)	---	1,672.17 (S)	---	4,525.43	---	---	---	---
	Sector wise total	**420.50**	**---**	**---**	**1,672.17 (S)**	**---**	**1,672.17 (S)**	**---**	**4,525.43**	**---**	**---**	**---**	**---**
	Grand Total (A+B)	**737.21**	**477.70**	**552.58 (G) 654.77 (S)**	**337.91 (G) 6,171.43 (S)**	**0.47 (S)**	**890.49 (G) 6,826.67 (S)**	**126.00**	**5,221.87**	**---**	**28.00**	**---**	**28.00**
C.	**Non working Government companies**												
	FINANCE												
1.	TN CHIT	---	---	---	----	----	---	---	---	0.19	---	0.63	0.82
	Sector wise total	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**0.19**	**---**	**0.63**	**0.82**
	SERVICE												
2.	TNFDCL	---	5.43	---	----	----	---	---	---	---	---	---	---
	Sector wise total	**---**	**5.43**	**---**	**----**	**----**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
	Grand Total (A+B+C)	**737.21**	**483.13**	**552.58 (G) 654.77 (S)**	**337.91 (G) 6,171.43 (S)**	**0.47 (S)**	**890.49 (G) 6,826.67 (S)**	**126.00**	**5,221.87**	**0.19**	**28.00**	**0.63**	**28.82**

A Subsidy includes subsidy receivable at the end of year.
'G' indicates Grants and 'S' indicates Subsidy.
Except in respect of companies which finalised their accounts for 2009-10 (Serial numbers 2, 3, 4, 6, 8, 9, 11, 12, 13, 14, 15, 17 to 20, 27 to 34 the figures are provisional and as given by the companies/corporations.

ANNEXURE - 4

(Referred to in paragraph 1.23)

Statement showing investment made by the State Government in PSUs whose accounts were in arrears

(₹ in crore)

Sl.No.	Name of the Company	Year up to which accounts finalised	Paid-up capital as per latest finalised accounts	Investment made by the State Government during the years for which accounts were in arrears				
				Year	Equity	Loan	Grant	Subsidy
	WORKING PSUs							
1.	TAHDCO	2008-09	95.12	2009-10	---	---	---	24.44
2.	TN Women	2008-09	0.78	2009-10	---	---	108.96	---
3.	SSL	2006-07	34.54	2007-08 to 2009-10	---	12.43	---	---
4.	TN Handloom	2007-08	4.29	2009-10	1.62	---	---	---
5.	TN Civil Supplies	2008-09	39.01	2009-10	4.74	---	---	4,160.00
6.	ELCOT	2008-09	25.93	2009-10	---	---	6.76	---
7.	TNEB	2008-09	2,050.00	2008-09	320.50	---	---	---
				2009-10	100.00	---	---	1,672.17
	NON-WORKING PSUs				---			
8.	TN Agro	2002-03	6.01	2003-04 to 2009-10	1.65	2.52	---	---
	TOTAL		**2,671.89**		**428.51**	**14.95**	**115.72**	**5,856.61**

ANNEXURE-5

(Referred to in paragraph 1.15)

Statement showing financial position of Tamil Nadu Warehousing Corporation

(₹ in crore)

Particulars	2007-08	2008-09	2009-10 (Provisional)
A. LIABILITIES			
Paid-up capital	7.61	7.61	7.61
Reserves and surplus	42.15	44.08	51.63
Subsidy	0.17	0.17	0.17
Trade dues and current liabilities (including provision)	17.23	21.98	25.77
Deferred tax liabilities	0.21	0.18	0.18
Insurance fund	2.22	2.92	3.42
TOTAL	**69.59**	**76.94**	**88.78**
B. ASSETS			
Gross block	42.72	44.87	51.05
LESS: Depreciation	16.01	16.86	17.91
Net fixed assets	26.71	28.01	33.14
Capital works-in-progress	1.28	1.11	---
Current assets, loans and advances	41.60	47.82	55.64
TOTAL	**69.59**	**76.94**	**88.98**
C. CAPITAL EMPLOYED*	**52.36**	**54.96**	**63.21**

* Capital employed represents net fixed assets PLUS working capital

ANNEXURE-6

(Referred to in paragraph 1.15)

Statement showing working results of Tamil Nadu Warehousing Corporation

(₹ in crore)

	Particulars	2007-08	2008-09	2009-10 (Provisional)
1.	**Income**			
(a)	Warehousing charges	19.07	19.69	28.71
(b)	Other income	3.49	3.94	4.09
	TOTAL	**22.56**	**23.63**	**32.80**
2.	**Expenses**			
(a)	Establishment charges	9.60	16.78	16.48
(b)	Other expenses	5.46	5.52	6.55
	TOTAL	**15.06**	**22.30**	**23.03**
3.	Profit (+) / Loss (-) before tax	7.50	1.33	9.77
4.	Other appropriations/adjustments	(-)3.42	(-)1.63	(-)1.19
5.	Amount available for dividend	4.08	2.96	8.58
6.	Dividend for the year (excluding dividend tax)	0.50	0.46	0.46
7.	**Total return on capital employed**	**4.08**	**2.96**	**8.58**
8.	**Percentage of return on capital employed**	**7.79**	**5.30**	**13.60**

ANNEXURE–7

(Referred to in Paragraph 2.9)

Statement showing financial position of TAHDCO for the five years ended 31 March 2010

(₹ in lakh)

Sl.No	Particulars	2005-06	2006-07	2007-08	2008-09	2009-10 (Provisional)
I	Sources of Funds					
a)	Paid up capital	9,512.41	9,512.41	9,512.41	9,512.41	9,512.41
	Share Application	---	---	---	---	---
b)	Reserves and Surplus	1,959.48	2,028.59	2,214.33	1,600.15	1,499.53
c)	Borrowings	3,663.49	1,374.54	2,997.67	3,031.40	2,194.29
	Total	**15,135.38**	**12,915.54**	**14,724.41**	**14,143.96**	**13,206.23**
II	Application of funds					
a)	Gross Block	357.27	394.10	437.78	450.26	454.65
b)	Less Depreciation	232.17	256.03	288.67	310.76	329.80
c)	Net Fixed Assets	125.10	138.07	149.11	139.50	124.85
d)	**Current Assets , Loans and Advances**					
	Cash and Bank Balances	14,732.33	9,369.48	13,459.04	22,572.79	24,925.13
	Other current assets	1,659.35	2,103.57	2,669.74	3,017.27	3,442.23
	Loans and Advances	10,499.66	11,399.70	10,195.66	10,678.09	9,365.49
	Total	**26,891.34**	**22,872.75**	**26,324.44**	**36,268.15**	**37,732.85**
e)	Trade dues and other liabilities	11,881.06	10,095.28	11,749.14	22,263.69	24,651.47
	Net Current Assets	15,010.28	12,777.47	14,575.30	14,004.46	13,081.38
	Total	**15,135.38**	**12,915.54**	**14,724.41**	**14,143.96**	**13,206.23**
	Capital Employed	**14,450.33**	**12,704.91**	**13,573.00**	**14,314.00**	**13,555.09**
	Net Worth	**11,471.89**	**11,541.00**	**11,726.74**	**11,112.56**	**10,891.94**

