CHAPTER-IV
GOVERNMENT COMMERCIAL AND TRADING ACTIVITIES

4.1 Overview of State Public Sector Undertakings

Introduction

4.1.1 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 Chhattisgarh, the State PSUs occupy an important place in the State economy. The State PSUs registered a turnover of ₹ 5449.33 crore for 2009-10 as per their latest finalised accounts as of September 2010. This turnover was equal to 5.05 *per cent* of State Gross Domestic Product (GDP) for 2009-10. Major activities of Chhattisgarh State PSUs are concentrated in the power sector. The State PSUs earned a profit of ₹ 475.57 crore in the aggregate for 2009-10 as per their latest finalised accounts. They had employed 19,321[1] employees as of 31 March 2010.

4.1.2 As on 31 March 2010, there were 17 PSUs as per the details given below. Of these, no company was listed on the stock exchange.

Type of PSUs	Working PSUs	Non-working PSUs[2]	Total
Government Companies	15	-	15
Statutory Corporations	2[3]	-	2
Total	**17**	**-**	**17**

4.1.3 During the year 2009-10, one PSU namely, Chhattisgarh Sondiha Coal Company Limited was established.

Audit Mandate

4.1.4 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.

4.1.5 The accounts of the State Government companies (as defined in Section 617 of the Companies Act, 1956) are audited by Statutory Auditors,

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1 As per the details provided by 10 PSUs

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

3 Including Chhattisgarh State Electricity Board, which was unbundled into five companies with effect from 1 January 2009 as per the State Government Gazette Notification dated 19 December 2008. Further, as per the Transfer Scheme Rules, 2010 notified (31 March 2010) by Government, the properties and all interests, rights, liabilities, etc. of the CSEB stand transferred to and vested with the State Government w.e.f. 1 January 2009. Hence, CSEB did not virtually hold any assets, liabilities, etc. The name of CSEB has been included in the Chapter for reconciliation purposes as CSEB, having pendency in finalisation of accounts is appearing under ***Appendix-4.1.2***

who are appointed by Comptroller and Auditor General of India (CAG) as per the provisions of Section 619(2) of the Companies Act, 1956. These accounts are also subject to supplementary audit conducted by CAG as per the provisions of Section 619 of the Companies Act, 1956.

4.1.6 Audit of Statutory corporations is governed by their respective legislations. In respect of Chhattisgarh State Warehousing Corporation, the audit is conducted by Chartered Accountants and supplementary audit by CAG.

Investment in State PSUs

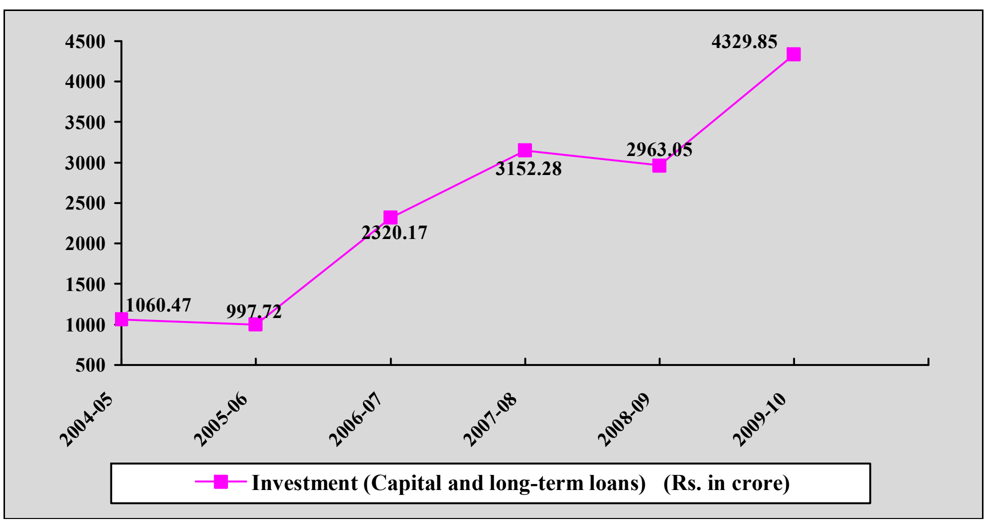
4.1.7 As on 31 March 2010, the investment (capital and long-term loans) in 17 PSUs was ₹ 4329.85 crore as per details given below.

(₹ in crore)

Type of PSUs	Government Companies			Statutory Corporations			Grand Total
	Capital	Long Term Loans	Total	Capital	Long Term Loans	Total	
Working PSUs	78.25	4249.60	4327.85	2.00	-	2.00	4329.85[4]

A summarised position of Government investment in State PSUs is detailed in ***Appendix-4.1.1***.

4.1.8 As on 31 March 2010, the total investment consisted of 1.85 *per cent* towards capital and 98.15 *per cent* in long-term loans. The investment has grown by 308.30 *per cent* from ₹ 1060.47 crore in 2004-05 to ₹ 4329.85 crore in 2009-10 as shown in the graph below.

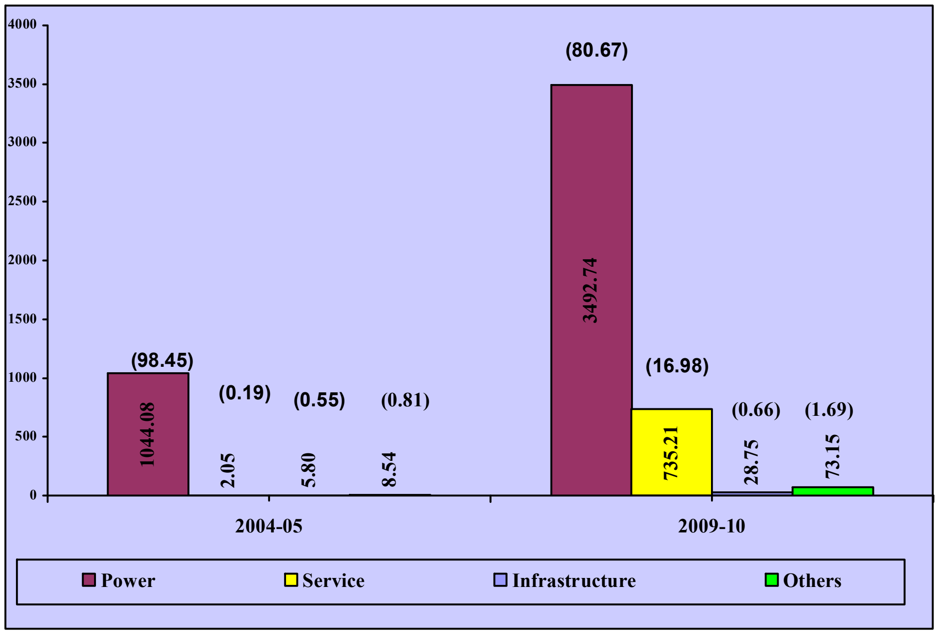


[4] State Government's investment in working PSU's was ₹ 503.74 crore (Share capital, Share application money and loans)

It may be seen that during the year 2009-10, there was an increase of ₹ 1,366.80 crore in the investment in State PSUs mainly due to increase of ₹ 1,004.48 crore in the investments in power sector by way of long term loans from the sources other than State Government.

4.1.9 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.

(Amount ₹in crore)



(Figures in brackets show the percentage of total investment)

As may be seen from the above chart the major investment of the State Government in PSUs was in power sector, which increased from ₹ 1,044.08 crore during 2004-05 to ₹ 3,492.74 crore during 2009-10.

Budgetary outgo, grants/subsidies, guarantees and loans

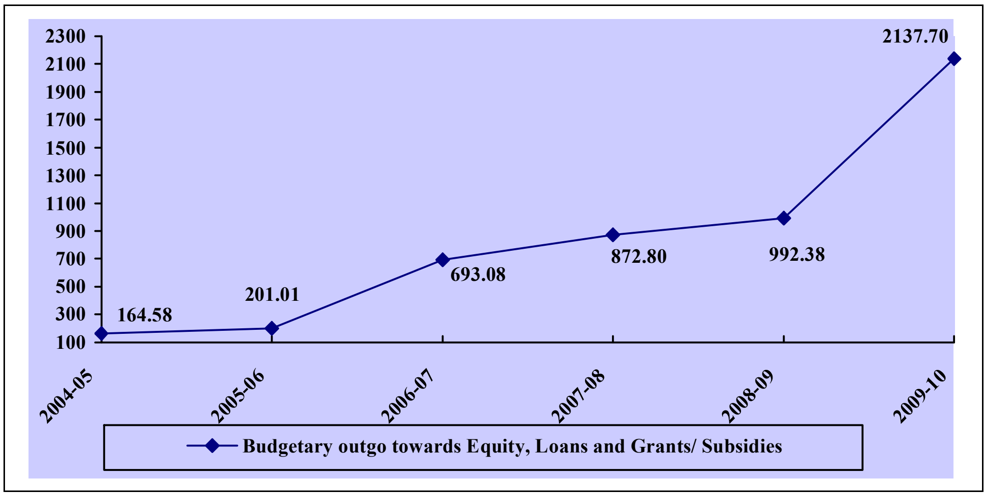
4.1.10 The details regarding budgetary outgo by the State Government towards equity, loans, grants/ subsidies, guarantees issued, loans written off, loans converted into equity and interest waived in respect of State PSUs are given in ***Appendix-4.1.3***. The summarised details are given below for three years ended 2009-10.

(Amount ₹ in crore)

Sl. No.	Particulars	2007-08		2008-09		2009-10	
		No. of PSUs	Amount	No. of PSUs	Amount	No. of PSUs	Amount
1.	Equity Capital outgo from budget	1	1.00	-	-	-	-
2.	Loans given from budget	2	8.13	1	1.95	1	500.00
3.	Grants/Subsidy received	7	863.67	6	990.43	7	1637.70
4.	Total Outgo (1+2+3)	7[5]	872.80	7[5]	992.38	7[5]	2137.70
5.	Loans converted into equity	-	-	1	20.11	-	-
6.	Guarantees issued	2	252.53	2	108.11	1	1.46
7.	Guarantee Commitment	2	132.36	1	22.98	2	376.53

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

(Amount ₹ in crore)



The budgetary outgo towards Equity, Loans and Grants/Subsidies increased from ₹ 164.58 crore (2004-05) to ₹ 2,137.70 crore (2009-10). The budgetary outgo of ₹ 2,137.70 crore during 2009-10 included a major portion of budgetary support of ₹ 1,841.25 crore extended to one PSU (Chhattisgarh State Civil Supplies Corporation Limited) by way of loans (₹ 500 crore) and grants (₹ 1,341.25 crore).

4.1.12 The guarantees outstanding decreased from ₹ 132.36 crore in 2007-08 to ₹ 22.98 crore in 2008-09 but increased to ₹ 376.53 crore in 2009-10. None of the PSU has paid any guarantee fee/commission to the State Government during 2009-10.

Reconciliation with Finance Accounts

4.1.13 The figures in respect of equity and guarantees outstanding as per records of State PSUs should agree with that of the figures appearing in the Finance Accounts of the State. In case the figures do not agree, the concerned

[5] These are the actual number of PSUs which have received budgetary support in the form of equity, loans, grants and subsidy from the State Government during the year

PSUs and the Finance Department should carry out reconciliation of differences. The position in this regard as at 31 March 2010 is stated below.

(Amount ₹ in crore)

Outstanding in respect of	Amount as per Finance Accounts	Amount as per records of PSUs	Difference
Equity	26.38	40.13	13.75
Guarantees	433.10	376.53	56.57

4.1.14 We observed that the differences occurred in respect of six PSUs and some of the differences were pending reconciliation since 2004-05.The Government and the PSUs should take concrete steps to reconcile the differences in a time-bound manner.

Performance of PSUs

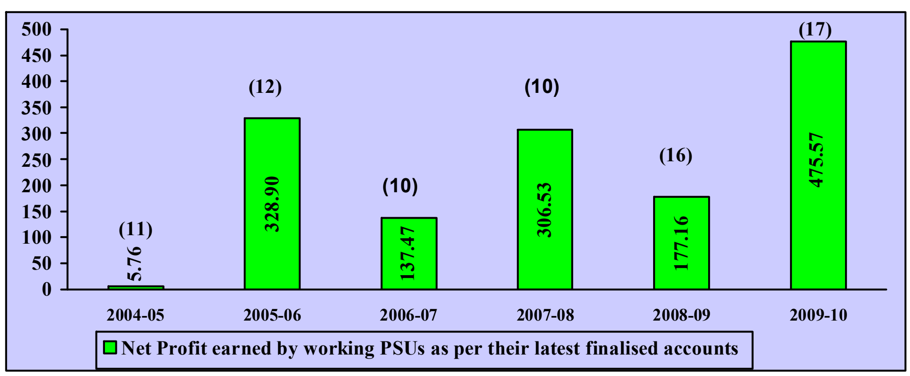
4.1.15 The financial results of PSUs, financial position and working results of working Statutory corporations are detailed in ***Appendix-4.1.2, 4.1.5, 4.1.6*** respectively. The ratio of PSU turnover to State GDP shows the extent of PSU activities in the State economy. Table below provides the details of working PSUs turnover and State GDP for the period 2004-05 to 2009-10.

(Amount ₹ in crore)

Particulars	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Turnover[6]	354.88	3,015.23	3,709.55	4,493.73	4,773.05	5,449.33
State GDP[7]	45,999.00	51,921.00	57,782.00	67,455.00	80,698.41	1,07,848.23
Percentage of Turnover to State GDP	0.77	5.81	6.42	6.66	5.91	5.05

There is steady increase in aggregate turnover of State PSUs primarily due to increase in business activities in power sector which was, however, not in proportion to the corresponding growth in the State GDP after 2007-08.