Statement showing financial position of TABCEDCO for the five years ended 31 March 2010

(₹ in lakh)

	2005-06	2006-07	2007-08	2008-09	2009-10
SOURCES OF FUNDS					
Share Capital	1,227.01	1,227.01	1,227.01	1,227.01	1,227.01
Reserves and Surplus	262.25	323.17	494.29	505.69	666.00
Borrowings	3,021.03	3,532.58	4,992.21	7,366.43	7,726.23
TOTAL	**4,510.29**	**5,082.76**	**6,713.51**	**9,099.13**	**9,619.24**
APPLICATION OF FUNDS					
Fixed Assets	23.65	23.87	33.04	33.32	33.32
Less: Depreciation	14.94	16.96	24.23	26.41	28.03
Net Fixed Assets	8.71	6.91	8.81	6.91	5.29
Investments	---	15.00	15.00	15.00	15.00
Current Assets, Loans and Advances:					
Cash and Bank Balances	1,828.13	1,149.61	1,089.17	8,248.95	8,737.38
Loans and advances	2,648.78	3,815.75	5,416.78	6,116.32	6,544.65
Other Current Assets	154.87	186.06	417.28	544.22	668.01
Total current Assets	**4,631.79**	**5,151.42**	**6,923.23**	**14,909.49**	**15,950.04**
Less Current Liabilities and Provisions:					
Current Liabilities	120.97	77.70	213.23	5,811.72	6,329.75
Provisions	12.84	14.67	20.30	20.55	21.34
Total Current Liabilities and Provisions	**133.81**	**92.38**	**233.53**	**5,832.27**	**6,351.09**
Net Current Assets	4,497.97	5,059.04	6,689.70	9,077.22	9,598.95
Miscellaneous expenditure	3.61	1.81	---	--	---
Total	**4,510.29**	**5,082.76**	**6,713.51**	**9,099.13**	**9,619.24**
Capital employed	**4506.69**	**5080.96**	**6,698.51**	**7,906.00**	**9,359.19**
Net worth	**1,485.65**	**1,548.37**	**1,721.30**	**1,732.70**	**1,893.01**

Statement showing financial position of TAMCO for the five years ended 31 March 2010

(₹ in lakh)

	2005-06	2006-07	2007-08	2008-09	2009-10
SOURCES OF FUNDS					
Share Capital	5.01	5.01	5.01	205.01	205.01
Share Application	---	---	200.00	---	---
Reserves and Surplus	13.90	28.48	74.81	121.62	193.40
Borrowings	1,228.59	1,975.26	2,936.30	3,338.60	4,811.09
Total	**1,247.50**	**2,008.75**	**3,216.12**	**3,665.23**	**5,209.50**
APPLICATION OF FUNDS					
Fixed Assets	9.74	10.07	14.13	12.26	30.19
Less: Depreciation	5.69	6.79	5.85	2.64	5.12
Net Fixed Assets	4.05	3.28	8.28	9.62	25.07
Current Assets, Loans and Advances:					
Cash and Bank Balances	240.90	512.14	535.11	810.10	1355.47
Loans and advances	1,053.80	1,563.47	3,034.78	3,704.45	4,554.76
Total current Assets	**1,294.70**	**2,075.61**	**3,569.89**	**4,514.55**	**5,910.23**
Less Current Liabilities	51.25	70.14	362.05	858.94	725.80
Net Current Assets	1,243.45	2,005.47	3,207.84	3,655.61	5,184.43
Total	**1,247.50**	**2,008.75**	**3,216.12**	**3,665.23**	**5,209.50**
Capital employed	**1,247.49**	**2,008.75**	**2,607.00**	**3,665.23**	**4,417.00**
Net worth	**18.91**	**33.49**	**279.82**	**326.63**	**369.56**

ANNEXURE-8

(Referred to in Paragraph 2.9)

Statement showing working results of TAHDCO for the five years ended 31 March 2010

(₹ in lakh)

Particulars	2005-06	2006-07	2007-08	2008-09	2009-10 (Provisional)
Income					
Centage	440.66	328.95	203.15	194.71	756.29
Staff assistance from SCA	556.83	654.10	1,020.74	1,243.17	801.34
Interest	952.72	788.02	932.61	1,125.63	943.36
Profit on sale of asset	0.53	0.15	0.07	0.78	0.51
Rent on premises	21.75	20.70	20.93	34.55	33.66
Other Income	32.52	40.03	28.69	20.68	19.55
Total	**2,005.01**	**1,831.95**	**2,206.19**	**2,619.52**	**2,554.71**
Expenditure					
Personnel Expenditure	997.49	983.05	1,223.88	1,437.88	1,557.63
Other Administrative expenditure	207.80	305.21	297.22	311.86	234.94
Interest	156.12	70.42	67.01	91.67	69.76
Depreciation	29.17	24.61	33.54	32.04	28.66
Provision for Doubtful Debts	171.74	13.70	385.88	559.37	353.77
Provision for Guarantee Commission	12.36	12.36	12.36	12.36	12.36
Loss on sale of fixed assets			0.57	0.75	
Total	**1,574.68**	**1,409.35**	**2,020.46**	**2,445.93**	**2,257.12**
Profit	**430.33**	**422.60**	**185.73**	**173.59**	**297.59**
Prior period adjustments	**---**	**353.49**	**---**	**787.77**	**398.20**
Net Profit	**430.33**	**69.11**	**185.73**	**(-)614.18**	**(-)100.61**

Statement showing working results of TABCEDCO for the five years ended 31 March 2010

(₹ in lakh)