4.1.16 Profit earned and losses incurred by State working PSUs during 2004-05 to 2009-10 are given below in a bar chart.



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

During the year 2009-10, out of 17[8] working PSUs, eight PSUs[9] earned profit of ₹ 480.01 crore and four PSUs incurred loss of ₹ 4.44 crore as per their latest

6 Turnover as per the latest finalised accounts as of 30 September 2010

7 The State GDP in respect of 2009-10 is Advance estimate

finalised accounts as on 30 September 2010. Two PSUs[10] prepared their accounts on "no profit no loss" basis. Balance three PSUs did not finalise their first accounts. The major contributors to profit were Chhattisgarh State Electricity Board (₹ 435.29 crore), Chhattisgarh Rajya Van Vikas Nigam Limited (₹ 17.74 crore) and Chhattisgarh State Warehousing Corporation (₹ 25.10 crore). Losses were incurred by Chhattisgarh State Industrial Development Corporation Limited (₹ 2.00 crore), Chhattisgarh Mineral Development Corporation Limited (₹ 1.22 crore) and Chhattisgarh State Civil Supplies Corporation Limited (₹ 1.21 crore).

4.1.17 The losses of PSUs are mainly attributable to deficiencies in financial management, planning, implementation of project, running their operations and monitoring. A review of latest Audit Reports of CAG shows that the State PSUs incurred losses to the tune of ₹ 647.80 crore and infructuous investments of ₹ 81.06 crore which were controllable with better management. Year wise details from Audit Reports are stated below.

(Amount ₹ in crore)

Particulars	2007-08	2008-09	2009-10	Total
Net Profit (+)/ loss (-) of working PSUs	306.53	177.16	475.57	**959.26**
Controllable losses as per CAG's Audit Report	216.82	10.28	420.70	**647.80**
Infructuous investments	-	0.14	80.92	**81.06**

4.1.18 The above losses pointed out by Audit Reports of CAG are based on test check of records of PSUs. The actual controllable losses would be much more. The above table shows that with better management, the profits can be enhanced substantially. The PSUs can discharge their role efficiently only if they are financially self-reliant. The above situation points towards the need for professionalism and accountability in the functioning of PSUs.

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

(Amount ₹ in crore)

Particulars	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Return on Capital Employed (*Per cent*)	5.03	20.56	14.35	22.76	14.38	12.09
Debt	1,021.81	958.71	2,277.16	3,108.27	2,861.68	4,249.60
Turnover[11]	354.88	3,015.24	3,709.55	4,493.73	4,773.05	5,449.33
Debt/ Turnover Ratio	2.88:1	0.32:1	0.61:1	0.69:1	0.60:1	0.78:1
Interest Payments	11.94	119.09	193.93	216.20	180.99	213.31
Accumulated Profits (losses)	10.77	319.28	451.76	728.52	836.89	1,808.06

4.1.20 It may be noted that the Debt turnover ratio had improved upto 2008-09 from 2.88:1 (2004-05) to 0.60:1 (2008-09) but deteriorated marginally to

[8] Including erstwhile CSEB, which was unbundled into five power sector companies (serial number A-9 to 13 of ***Appendix-4.1.2***) in December 2008, but had finalised its accounts upto the year 2006-07 as on 30 September 2010

[9] Including three companies (serial number A-9, 10 and 13 of ***Appendix-4.1.2***) which have not started commercial operations but earned aggregate nominal profit of ₹ 27,042.00 out of interest income

[10] CMDC ICPL Coal Limited and Chhattisgarh Infrastructure Development Corporation Limited

[11] Turnover of working PSUs as per the latest finalised accounts as of 30 September 2010

0.78:1 in 2009-10. The accumulated profits of the State PSUs had shown gradual improvement during previous six years and had registered a growth of more than 167 times from the year 2004-05 (₹ 10.77 crore) to 2009-10 (₹ 1,808.06 crore). It shows that the performance of State PSUs is good enough to absorb the debt burden.

4.1.21 The State Government had not formulated any dividend policy for payment of minimum return on the paid-up share capital contributed by the State Government. As per their latest finalised accounts, eight PSUs earned an aggregate profit of ₹ 480.01 crore of which only two PSUs[12] declared a dividend of ₹ 2.77 crore as per the provisions of the relevant Act.

Arrears in finalisation of accounts

4.1.22 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	12	10	10	16[13]	17
2.	Number of accounts finalised during the year	5	5	10	9	16
3.	Number of accounts in arrears	26	31	31	36	37
4.	Average arrears per PSU (3/1)	2.17	3.10	3.10	2.25	2.18
5.	Number of Working PSUs with arrears in accounts[14]	12	10	10	13	15
6.	Extent of arrears	1 to 4 years	1 to 5 years	1 to 5 years	1 to 5 years	1 to 6 years

4.1.23 From the above table it would be seen that there was increase in arrears of accounts. Concrete steps to clear the accounts need to be taken. The main reason as stated by the companies for delay in finalisation of accounts was the books of accounts not closed/reconciled. It was observed that many organisations were formed after bifurcating from the erstwhile organisations in Madhya Pradesh and importance for timely preparation and finalisation of annual accounts was not given by the management.

4.1.24 The State Government had invested ₹ 3980.95 crore (Equity: ₹ 0.55 crore, loans: ₹ 963.61 crore, grants: ₹ 207.23 crore and others (subsidy): ₹ 2809.56 crore) in nine PSUs during the years for which accounts have not been finalised as detailed in ***Appendix-4.1.4.*** Delay in finalisation of accounts may also result in risk of fraud and leakage of public money apart from violation of the provisions of the Companies Act, 1956.

12 Serial number A-2 and B-2 of ***Appendix-4.1.2***

13 Including two companies (serial number A-11 and 12 of ***Appendix-4.1.2***) incorporated on 30 December 2008 and not considered to be in arrears as their first accounts were being prepared for 15 months period

14 Including Chhattisgarh State Electricity Board which is not in existence

4.1.25 The administrative departments have the responsibility to oversee the activities of these entities and to ensure that the accounts are finalised and adopted by these PSUs within the prescribed period. Though we informed the concerned administrative departments and officials of the Government of the arrears in finalisation of accounts, no remedial measures were taken. As a result of this we could not assess the net worth of these PSUs. We had also taken up (May 2010) the matter of arrears in accounts with the Chief Secretary/Registrar of Companies to expedite the backlog of arrears in accounts in a time bound manner and also discussed the issue in the meeting of COPU.

4.1.26 In view of above state of arrears, it is recommended that:

- **The Government may set up a cell to oversee the clearance of arrears and set the targets for individual companies which would be monitored by the cell.**
- **The Government may consider outsourcing the work relating to preparation of accounts wherever the staff is inadequate or lacks expertise.**

Accounts Comments and Internal Audit

4.1.27 Nine working companies forwarded their audited (twelve) accounts to Accountant General during the period from 1 October 2009 to 30 September 2010. Eight accounts of seven companies were selected for supplementary audit. The audit reports of statutory auditors appointed by CAG and the supplementary audit of CAG indicate that the quality of maintenance of accounts needs to be improved. The details of aggregate money value of comments of statutory auditors and CAG are given below.

(Amount ₹ in crore)

Sl. No.	Particulars	2007-08		2008-09		2009-10	
		No. of accounts	Amount	No. of accounts	Amount	No. of accounts	Amount
1.	Decrease in profit	-	-	3	1.04	1	3.92
2.	Increase in loss	1	0.92	-	-	3	5.91
3.	Non-disclosure of material facts	1	7.57	-	-	3	70.14

4.1.28 During the year, the statutory auditors had given unqualified certificates for three accounts, qualified certificates for eight accounts and adverse certificate for one account. The compliance of companies with the Accounting Standards (AS) was generally satisfactory as there were only three instances of non-compliance with AS–15 during the year.

4.1.29 Some of the important comments in respect of accounts of companies finalised during 2009-10 are stated below.

Chhattisgarh State Industrial Development Corporation Limited (2004-05)

- The loss for the year was overstated by ₹ 1.53 crore due to non-accountal of service charges collected by the Company from nine entrepreneurs against allotment of land.

- The loss for the year was understated by ₹ 1.05 crore due to non-provision of accrued liabilities towards leave encashment of employees as on 31 March 2010.
- Non-provision of ₹ 90.44 lakh towards interest accrued but not due on SLR Bonds resulted in understatement of Current Liabilities as well as understatement of Loss to that extent.

4.1.30 Similarly, two working Statutory corporations forwarded four accounts to Accountant General during the year 2009-10. Of these, audit of two accounts of one corporation (Chhattisgarh State Electricity Board) which pertained to sole audit by CAG, was completed. Both the remaining two accounts of the other corporation (Chhattisgarh State Warehousing Corporation) were also selected for supplementary audit. The details of aggregate money value of comments of statutory auditors and CAG are given below.

(Amount ₹in crore)

Sl. No.	Particulars	2007-08		2008-09		2009-10	
		No. of accounts	*Amount*	*No. of accounts*	*Amount*	*No. of accounts*	*Amount*
1	Increase in profit	1	1.74	3	3.71	1	23.13
2	Decrease in profit	-	-	-	-	2	82.71
3	Non-disclosure of material facts	-	-	-	-	1	900.77
	Total		**1.74**		**3.71**		**1,006.61**

4.1.31 During the year, two accounts of Chhattisgarh State Warehousing Corporation received qualified certificates.

4.1.32 Some of the important comments in respect of accounts of statutory corporations are stated below.

Chhattisgarh State Electricity Board (2004-05)

- CSEB accounted disputed claim of ₹ 12.95 crore as revenue resulting in overstatement of Revenue from Sale of Power and overstatement of Profit to that extent.
- The Employees Cost does not include ₹ 1,924.85 crore being accrued liability on Gratuity and Pension as on 31 March 2005 as per actuarial valuation. This has resulted in understatement of Employees Cost and overstatement of Profit to that extent.
- The liability towards Earned Leave encashment does not include ₹ 182.71 crore being the accrued liability towards earned leave encashment as on 31 March 2005 resulting in understatement of Employees Cost and overstatement of Profit to that extent.
- CSEB did not account for ₹ 94.56 crore received on 31 March 2005 through State Government towards APDRP. This resulted in

understatement of current assets as well as liabilities to the same extent.

Chhattisgarh State Electricity Board (2005-06)

- Sundry Debtors for sale of power includes ₹ 105.78 crore in respect of Jagdalpur Region as against the actual amount ₹ 79.82 crore outstanding as on 31 March 2006. This has resulted in overstatement of Receivable against Supply of Power and overstatement of Profit by ₹ 25.96 crore.
- Provision for unbilled Revenue includes ₹ 6.09 crore in respect of Rajnandagaon Region as against the actual amount of unbilled revenue of ₹ 1.59 crore as on 31 March 2006. This has resulted in overstatement of Receivable against supply of Power and Profit by ₹ 4.50 crore.
- Income accrued but not due includes ₹ 26.74 crore being Interest accrued on fixed deposits. As against this the actual amount of interest accrued as on 31 March 2006 was ₹ 23.07 crore. This has resulted in overstatement of Income Accrued but not due and Profit for the year by ₹ 3.67 crore.
- Non-provision of ₹ 18.28 crore towards unpaid coal bills relating to the year 2005-06 has resulted in overstatement of Profit for the year and understatement of Other Current Liabilities by ₹ 18.28 crore.

Recoveries at the instance of audit

4.1.33 During the course of audit in 2009-10, recoveries of ₹ 12.85 crore were pointed out to the Management of various PSUs, which were admitted by PSUs. An amount of ₹ 5.31 crore was recovered during the year 2009-10.

Status of placement of Separate Audit Reports

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 of the Government.

Sl. No.	Name of Statutory corporation	Year up to which SARs placed in Legislature	Year for which SARs not placed in Legislature		
			Year of SAR	Date of issue to the Government	Reasons for delay in placement in Legislature
1.	Chhattisgarh State Electricity Board	-	2001-02	08.12.2006	Absence of enabling provision under the Electricity Act, 2003.
		-	2002-03	25.04.2008	
		-	2003-04	01.04.2009	
		-	2004-05	09.12.2009	
		-	2005-06	22.06.2010	

2.	Chhattisgarh State Warehousing Corporation	2008-09	-	-	-

Disinvestment, Privatisation and Restructuring of PSUs

4.1.35 The process of unbundling of Chhattisgarh State Electricity Board was completed as per the Electricity Act, 2003. The Board was unbundled into five companies[15] with effect from 1 January 2009. Allocation of assets and liabilities is under process.

Reforms in Power Sector

4.1.36 The State has formed Chhattisgarh State Electricity Regulatory Commission (Commission) in May 2004 under Section 17 of the erstwhile Electricity Regulatory Commission Act, 1998 with the objective of rationalisation of electricity tariff, advising in matters relating to electricity generation, transmission and distribution in the State and issue of licences. During 2009-10, Commission issued 49 orders (five on annual revenue requirements and 44 on others).

4.1.37 Memorandum of Understanding (MoU) was signed in May 2000 between the Union Ministry of Power and the State Government (MP) as a joint commitment for implementation of reforms programme in power sector with identified milestones. However, no MoU was signed between the Union Ministry of Power and State of Chhattisgarh after formation of Chhattisgarh State in November 2000 bifurcating erstwhile Madhya Pradesh under Madhya Pradesh reorganisation Act. Hence the implementation of reforms programme and achievement of identified milestones could not be assessed.