	2005-06	2006-07	2007-08	2008-09	2009-10
A. INCOME					
Interest income*	185.68	234.22	392.31	479.94	377.73
Other income	3.48	3.67	3.20	4.10	199.26
Total A	**189.16**	**237.89**	**395.51**	**484.04**	**576.99**
B EXPENDITURE					
Employee Cost	23.37	26.20	34.35	32.05	29.78
Administrative expenses	65.20	80.93	198.46	279.54	257.63
Interest	56.18	67.32	83.15	96.49	128.07
Depreciation	1.74	2.08	7.27	2.18	1.62
Total B	**146.49**	**176.53**	**323.23**	**410.26**	**417.10**
Profit for the year (A-B)	**42.67**	**61.36**	**72.28**	**73.78**	**159.89**
Prior period Income	--	--	103.22	4.32	0.54
Prior period Expenditure	--	0.44	0.51	66.71	0.12
Net Profit	**42.67**	**60.92**	**174.99**	**11.39**	**160.31**
Interest from FD/SB	**86.41**	**138.93**	**176.80**	**179.02**	**180.56**

Statement showing working results of TAMCO for the five years ended 31 March 2010

(₹ in lah)

	2005-06	2006-07	2007-08	2008-09	2009-10
B. INCOME					
Interest income	39.52	65.51	116.11	183.18	188.37
Other income	16.80	22.64	77.33	63.90	111.11
Total A	**56.32**	**88.15**	**193.44**	**247.08**	**299.48**
B EXPENDITURE					
Employee Cost	15.72	18.59	21.12	26.98	39.44
Administrative expenses	37.75	53.73	130.72	173.55	190.84
Depreciation	1.36	1.10	2.03	2.64	5.12
Total B	**54.83**	**73.42**	**153.87**	**203.17**	**235.40**
Profit for the year (A-B)	**1.49**	**14.73**	**39.57**	**43.91**	**64.08**
Prior period Expenditure	--	--	--	--	8.91
Net Profit	**1.49**	**14.73**	**39.57**	**43.91**	**55.17**
Interest from FD/SB	**6.01**	**24.67**	**37.90**	**73.22**	**28.71**

ANNEXURE-9
(Referred to in Paragraph 2.14)
Details of targets and achievement for the last five years ended 31 March 2010

Name of the Companies	2005-06	2006-07	2007-08	2008-09	2009-10
TAHDCO					
Physical Target (In numbers)	2,47,900	2,44,149	2,24,660	1,71,555	1,16,800
Physical Achievement	1,68,532	2,37,440	1,22,230	70,473	83,966
Percentage of achievement to target	68.0	97.0	54.0	41.0	72.0
Financial Target (₹ in crore)	95.16	119.16	77.85	117.00	51.20
Financial Achievement	60.29	83.21	60.49	58.32	48.69
Percentage of achievement to target	63.0	70.0	78.0	50.0	95.0
TABCEDCO					
Physical Target (In numbers)	71,028	77,700	26,900	35,000	35,025
Physical Achievement	32,503	28,202	32,535	27,258	25,874
Percentage of achievement to target	46.0	36.0	121.0	78.0	74.0
Financial Target (₹ in crore)	24.86	21.26	30.00	30.00	30.00
Financial Achievement	11.28	20.24	30.09	18.56	32.73
Percentage of achievement to target	45.0	95.0	100.0	62.0	109.0
TAMCO					
Physical Target (In numbers)	5,316	9,608	21,000	9,320	9,200
Physical Achievement	5,317	7,284	10,473	9,832	9,576
Percentage of achievement to target	100.0	76.0	50.0	105.0	104.0
Financial Target (₹ in crore)	16.00	13.00	30.00	30.00	30.00
Financial Achievement	6.43	8.21	20.42	16.26	20.58
Percentage of achievement to target	40.0	63.0	68.0	54.0	69.0

ANNXURE-10

(Referred to in Paragraph 2.29)

Recovery performance of the companies

(₹ in crore)

Year	TAHDCO			TABCEDCO			TAMCO		
	Demand	Collection	Percentage of recovery	Demand	Collection	Percentage of recovery	Demand	Collection	Percentage of recovery
2005-06	N.A	N.A	---	11.41	10.80	94.65	1.81	1.62	89.50
2006-07	88.77	1.57	1.76	10.47	9.24	88.25	2.40	2.09	87.08
2007-08	93.96	1.40	1.49	14.70	14.70	100.00	6.85	6.37	92.99
2008-09	96.54	0.69	0.71	25.85	23.97	92.73	9.86	8.26	83.77
2009-10	N.A	N.A	---	N.A	N.A	---	13.46	12.64	93.91

ANNEXURE-11

(Referred to in Paragraph 3.2)

Statement showing installed capacity of generating units of the State of Tamil Nadu

(Figures in MW)

Sl. No.	Particulars	Installed Capacity as on 1 April 2005	Addition during 2005-10	Decrease/ Derated during 2005-10	Installed Capacity as on 1 April 2010
1.	**Own Power Stations**				
	a) Thermal				
	i) Ennore	450	-	-	450
	ii) Tuticorin	1,050	-	-	1,050
	iii) Mettur	840	-	-	840
	iv) North Chennai	630	-	-	630
	b) Hydel	1,987	200	-	2,187
	c) Gas	424	92	-	516
	d) Wind Mill	19	-	2	17
	Total TNEB	5,400	292	2	5,690
2.	**Independent Power Producers**	1,426	273	-	1,699
3.	**Share from Central Generating Stations**	2,705	120	-	2,825
4.	**Total State Sector (1)**	**5,400**	**292**	**2**	**5,690**
5.	**Total Others(2+3)**	**4,131**	**393**	**-**	**4,524**
	Grand Total (MW) (4+5)	**9,531**	**685**	**2**	**10,214**

ANNEXURE-12

(Referred to in Paragraph 3.9)

Statement showing financial position of the Tamil Nadu Electricity Board

(₹ in crore)

Particulars	2005-06	2006-07	2007-08	2008-09	2009-10€
A. Liabilities					
Paid up Capital	535.00	710.00	1,200.00	2,370.50	2,470.50
Reserves and reserve funds	4,944.68	5,752.82	6,681.62	7,419.99	8,429.39
Borrowings (Loan Funds)					
Long term loan	9,323.68	10,561.03	13,745.22	20,249.94	26,805.29
Short term loan	260.00	1,039.26	865.88	1,252.37	5,233.97
Current Liabilities & Provisions	8,720.04	9,554.59	10,661.01	12,045.78	14,900.87
Total	**23,783.40**	**27,617.70**	**33,153.73**	**43,338.58**	**57,840.02**
B. Assets					
Gross Block	19,907.01	21,565.91	23,503.56	25,247.27	27,148.26
Less: Depreciation	8,557.70	8,733.94	9,400.34	10,155.74	10,968.75
Net Fixed Assets	11,349.31	12,831.97	14,103.22	15,091.53	16,179.51
Capital works-in-progress	2,177.35	2,612.11	3,008.37	3,970.65	6,216.22
Investments & other assets	88.04	83.24	270.67	303.63	588.82
Current Assets, Loans and Advances	5,238.85	5,951.87	6,097.02	6,529.89	7,759.10
Accumulated losses	4,911.51	6,130.45	9,642.53	17,413.92	27,094.17
Subsidy receivable	18.34	8.06	31.92	28.96	2.20
Total	**23,783.40**	**27,617.70**	**33,153.73**	**43,338.58**	**57,840.02**

€ Provisional

ANNEXURE-13

(Referred to in Paragraph 3.10)

Statement showing working results of the Tamil Nadu Electricity Board

(₹ in crore)

Sl.No	Description	2005-06	2006-07	2007-08	2008-09	2009-10[€]
1.	**Income**					
	Revenue from sale of power	12,718.98	14,455.23	15,672.85	15,425.60	16,765.30
	Revenue subsidy and grants	1,179.49	1,330.10	1,457.02	1,831.61	1,672.17
	Other income	450.66	319.56	378.56	386.64	408.41
	Total Income	**14,349.13**	**16,104.89**	**17,508.43**	**17,643.85**	**18,845.88**
2.	Own Generation (in MUs)	26,915	29,481	29,241	28,983	27,860
	Less: Auxiliary consumption (in MUs)	2,346	2,393	2,385	2,252	2,430
	Net Generation (in MUs)	24,569	27,088	26,856	26,731	25,430
	Add: Power Purchase in MUs)	29,811	34,082	37,574	37,984	45,027
	Total generation including power purchase (in MUs)	54,380	61,170	64,430	64,715	70,457
	Less: Transmission and Distribution Loss (in MUs)	9,788	11,011	11,597	11,650	12,682
	Net Units sold to Consumers (in MUs)	**44,592**	**50,159**	**52,833**	**53,065**	**57,775**
3.	**Expenditure**					
(a)	Fixed cost					
(i)	Employees cost	1,900.09	2,160.57	2,370.17	2,909.16	3,376.57
(ii)	Administrative and General expenses	199.93	205.91	242.33	224.80	253.67
(iii)	Depreciation	1,187.12	632.31	681.80	775.48	828.08
(iv)	Interest and finance charges	1,132.85	1,204.23	1,586.96	2,276.24	3,170.87
	Total	**4,419.99**	**4,203.02**	**4,881.26**	**6,185.68**	**7,629.19**
(v)	Less: Capitalised items	422.06	412.01	451.63	589.95	815.98
	Total	**3,997.93**	**3,791.01**	**4,429.63**	**5,595.73**	**6,813.21**
(vi)	Add: Other debits and prior period items[♦]	(-)122.05	(-)617.87	99.25	(-)16.04	6.71
	Total fixed cost	**3,875.88**	**3,173.14**	**4,528.88**	**5,579.69**	**6,819.92**
(b)	**Variable cost**					
(i)	Fuel consumption					
	Coal	2,814.61	3,059.88	3,353.53	4,095.11	3,868.38
	Oil	37.88	81.79	104.80	158.89	129.59
	Gas	144.69	153.20	98.79	228.61	240.02

€ Provisional

♦ Prior period adjustments (excluding power purchase transactions that have been treated as part of variable cost in the current year) and other debits have been treated as part of fixed cost.

Sl.No	Description	2005-06	2006-07	2007-08	2008-09	2009-10€
	Naphtha	30.49	55.34	71.81	174.78	87.48
	Other fuel related cost including shortages/surplus	1.95	16.05	13.77	10.77	11.77
(ii)	Cost of water (hydel/ thermal/ gas/others)	14.99	20.41	22.18	23.42	17.72
(iii)	Lubricants and consumables	6.99	10.30	13.14	11.64	7.36
(iv)	Maintenance	192.12	242.03	367.14	436.70	373.64
(v)	Total power purchase cost#	8,558.53	10,511.71	12,446.47	14,695.62	16,969.53
	Total Variable cost	**11,802.25**	**14,150.71**	**16,491.63**	**19,835.54**	**21,705.49**
C.	**Total cost 3(a) + (b)**	**15,678.13**	**17,323.85**	**21,020.51**	**25,415.23**	**28,525.41**
				(In ₹)		
4.	Realisation (per unit)	3.22	3.21	3.31	3.32	3.26
5	Fixed cost (per unit)	0.87	0.63	0.86	1.05	1.18
6(a)	Variable cost (per unit of generation)	1.61	1.64	1.84	2.34	2.27
6(b)	Variable cost (per unit of purchase)	3.50	3.76	4.04	4.72	4.60
6(c)	Weighted Average Variable cost (per unit)	2.65	2.82	3.12	3.74	3.76
7.	Total cost per unit {5+6(c)}	3.52	3.45	3.98	4.79	4.94
8(a)	Contribution (per unit of generation) {4-6(a)}	1.61	1.57	1.47	0.98	0.99
8(b)	Contribution (per unit of purchase) {4-6(b)}	(-)0.28	(-)0.55	(-)0.73	(-)1.40	(-)1.34
8(c)	Weighted Average Contribution (per unit) {4-6(c)}	0.57	0.39	0.19	(-)0.42	(-)0.50
9.	**Profit (+)/Loss(-) (per unit) (4-7)**	**(-)0.30**	**(-)0.24**	**(-)0.67**	**(-)1.47**	**(-)1.68**

\# Prior period adjustments relating to power purchase have been treated as part of variable cost in the current year.