[15] Serial number A-9 to 13 of ***Appendix- 4.1.1.***

4.2 Performance review relating to Government Company

Chhattisgarh State Power Generation Company Limited

Power Generation Activities

Executive Summary

Power is an essential requirement for all facets of life and has been recognized as a basic human need. In Chhattisgarh, generation of power upto 31 December 2008 was carried out by the erstwhile Chhattisgarh State Electricity Board. Consequent to unbundling of the Board, from 1 January 2009, the generation of power is carried out by the Chhattisgarh State Power Generation Company Limited. The performance audit of the Company was conducted to assess economy, efficiency and effectiveness of activities relating to Planning, Project Management, Financial Management, Operational Performance, Environment Issues and Monitoring by top management during the period 1 April 2005 to 31 March 2010.

Planning

As on 31 March 2010 against the requirement of power of 19209.62 MU, available power was 19746.18 MU, whereas the installed capacity was 5898.70 MW. There was a growth in demand of 6836.50 MU during 2005-10, whereas the capacity addition was 2387.85 MW. There were deficiencies in project planning and formulation. The Board had taken up Bhaiyathan Thermal Power Project without obtaining forest clearance from MoEF. Thus the implementation of the project became uncertain resulting in blocking up of ₹ 66.50 crore. Further, the Company established a cogeneration plant at Kawardha. However, it failed to assess the availability of requisite fuel before taking up the project. This resulted in operation loss of ₹ 12.61 crore. One Hydro-electric and one Thermal Power Project planned by the Company could not be commenced due to non-fulfilment of stipulated conditions of initial clearances, lack of vigorous persuasion and selection of disputed land for the project.

Project Management

The Company completed four power projects during the review period. However, none was completed in time and there were delays ranging from eight to 36 months resulting in generation loss of 4239.14 MU valued at ₹ 1245.19 crore. Besides, there was cost overrun of ₹ 187.72 crore in two projects.

Contract Management

The Company executed contracts valuing ₹ 8106.40 crore relating to civil works, supply of equipments and other miscellaneous works. The Company extended undue financial benefit to various contractors for execution of six power projects by allowing interest free mobilisation advances amounting to ₹ 188.87 crore during October 2003 to December 2006. Besides, due to failure of the Company to assess the reasonability of rates, it had to incur avoidable expenditure of ₹ 2.60 crore on the purchase of coal wagons.

Operational Performance

Consumption of coal and fuel oil in excess of the prescribed norms resulted in avoidable expenditure of ₹ 361.03 crore. Besides, due to underutilisation of bi-cable ropeway system, the Company had to incur avoidable expenditure of ₹ 3.05 crore on coal transportation. Further, due to deployment of excess manpower against the CEA norms, the Company had to bear extra expenditure of ₹ 267.47 crore. The PLF and the Plant Availability of Company's power stations were higher than the CEA norms and national average as well. Outages (planned and forced) were within the norms of CEA during the review period. However, the Company failed to replace, install and commission various equipments like Air Pre Heater, TAS/BAS system, Fire Protection System etc. as per schedule which resulted in blocking up of funds of ₹ 21.84 crore besides impairing the performance of the power stations.

Environment Issues

The Company did not adhere to the provisions of various Acts, Regulations and norms prescribed by the Government and Chhattisgarh State Environment Conservation Board which may adversely impact the environment. This included non-achievement of specified SPM levels, use of high ash content coal, disposal of ash, non-recycling of water etc.

Financial Management

The Board faced cash deficit due to poor recovery of outstanding energy bills and distribution subsidy receivable from the State Government, which resulted in increased borrowings during the review period. The Company had to suffer loss of interest subsidy of ₹ 243.60 crore under the AG&SP scheme due to delay in commissioning of DSPM TPS. There was lack of control over inventory holding. Company's thermal power stations held spares in excess of CERC norms which resulted in blocking up of ₹ 107.06 crore. Delayed submission of tariff petition resulted in depriving the consumers of benefit of lower tariff during 2006-08 amounting to ₹ 248.15 crore. Further, Chhattisgarh State Electricity Regulatory Commission disallowed expenditure of ₹ 101.43 crore in 2009-10 on account of underperformance by the Company for reasons deemed to be controllable.

Conclusion

The Company's failure to obtain forest clearance resulted in non-commencement/abandonment of three power projects. Four new projects of the Company were not commissioned as scheduled resulting in time and cost overrun due to inadequate project monitoring system. Company extended undue financial benefit to contractors in execution of projects. Consumption of coal and fuel oil were in excess of norms. The Company had huge outstanding dues relating to energy bills. Holding inventories of spares in excess of norms resulted in blocking up of funds. Environmental issues were also not new projects of the Company were not commissioned as scheduled resulting in time and cost overrun due to inadequate project monitoring system. Company extended undue financial benefit to contractors in execution of projects. Consumption of coal and fuel oil were in excess of norms. The Company had huge outstanding dues relating to energy bills. Holding inventories of spares in excess of norms resulted in blocking up of funds. Environmental issues were also not adequately addressed by the Company.

4.2.1 Introduction

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

During the year 2005-06, electricity requirement in Chhattisgarh State was assessed as 12373.12 Million Units (MU) against which 12492.97 MU were available. The total installed power generation capacity of State was 3510.85 Mega Watt (MW) as on 1 April 2005 against the peak demand of 1965 MW. As on 31 March 2010 the comparative figures of requirement and availability of power were 19209.62 MU and 19746.18 MU respectively while the installed capacity was 5898.70 MW. Thus there was a growth in demand of 6836.50 MU during the review period, whereas the capacity addition was 2387.85 MW.

In Chhattisgarh, generation of power up to 31 December 2008 was carried out by the erstwhile Chhattisgarh State Electricity Board (Board) which was formed on 15 November 2000 as the successor of Madhya Pradesh Electricity Board (MPEB) after the formation of Chhattisgarh State. Consequent to the unbundling of the Board, from 1 January 2009, the generation of power in Chhattisgarh is carried out by the Chhattisgarh State Power Generation Company Limited (Company) which was incorporated on 19 May 2003 under the Companies Act, 1956 as a fully owned Government Company under the administrative control of the Energy Department of the Chhattisgarh Government. The Management of the Company is vested with a Board of Directors comprising four directors appointed by the State Government. The day-to-day operations are carried out by the Managing Director, who is the Chief Executive of the Company with the assistance of Executive Directors, Chief Engineers (who heads each Station), and Superintending Engineers. The Company had three thermal generation stations, four hydro generation stations and one cogeneration station with the installed capacity of 1780 MW, 138.7 MW and 6 MW respectively as shown in ***Appendix – 4.2.1***.

The turnover of the Company was ₹ 1780.38 crore[1] in 2009-2010, which was equal to 32.67 *per cent* and 1.65 *per cent* of the State PSUs turnover and State Gross Domestic Product, respectively. Pending finalisation of restructuring,

[1] Provisional figures.

the number of employees pertaining to the Company was not available (September 2010).

4.2.2 Scope and Methodology of Audit

The present review conducted during February 2010 to June 2010 covers the performance of the erstwhile Board/ the Company during the period from 2005-06 to 2009-10. The review mainly deals with Planning, Project Management, Financial Management, Operational Performance, Environmental Issues and Monitoring by Top Management. The audit examination involved scrutiny of records at the Head Office and five[2] out of eight generating stations. The total installed capacity of the selected five stations is 1906 MW which worked out to 99 *per cent* of the total installed capacity. The criteria adopted for selection of generating stations was as under:

Criteria	No. of units	Unit selected	Coverage
New Thermal Power Projects	01	DSPM TPS, Korba East	100 *per cent*
Hydro Electric Power Projects	04	120 MW Hasdeo Bango Hydel Power Plant, Korba	Selection made on the basis of higher generation capacity and the coverage was 86 *per cent*
Post Refurbishment Performance	01	KTPS, Korba East	100 *per cent*
Due for Renovation/ Life Extension	01	HTPS, Korba West	100 *per cent*
Non-conventional power plant	01	Cogeneration Plant, Kawardha	100 *per cent*

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

4.2.3 Audit Objectives

The objectives of the performance audit were to:

Planning and Project Management

- To assess whether capacity addition programme taken up/ to be taken up to meet the shortage of power in the State is in line with the National Policy of Power for All by 2012;

[2] a) Dr. Shyama Prasad Mukherjee Thermal Power Station (DSPM TPS), Korba East.
b) Hasdeo Bango Hydel Power Station, Korba.
c) Korba Thermal Power Station (KTPS), Korba East.
d) Hasdeo Thermal Power Station (HTPS), Korba West and,
e) Cogeneration plant at Kawardha.

- To assess whether a plan of action is in place for optimisation of generation from the existing capacity;
- To ascertain whether the contracts were awarded with due regard to economy and in transparent manner;
- To ascertain whether the execution of projects were managed economically, effectively and efficiently; and
- To ascertain whether the erstwhile Board/ Company had taken up the projects under non conventional sources such as wind, solar, biomass, etc and tap generation from captive power sources.

Financial Management

- To ascertain whether the projections for funding the new projects and upgradation of existing generating units were realistic including the identification and optimal utilization for intended purpose; and
- To assess the soundness of financial health of the generating undertakings.

Operational Performance

- To assess whether the power plants were operated efficiently and preventive maintenance as prescribed was carried out to minimise the forced outages;
- To assess whether requirements of each category of fuel were worked out realistically, procured economically and utilised efficiently;
- To assess whether the manpower requirement was realistic and its utilisation optimal;
- To assess whether the life extension (renovation and modernization) programme were ascertained and carried out in an economic, effective and efficient manner; and
- To assess the impact of R&M/LE activity on the operational performance of the Unit.

Environmental Issues

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

Monitoring and Evaluation

- To ascertain whether adequate MIS existed in the entity to monitor and assess the impact and utilize the feedback for preparation of future schemes; and
- To ascertain whether a documented and proper disaster management system was in place in all generating units.

4.2.4 Audit Criteria

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

- National Electricity Plan, norms/guidelines of CEA regarding planning and implementation of the projects;
- Standard procedures for award of contract with reference to principles of economy, efficiency and effectiveness;
- Guidelines and norms issued by Central Electricity Regulatory Commission (CERC)/ Chhattisgarh State Electricity Regulatory Commission (CSERC) in respect of
  - ❖ targets fixed for generation of power ;
  - ❖ parameters fixed for plant availability, Plant Load Factor (PLF) etc;
  - ❖ best performers in the regions/all India averages;
  - ❖ prescribed norms for planned outages; and
- Acts relating to Environmental laws.

4.2.5 Financial Position and Working Results

The financial position[3] of the erstwhile Board for the period 2005-06 to 2008-09 (upto 31 December 2008)[4] is given below:

(₹ in crore)

Particulars	2005-06	2006-07	2007-08	2008-09 (upto 31 December 2008)
A. Liabilities				
Paid up Capital	23.12	23.12	23.12	23.12
Reserve & Surplus (including Capital Grants but excluding Depreciation Reserve)	1999.65	2965.81	3575.50	4458.45
Borrowings (Loan Funds)				
Secured	1948.34	2510.63	2886.94	2862.33
Unsecured				
Current Liabilities & Provisions	2657.52	2708.91	2833.20	2625.22
Total	**6628.63**	**8208.47**	**9318.76**	**9969.12**
B. Assets				
Gross Block	2636.99	2867.30	5443.75	6253.04
Less: Depreciation	1325.41	1432.22	1557.84	1798.46
Net Fixed Assets	1311.58	1435.08	3885.91	4454.58
Capital works-in-progress	1852.57	3242.32	1595.80	2038.47
Investments	920.09	514.03	593.55	275.27
Current Assets, Loans and Advances	2544.39	3017.04	3243.50	3200.80
Total	**6628.63**	**8208.47**	**9318.76**	**9969.12**

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3 Provisional and unaudited figures from 2006-07 to 2008-09.

4 The figures from January 2009 was not furnished by the Company as its accounts were not finalized due to restructuring of erstwhile Board w.e.f. 01 January 2009. Compilation of accounts of successor companies of erstwhile Board is pending due to non-availability of the opening balances of newly formed companies. The opening balances of power companies have not been notified by the State Government as per restructuring plan.

The financial position furnished in the table revealed the following:

- The debt-equity ratio decreased from 0.96:1 to 0.64:1 due to increase in Reserve & Surplus.
- The Reserves and Surplus of the erstwhile Board increased by 123 *per cent* from ₹ 1999.65 crore in 2005-06 to ₹ 4458.45 crore in 2008-09 mainly due to sale of surplus power (peak and off peak) by the erstwhile Board to other power utilities.
- The borrowings of the erstwhile Board increased by 47 *per cent* from ₹ 1948.34 crore in 2005-06 to ₹ 2862.33 crore in 2008-09 mainly due to taking up of new projects.
- Net Fixed Assets increased by 240 *per cent* from ₹ 1311.58 crore in 2005-06 to ₹ 4454.58 crore in 2008-09 due to completion of new projects.
- Investments decreased by 70 *per cent* from ₹ 920.09 crore in 2005-06 to ₹ 275.27 crore in 2008-09 due to utilization of the amount for funding new project.
- The Current Assets, Loans and advances increased by 25.80 *per cent* from ₹ 2544.39 crore in 2005-06 to ₹ 3200.80 crore in 2008-09. This was mainly due to increase of receivables against supply of power, subsidy receivable from Government and increase of loans and advances.

The details of working results like cost of generation of electricity, revenue realisation, net surplus/ loss and earnings and cost *per* unit of operation are given below.