ANNEXURE–14

(Referred to in Paragraph 3.14)

Statement showing operational performance of Tamil Nadu Electricity Board

Sl.No	Particulars	2005-06	2006-07	2007-08	2008-09	2009-10
1.	Installed capacity			(MW)		
(a)	Thermal	2,970	2,970	2,970	2,970	2,970
(b)	Hydel	1,987	2,184	2,187	2,187	2,187
(c)	Gas	424	424	424	516	516
(d)	Other	19	19	17	17	17
(e)	Purchase from Central Generating Stations and IPPs	4131	4501	4524	4524	4524
	TOTAL	**9,531***	**10,098**	**10,122**	**10,214**	**10,214**
2.	Peak demand♣	9,375	8,860	10,334	9,799	11,125
	Percentage increase/decrease (-) over previous year	22.60	(-) 5.49	16.64	(-) 5.18	13.53
3.	**Power generated**			**(MKWH)**		
(a)	Thermal	18,795	21,228	21,355	21,023	19,882
(b)	Hydel	6,141	6,292	6,455	5,386	5,640
(c)	Gas	1,964	1,944	1,419	2,564	2,327
(d)	Other	15	17	12	10	11
	TOTAL	26,915	29,481	29,241	28,983	27,860
	Percentage increase/decrease (-) over previous year	1.76	9.53	(-)0.81	(-)0.88	(-) 3.87
	LESS: Auxiliary consumption					
(a)	Thermal	1,640	1,832	1,874	1,842	1,760
	(Percentage)	8.73	8.63	8.78	8.76	8.85
(b)	Hydel	583	439	428	260	514
	(Percentage)	9.49	6.98	6.63	4.83	9.11
(c)	Gas	123	122	83	150	156
	(Percentage)	6.26	6.28	5.85	5.85	6.71
	TOTAL	**2,346**	**2,393**	**2,385**	**2,252**	**2,430**
	(Percentage)	8.72	8.12	8.16	7.77	8.72
5.	Net power generated	24,569	27,088	26,856	26,731	25,430

* Installed capacity in April 2005 has been considered.

♣ As per report published (November 2010) by CEA – Integrated Resource Planning Division.

Sl.No	Particulars	2005-06	2006-07	2007-08	2008-09	2009-10
6.	Total demand (in MUs)	55,479	59,824	64,510	69,565	75,011
7.	Deficit (-)/Surplus (+) power (In MU)	(-)30,910	(-)32,736	(-)37,654	(-)42,834	(-)49,581
8.	**Power purchased/Sold**					
(a)	Within the State					
	(i) Government	8,492	8,865	8,647	7,791	9,015
	(ii) Private	11,200	14,912	19,308	20,936	24,572
(b)	Other States	10,119	10,305	9,619	9,257	11,440
	Total power purchased/sold	**29,811**	**34,082**	**37,574**	**37,984**	**45,027**
9.	Net Surplus (+)/Net Deficit (-)	(-)1,099	(+)1,346	(-)80	(-)4,850	(-)4,554

ANNEXURE-15

(Referred to in Paragraph 3.19)

(a) Statement showing time and cost over-run in respect of completed projects during 2005-10

S. No.	Phase-wise name of the Unit	Installed Capacity (in MW)	Scheduled completion as per DPR	Actual Date of completion/expected completion month of unit	Time overrun (in months)	Estimated cost as per DPR (₹. in crore)	Awarded Cost (₹. in crore)	Actual expenditure as on 31 October 2010 (₹. in crore)	Expenditure over and above estimate (9 – 7) (₹. in crore)	Percentage increase as compared to DPR (10/7)*100	Annual Generation (MU)	Loss of generation during the review period (MUs)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1.	Bhavani Kattalai Barrage-I (2 X 15 MW)	30	I-July 2003	I-Aug. 2006	37	90.62	216.05	216.05	125.43	138	17.40	24.65
			II-Oct 2003	II-Sept 2006	35							
2.	Perunchani Mini Power House (2 X 0.650)	1.30	I-Jan 1997	I–Mar 2006	86	3.09	6.23	13.06	9.97	323	1.15	1.05
			II-Jan 1999	II-Mar 2006								
3.	Amaravathi Mini Power House (2 X 2)	4.00	I-Jan 2002	I-July 2006	54	5.19	20.13	20.13	14.94	288	9.71	12.14
			II-Jan 2002	II-Sept.2006	56							
4	Pykara Ultimate Stage HEP (3X50)	150	I,II,III -Aug 1996	I,II and III – Sep. 2005	109	70.16	312.19	312.19	242.03	345	474.75	197.81
5	Valuthur Phase-II	92	Feb. 2008	Feb 2009	11	355.30	355.30	355.30	NIL	NIL	486.74	470.74
	Total								**392.37**			**706.39**

(b) Statement showing time and cost over-run in respect of ongoing projects during 2005-10

S. No.	Phase-wise name of the Unit	Installed Capacity (in MW)	Scheduled completion as per DPR	Status of the project as of October 2010	Time overrun so far (in months)	Estimated cost as per DPR (₹. in crore)	Awarded Cost (₹. in crore)	Actual expenditure as on 31 October 2010 (₹. in crore)	Expenditure over and above estimate (9 – 7) (₹. in crore)	Percentage increase as compared to DPR (10/7)*100	Annual Generation (MU)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	Bhavani Kattalai Barrage – II (2X15 MW)	30	February 2009	Work in Progress	20	99.15	400.59	326.43	227.28	229	83.39
2	Bhavani Kattalai Barrage.III (2 X 15 MW)	30	February 2009	Work in Progress	20	99.75	396.59	304.16	204.41	205	78.77
3	Bhavani Barrage – II (2 X 5 MW)	10	February 2010	Work in Progress	8	49.40	151.73	92.44	43.04	87	16.72
4	Periyar Vaigai Mini PH – I (2X2)	4	December 2009	Work in Progress	10	18.83	49.19	39.77	20.94	111	15.92
5	Periyar Vaigai Mini PH – II (2X1.25)	2.50	February 2009	Work in Progress	20	14.25	40.07	24.24	9.99	70	10.25
6	Periyar Vaigai Mini PH – III(2X2)	4.00	January 2010	Work in Progress	9	18.63	58.84	31.22	12.59	68	15.30
7	Periyar Vaigai Mini PH – IV(2.125)	2.50	January 2009	Work in Progress	9	15.00	46.66	25.84	10.84	72	10.38
	Total	**360.30**							**529.09**		

ANNEXURE-16

(Referred to in Paragraph 3.24)

Statement showing loss of generation due to inadequate fuel stock in TTPS, MTPS and ETPS

Year	Name of the TPS	Forced outage/partial loss on account of want of fuel (coal) in hours	Estimated Loss of generation (in MU) *	Rate per Unit (₹/Unit)	₹ in crore
2008-09	TTPS	*	77.65	3.32	25.78
	MTPS	*	161.75		53.70
	ETPS	*	5.98		1.99
2009-10	TTPS	*	104.97	3.26	34.22
	MTPS	*	205.65		67.04
	ETPS	2,794.24	256.77		83.71
	Total		**812.77**		**266.44**

* The plants were operated on low loads and the loss of generation was accounted under partial loss. Hence duration of hours was not recorded.

ANNEXURE-17

(Referred to in Paragraph 3.27)

Statement showing year wise excess consumption of Coal, Gas and Naphtha

a) Thermal Stations

Sl. No.	Particulars		2005-06	2006-07	2007-08	2008-09	2009-10
1	Gross Generation (MUs)	TTPS	7,674.14	8,083.29	7,974.38	7,850.33	7,166.61
		ETPS	600.52	1,427.88	2,032.41	1,938.33	1,500.12
		MTPS	6,518.90	6,812.83	6,691.97	6,458.96	6,390.56
		NCTPS	4,001.13	4,904.40	4,656.54	4,775.09	4,825.12
2	Heat Consumption allowed by TNERC (Kcal/KWh)	TTPS	2,453	2453	2,453	2,453	2,453
		ETPS	3,200	3,200	3,200	3,200	3,200
		MTPS	2,500	2,500	2,500	2,500	2,500
		NCTPS	2,393	2,393	2,393	2,393	2,393
3	Actual heat consumption (Kcal/KWh)≠	TTPS	2,492	2,495	2,543	2,555	2,551
		ETPS	3,303	3,243	3,362	3,277	3,372
		MTPS	2,538	2,524	2,502	2,517	2,528
		NCTPS	2,451	2,450	2,453	2,456	2,466
4	Coal consumption (MT)	TTPS	56,95,818	58,67,273	61,96,117	58,18,964	53,59,705
		ETPS	5,76,180	12,89,200	19,73,800	18,17,119	15,10,607
		MTPS	41,81,874	46,11,100	44,97,375	44,11,200	45,67,905
		NCTPS	25,53,863	32,80,728	30,02,032	32,26,760	33,57,644
5	Average calorific value of coal (Kcal/Kg)	TTPS	3,353	3,434	3,235	3,415	3,365
		ETPS	3,385	3,411	3,394	3,396	3,266
		MTPS	3,975	3,723	3,716	3,613	3,530
		NCTPS	3,877	3,659	3,794	3,743	3,533
6	Heat required from coal for generation (million Kcal) (1x2)	TTPS	188,24,665	198,28,310	195,61,154	192,56,859	175,79,694
		ETPS	19,21,664	45,69,216	65,03,712	62,02,656	48,00,384
		MTPS	162,97,250	170,32,075	167,29,925	161,47,400	159,76,400
		NCTPS	95,74,704	117,36,229	111,43,100	114,26,790	115,46,512
7	Coal required for gross generation (MT) (6/5)	TTPS	56,14,275	57,74,115	60,46,725	56,38,905	52,24,278
		ETPS	5,67,700	13,39,553	19,16,238	18,26,459	14,69,805
		MTPS	40,99,937	45,74,825	45,02,133	44,69,250	45,25,892
		NCTPS	24,69,617	32,07,496	29,37,032	30,52,843	32,68,189
8.	Excess consumption of coal (MT) (4 –7)	TTPS	81,543	93,158	1,49,392	1,80,059	1,35,427
		ETPS	8,480	NIL	57,562	NIL	40,802
		MTPS	81,937	36,275	NIL	NIL	42,013
		NCTPS	84,246	73,232	65,000	1,73,917	89,455
9	Rate of coal (₹ Per MT)♥	TTPS	2,174	2,157	2,212	2,982	2,717
		ETPS	1,662	1,722	1,824	1,952	1,833
		MTPS	2,372	2,148	2,276	2,729	2,551
		NCTPS	2,028	1,816	1,944	2,365	2,180
10	Value of excess coal consumed (8 x 9) (₹. in crore)	TTPS	17.72	20.10	33.05	53.69	36.80
		ETPS	1.41	NIL	10.50	NIL	7.48
		MTPS	19.44	7.79	NIL	NIL	10.72
		NCTPS	17.08	13.30	12.64	41.13	19.50
	Grand total- excess cost of fuel consumption – ₹322.35 crore						

≠ Usage of oil which is only a secondary fuel during emergency situations and light up is not considered.

♥ Weighted average cost of both indigenous and imported coal for the year

b) Gas Stations

Sl. No.	Particulars		2005-06	2006-07	2007-08	2008-09	2009-10
1	Gross Generation (MUs)	BBGTPS	39.87	56.58	63.30	179.40	86.67
		TKGTPS	572.86	704.23	676.68	707.74	532.33
		KGTPS	654.22	455.28	68.32	724.09	644.58
		VGTPS-I	697.41	727.87	610.52	703.50	684.60
		VGTPS-II[φ]	-	-	-	249.78	377.39
2	Heat Consumption allowed by TNERC (Kcal.KWh)	BBGTPS	2,830	2,830	2,830	2,830	2,830
		TKGTPS	1,950	1,950	1,950	1,950	1,950
		KGTPS	1,950	1,950	1,950	1,950	1,950
		VGTPS-I	1,950	1,950	1,950	1,950	1,950
		VGTPS-II	-	-	-	1,950	1,950
3	Actual heat consumption (Kcal/KWh)	BBGTPS	3,161	3,177	3,180	3,143	3,318
		TKGTPS	2,150	1,863	1,890	1,887	1,894
		KGTPS	1,773	1,794	1,864	1,792	1,868
		VGTPS-I	1,707	1,865	1,863	1,813	1,804
		VGTPS-II	-	-	-	2,683	1,916
4	Fuel consumption (MT/ million sm^3) ♣	BBGTPS	10,196	15,600	17,666	50,737	24,015
		TKGTPS	126	134	131	139	104
		KGTPS	126	88	13	138	109
		VGTPS-I	148	151	128	146	104
		VGTPS-II	-	-	-	70	82
5	Average calorific value of Fuel (Kcal/Kg and Kcal/ksm^3)	BBGTPS	10,572	10,572	10,572	10,572	10,572
		TKGTPS	9,544	9,714	9,750	9,563	9,674
		KGTPS	9,254	9,355	9,475	9,407	9,453
		VGTPS-I	8,686	8,812	8,832	8,783	9,674
		VGTPS-II	-	-	-	8,774	8,805
6	Heat required from fuel for actual generation (lakh Kcal) (1x2)	BBGTPS	1,12,832	1,60,121	1,79,139	5,07,702	2,45,276
		TKGTPS	11,17,077	13,73,256	13,19,526	13,80,093	10,38,036
		KGTPS	12,75,729	8,87,796	1,33,224	14,11,976	12,56,931
		VGTPS-I	13,59,950	14,19,347	11,90,514	13,71,825	13,34,970
		VGTPS-II	-	-	-	4,87,071	7,35,911
7	Fuel required for gross generation (MT/ million sm^3) (6/5)	BBGTPS	10,673	15,146	16,945	48,023	23,201
		TKGTPS	117	141	135	144	107
		KGTPS	138	95	14	150	133
		VGTPS-I	157	161	135	156	138
		VGTPS-II	-	-	-	56	84
8.	Excess consumption of Fuel (MT) (4 –7)	BBGTPS	NIL	454	721	2,714	814
		TKGTPS	9	NIL	NIL	NIL	NIL
		KGTPS	NIL	NIL	NIL	NIL	NIL
		VGTPS-I	NIL	NIL	NIL	NIL	NIL
		VGTPS-II	-	-	-	14	NIL
9	Rate of Fuel (₹ per MT/ ksm^3)	BBGTPS	29,106	35,248	39,891	34,194	35,706
		TKGTPS	2,336	4,018	3,986	3,836	5,900
		KGTPS	3,540	3,670	3,520	3,520	3,520
		VGTPS-I	3,270	3,420	2,840	4,370	4,780
		VGTPS-II	-	-	-	4,370	4,780
10	Value of excess Fuel consumed (8 x 9) (₹. in crore)	BBGTPS	NIL	1.60	2.88	9.28	2.91
		TKGTPS	2.10	NIL	NIL	NIL	NIL
		KGTPS	NIL	NIL	NIL	NIL	NIL
		VGTPS-I	NIL	NIL	NIL	NIL	NIL
		VGTPS-II	-	-	-	6.34	NIL
	Grand total- excess cost of fuel consumption – ₹ 25.11 crore						