(₹ in crore)

Sl.No	Description	2005-06	2006-07	2007-08	2008-09[5]
1.	**Income**				
	Revenue from own generation	2612.48	2633.89	2730.13	2618.39
	Other income including interest	207.54	211.42	212.04	138.30
	Total Income	**2820.02**	**2845.31**	**2942.17**	**2756.69**
2.	**Generation**				
	Total generation (In MUs)	9316.26	9624.24	10341.47	9773.33
	Less: Auxiliary consumption (In MUs)	861.64	873.78	927.20	836.83
	Total generation available for Transmission and Distribution (In MUs)	**8454.62**	**8750.46**	**9414.27**	**8936.50**
3.	**Expenditure**				
(a)	**Fixed cost**				
(i)	Employees cost	187.40	179.29	210.65	181.72
(ii)	Administrative and General expenses	27.24	32.08	42.93	35.28
(iii)	Depreciation	10.94	40.39	41.51	145.55
(iv)	Interest and finance charges	82.24	42.42	53.55	123.48
	Total fixed cost	**307.82**	**294.18**	**348.64**	**486.03**
(b)	**Variable cost**				
(i)	Fuel consumption				

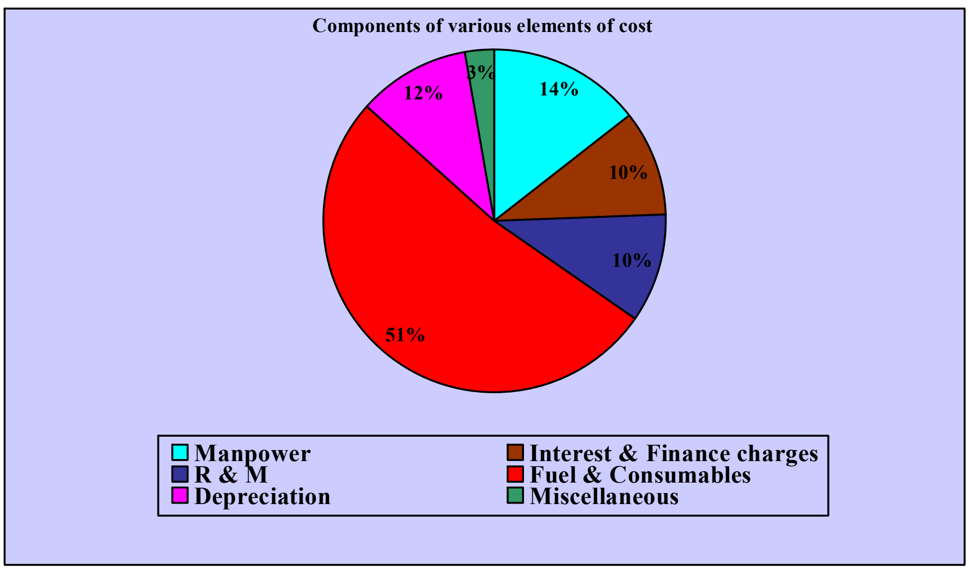
[5] upto 31 December 2008 i.e. before re-structuring of erstwhile Board.

	(a)	Coal	403.04	432.32	479.70	546.16
	(b)	Oil & Water	26.95	36.95	41.09	71.84
	(c)	Other fuel related cost including shortages/surplus	21.45	19.70	22.60	25.81
(iii)	Lubricants and consumables		3.93	5.10	6.12	5.27
(iv)	Repairs and maintenance		97.39	131.72	151.42	129.75
	Total variable cost		**552.76**	**625.79**	**700.93**	**778.83**
C.	**Total cost 3(a) + (b)**		**860.58**	**919.97**	**1049.57**	**1264.86**
4.	Average Realisation (₹ per unit)		3.09	3.01	2.90	2.93
5.	Fixed cost (₹ per unit)		0.36	0.34	0.37	0.54
6.	Variable cost (₹ per unit)		0.65	0.72	0.74	0.87
7.	Total cost (5+6) (₹ per unit)		1.01	1.06	1.11	1.41
8.	Contribution (4-6) (₹ per unit)		2.44	2.29	2.16	2.06
9.	**Profit (+)/Loss(-) (4-7)** (₹ per unit)		**2.08**	**1.95**	**1.79**	**1.52**

The analysis of above table is discussed in succeeding paragraphs:

Elements of Cost

Fuel & Consumables and employee cost constitute the major elements of costs. The percentage break-up of costs for 2008-09 (upto 31 December 2008) is given below in the pie-chart.



Elements of revenue

Sale of Power constitutes the major elements of revenue. The percentage break-up of revenue for 2008-09[6] is given below in the pie-chart.

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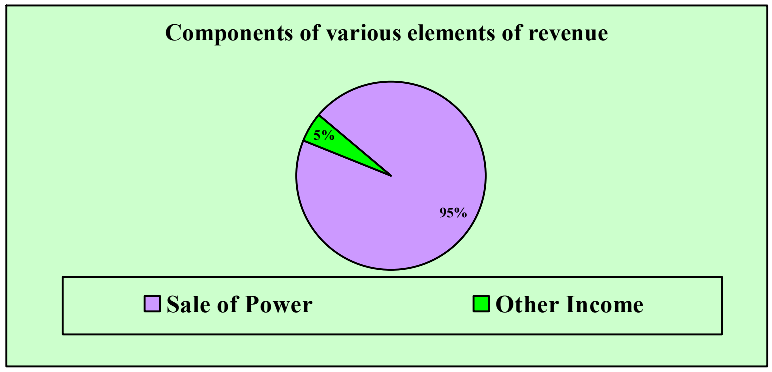
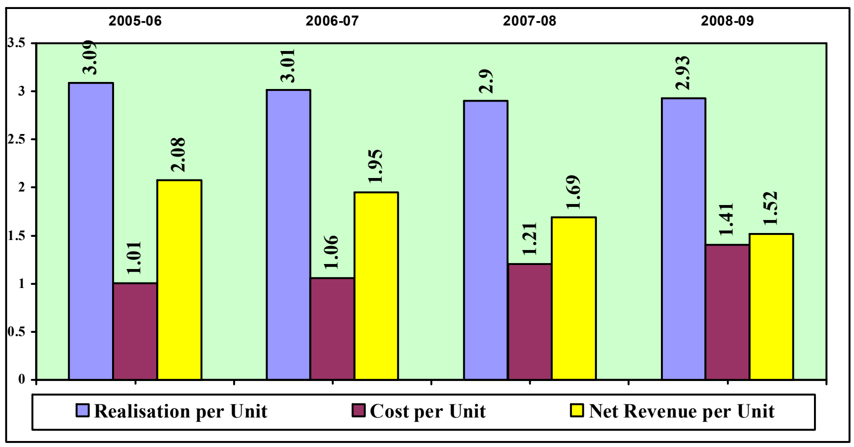
[6] The data for the year 2009-10 was not furnished by the Company as its accounts were not finalised.