φ Commissioned during 2008-2009.

♣ Naptha (MT) in respect of BBGTPS and Natural Gas (Million sm^3) in respect of TKGTPS, KGTPS and VGTPS.

ANNEXURE-18
(Referred to in Paragraph 3.29)
Statement showing excess manpower

Sl. No.	Particulars	2005-06			2006-07			2007-08			2008-09			2009-10		
		Thermal	Hydel	Gas	Thermal	Hydel	Gas	Thermal	Hydel	Gas	Thermal	Hydel	Gas	Thermal	Hydel	Gas
1	Sanctioned strength	10,821	3,455	381	10,819	3,345	381	10,835	34,16	383	10,809	3,404	381	11,052	3,383	381
2	Manpower as per norms	5,227	3,855	227	5,227	3,909	227	5,227	3,914	227	5,227	3,914	227	5,227	3,914	276
3	Actual manpower	8,208	2,433	322	7,764	2,493	307	7,454	2,410	323	7,221	2,268	324	7,195	2,181	358
4.	Excess(+)/Shortage(-) of manpower with reference to National Electricity Plan norms	2,981	(-)1,422	95	2,537	(-)1,416	80	2,227	(-)1,504	96	1,994	(-)1,646	97	1,968	(-)1,733	82
5	Expenditure on manpower (₹ in crore)	146.09	23.29	8.07	146.80	26.80	8.18	160.63	28.47	10.21	211.13	31.19	11.32	210.38	47.35	16.85
6.	Extra expenditure with reference to norms (₹ in crore) [(5/3) x (4)]	53.06	NIL	2.38	47.97	NIL	2.13	47.99	NIL	3.03	58.30	NIL	3.39	57.54	NIL	3.86
Total extra expenditure ₹279.65 crore																

ANNEXURE-19

(Referred to in Paragraph 3.33)

Statement showing the low capacity utilisation of Hydel stations

Name of the Power House	Installed capacity (in MW)	Operated capacity (in MW)	Loss of generation			Reasons for low capacity utilisation
			Period	MUs	Value (₹. In crore)	
Periyar Power House – Unit – II	35	26	2007-2008 to 2009-2010	36.18	11.99	The Axial vibration in the Machine-II which persisted since April 2007 was not rectified till date (November 2010). The Board replied that after completing the uprating works in unit-II, the enhanced capacity would be achieved.
Lower Mettur Barrage Power House –III	30	26.6 / 22	2005-2006 to 2009-2010	38.07	13.53	The river training work (February 2005 to May 2007) done at a cost of ₹2.38 crore to improve the generation was not successful because no scientific analysis of the reasons for shortfall in generation was carried out. The Board replied that the loss of generation was due to backing up of water at down stream of BPH-IV. The fact remained that the water availability was not improved even after Board carrying out river training works.
Lower Mettur Barrage Power House –IV	30	22	2006-2007 to 2009-2010	102.79	33.57	The experts opined (December 2006) that river training works at a cost of ₹25 to ₹30 crore would improve the generation. The Board did not take up the work citing cost constraints. As the Board has been incurring average loss of generation of 25.7 MUs *per annum*, it would have been beneficial to carry the river training works and reach the full generation level.
Thirumurthy Dam Mini PH and Amaravathy Small Hydro PH	3 X 0.650 and 2 X 2	-	2005-2006 to 2009-2010	0.71	0.23	Absence of dedicated feeders for evacuating the power generated from the two power houses led to tripping of generating machines caused by feeders. The Board replied that sub station was under construction.
Perunchani PH	1.30		2006-2007 to 2009-2010	14.64	4.81	In Unit I, absence of dedicated feeders led to power evacuation problems. Poor workmanship in execution of the project also caused frequent loss of generation. In Unit-II, continuous run of the unit for 72-hours at full load was yet to be carried out (November 2010) by the contractor even after a lapse more than four years leading to non-operation of the unit to the rated capacity (0.650 MW) till date (November 2010). The Board replied that it had proposed to erect the feeders for unit-I and the contractor for unit-II had been addressed to complete the pending works
Total				**192.39**	**64.13**	

ANNEXURE-20

(Referred to in Paragraph 3.34)

Loss of generation due to avoidable forced outages in Hydel stations

Sl.No.	Name of the Hydel station	Period of forced outages	Loss of generation (In MUs)	Value (₹ in crore)	Audit analysis of reasons for forced outages
1.	Lower Mettur Barrage Power House-I	2005-10	10.52	3.43	The trash rack cleaning system to prevent debris was unsuccessful since September 2005. But the Board had not installed alternate trash rack till date (November 2010). Board replied that the installation of trash rack machine was already proposed.
2.	Bhavani Kattalai Barrage Power House Unit-II	September 2008	2.18	0.72	The main turbo generators commissioned in October 2006 failed in September 2008 due to stator coil earth fault on account of poor workmanship which was rectified by another contractor in September 2008. Board replied that the cost of repair would be recovered from the supplier of generator.
3.	Lower Mettur Barrage Power House -II	2006-07 and 2008-09	5.83	1.90	The Board did not follow preventive maintenance schedules resulting in repeated occurrence of stator coil problems. Board replied that the works referred to in audit were of special nature which required expertise for rectification. The fact remained that the same was not rectified even after two years.
4.	Kundah Power House-III, Unit-II	February to June 2007	98.25	32.52	Delay in placement of purchase order and the subsequent delay in issue of amendment regarding replacement of burnt stator coil resulted in loss of generation. Board replied that the loss of generation was due to non availability of water. The reply was not convincing because there was generation during the said period in Kundah Unit I and III. Kundah Unit II was lying in between these two units and hence the water would be available for the intermediary unit also.
5.	Punachi Mini Power House Unit-I and II	2006-07 to 2009-10	3.50	1.14	Non-rectification of repeated problems in NDE bearing (Unit-I) and failure of thrust pad (Unit-II)
6.	Aliyar Mini Power House, Unit-II	Shutdown of 207 days from August 2009	3.00	0.98	The contractor did not take up repair of Unit-II to set right the defects noticed during the guarantee period (upto December 2009) The rectification work was completed only in June 2010.
			123.28	**40.69**	

ANNEXURE-21

{Referred to in Paragraph 3.36 (a)}

Statement showing delay in capital maintenance of thermal units

Sl. No.	Station Name	Unit	When last done	When due	When done	Delay
1	TTPS	I	January 2004	February 2009	March 2010	13 months
		II	November 2001	November 2006	January 2009	25 months
		III	January 2001	January 2006	December 2005	-
		IV	October 2003 (medium overhaul only – previous capital overhaul done in 1999-2000)	October 2008	Yet to be taken up (May 2010)	19 months
		V	February 2005	February 2010	Yet to be taken up (May 2010)	Three months-
2	NCTPS	I	November 2004	November 2009	Yet to be taken up (May 2010)	Six months
		II	January 2004	January 2009	October 2007	-
		III	---	March 2006	October 2006	Seven months
3.	MTPS	I	July 1998	July 2003	February 2006	30 months
		II	November 2001	November 2006	September 2008	21 months
		III	September 2002	September 2007	Yet to be taken up (May 2010)	32 months
		IV	November 2003	November 2008	Yet to be taken up (May 2010)	18 months
4.	ETPS	I	January 1995	January 2000	January 2007	84 months
		II	July 1995	July 2005	April 2006	Nine months
		III	April 2001	April 2006	May 2006	One month
		IV	November 2000	November 2005	October 2007	23 months
		V	November 2001	November 2006	Yet to be taken up (May 2010)	42 months

ANNEXURE-22

(Referred to in paragraph 4.17.1)

Statement showing paragraphs/reviews for which explanatory notes were not received

Sl. No.	Name of the Department	1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	Total
1.	Energy	---	---	---	---	---	---	---	---	9	7	**16**
2.	Co-operation, Food and Consumer Protection	---	---	---	---	---	---	---	---	---	2	**2**
3.	Highways and Minor ports	---	---	---	---	---	---	---	----	---	1	**1**
4.	Industries	1	1	1	---	---	---	---	---	3	3	**9**
5.	Micro, Small and Medium Enterprises	---	---	---	---	---	---	---	---	---	2	**2**
6.	Transport	---	---	---	---	---	---	---	---	---	1	**1**
7.	Environment and Forests	---	---	---	---	---	---	---	---	---	2	**2**
8.	Prohibition and Excise	---	---	---	---	---	---	---	---	---	1	**1**
9.	Information Technology	---	---	---	---	---	---	---	---	---	2	**2**
10.	Agriculture	---	---	---	---	---	---	---	---	---	1	**1**
11.	General	---	---	---	---	---	---	---	---	---	2	**2**
	TOTAL	**1**	**1**	**1**	**---**	**---**	**---**	**---**	**---**	**12**	**24**	**39**

ANNEXURE-23

(Referred to in paragraph 4.17.3)

Statement showing the department-wise outstanding inspection reports

Sl. No	Name of Department	Number of PSUs	Number of outstanding IRs	Number of outstanding paragraphs	Years from which paragraphs outstanding
1.	Industry	13	34	101	2005-06
2.	Micro, Small and Medium Enterprises	4	11	38	2004-05
3.	Information Technology	4	7	40	2005-06
4.	Information and Tourism	1	1	1	2009-10
5.	Agriculture	1	1	4	2007-08
6.	Public (Ex-servicemen)	1	3	6	2007-08
7.	Prohibition and Excise	1	2	4	2007-08
8.	Rural Development and Panchayatraj	2	6	13	2005-06
9.	Energy	1	1	1	2008-09
10.	Municipal Administration and Water Supply	1	1	2	2007-08
11.	Transport	7	16	69	2007-08
12.	Animal Husbandry	1	2	4	2007-08
13.	Health and Family Welfare	2	5	13	2007-08
14.	Adi Dravidar and Tribal Welfare	1	3	26	2006-07
15.	Backward Classes, Most Backward Classes and Minority Welfare	2	4	8	2007-08
16.	Home	1	1	3	2009-10
17.	Public Works	1	1	10	2007-08
18.	Highways and Minor Ports	2	6	49	2006-07
19.	Handloom, Handicrafts, Textiles and Khadi	3	5	11	2007-08
20.	Environment and Forests	3	4	7	2006-07
21.	Co-operation, Food and Consumer Protection	2	4	10	2007-08
22.	Tamil Nadu Electricity Board	1	557	2238	2002-03
	Grand Total	**55**	**675**	**2658**	

ANNEXURE-24

(Referred to in paragraph 4.17.3)

Statement showing the department-wise draft paragraphs/reviews, reply to which were awaited

Sl. No	Name of Department	Number of draft paragraphs	Number of reviews	Period of issue
1.	Industries	1	---	May 2010
2.	Energy	7	1	April, May, June, September 2010
3.	Information Technology	1	---	May 2010
4.	Highways and Minor Ports	2	---	May 2010
5.	Adi dravidar & Tribal Welfare and BC, MBC and Minorities Welfare	---	1	July 2010
	TOTAL	**11**	**2**	

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