Recovery of cost of operations

The per unit cost of generation, sales realization and net revenue during the four years ending 2008-09 are shown below:



From the above graph it could be seen that the generation cost per unit increased from ₹ 1.01 in 2005-06 to ₹ 1.41 in 2008-09. However, realization per unit more or less remained same which resulted in decline of net revenue per unit from ₹ 2.08 (2005-06) to ₹ 1.52 (2008-09). It was due to operational inefficiencies of erstwhile Board/ Company. In the Tariff Petition filed by the erstwhile Board/ Company during the last five years upto 2009-10 (four petitions), it projected a total Annual Revenue Requirement (ARR) of ₹ 5427.05 crore. However, CSERC approved only ₹ 4613.28 crore rejecting the further requirement of ₹ 813.77 crore. Had the Board/ Company been able to improve its efficiency at least an additional amount of ₹ 813.77 crore could have been available for capacity addition/ life extension programmes. The reasons for enhancement of cost were mainly due to increase in expenditure on coal (29 *per cent*), oil & water (154 *per cent*), increase in administrative expenses (30 *per cent*) and interest & finance charges (50 *per cent*).

4.2.6 Audit Findings

We explained the audit objectives to the Company during an 'entry conference' held on 16 February 2010. Subsequently, audit findings were reported to the Company and the State Government in July 2010. The reply of the Company/ Government are awaited (September 2010).

4.2.7 Operational Performance

The operational performance of the erstwhile Board/ Company for the five years ending 2009-10 is given in the ***Appendix–4.2.2***. The operational performance was evaluated on various operational parameters as described below. It was also seen whether the erstwhile Board/ Company was able to maintain pace in terms of capacity addition with the growing demand for power in the State. Audit findings in this regard are discussed in the subsequent paragraphs. These audit findings show that there was scope for improvement in performance.

4.2.8 Planning

NEP aims to provide availability of over 1,000 Units of per Capita electricity by 2012, for which it was estimated that need based capacity addition of more than 1,00,000 MW would be required during 2002-2012 in the country. The power availability scenario in the State indicating own generation, purchase of power, peak demand and net deficit are discussed in succeeding paragraphs.

During the period from 2005-10, the actual generation was substantially less than the peak as well as average demand as shown below:

Year	Generation (MW)	Peak Demand (MW)	Average Demand (MW)	Percentage of actual generation to Peak Demand	Percentage of actual generation to Average Demand
2005-06	1064	1965	1449	54.15	73.43
2006-07	1253	2027	1607	61.82	77.97
2007-08	1169	2335	1617	50.06	72.29
2008-09	1541	2889	1880	53.34	81.97
2009-10	1507	2929	2128	51.45	70.82

As may be seen from the above, the actual generation was only 70.82 to 81.97 *per cent* of the average demand and 50.06 to 61.82 *per cent* of the peak demand.

However, the total supply after import also fell short during 2008-09 and 2009-10 to meet the peak demand as shown below:

Year	Peak Demand (MW)	Peak Demand met (MW)	Sources of meeting peak demand (MW)		Peak Deficit (Percentage of Peak Demand)
			Own	Import	
2005-06	1965	1965	1140	825	0
2006-07	2027	2027	1282	745	0
2007-08	2335	2335	1613	722	0
2008-09	2889	2840	1881	959	1.70
2009-10	2929	2880	1803	1077	1.67

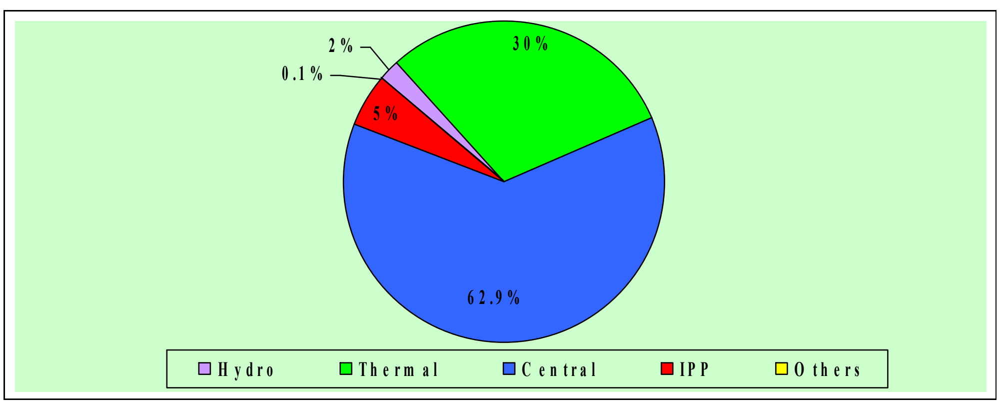
It is evident from the above that the Company's own capacity to meet the peak demand was only 58 *per cent* to 69 *per cent* during the period 2005-10 and the shortfall ranged between 722 MW to 1077 MW. This compelled the Company to purchase power from other sources viz. Central PSUs, traders and Captive Power Plants (CPP)/ Independent Power Producers (IPP) at higher cost. Further the Company could not meet the peak demand even after purchases during 2008-09 and 2009-10, where the shortfall was 49 MW in each year.

The Board/ Company purchased 30607.63 MU power valuing ₹ 6552.61 crore during the review period from Central pool at rates ranging from ₹ 1.407 to ₹ 1.657 per unit and from other sources at rates ranging from ₹ 1.92 to ₹ 4.01 per unit whereas its own generation cost ranged from ₹ 1.01 to ₹ 1.41 per unit.

This section deals with capacity additions and optimal utilisation of existing facilities. Environmental aspects have been discussed in subsequent paragraphs at later stage.

4.2.8.1 Capacity Additions

Chhattisgarh, a coal rich State, has 16.65 *per cent* of coal reserve of the country and has huge potential for thermal power plants. Accordingly a number of thermal power plants have been established/ are under-construction under Central, State and IPP sector. The State had total installed capacity of 3510.85 MW (Company -1410.85 MW and Central PSU- 2100 MW) at the beginning of 2005-06 which was increased to 5898.70 MW at the end of 2009-10 (Company - 1924.70 MW, Central PSUs - 3674 MW and IPPs – 300 MW). The breakup of generating capacities, as on 31 March 2010, under thermal, hydro, Gas, Central, IPP and others is shown in the pie chart below.



The projects categorised as 'Projects under Construction' (PUC) and 'Committed Projects'[7] (CP) earmarked for capacity addition during the review period according to NEP and are detailed below.

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

(In MW)

Sector	Thermal	Hydro	Non-conventional Energy	Total
PUC	2000[8]	7.85[9]	6[10]	2013.85
CP	4640[11]	-	-	4640.00
Total	**6640**	**7.85**	**6**	**6653.85**

The particulars of capacity additions envisaged, actual additions by the erstwhile Board/ Company and peak demand vis-à-vis energy supplied in the State as a whole during review period are given below.

Sl.No	Description	2005-06	2006-07	2007-08	2008-09	2009-10
1.	Capacity at the beginning of the year (MW)	1410.85	1410.85	1423.85	1673.85	1923.85
2.	Additions planned (MW)	7	250	250	0.85	0
3.	Actual Additions (MW)	0	13	250	250	0.85
4.	Capacity at the end of the year (MW) (1 +3)	1410.85	1423.85	1673.85	1923.85	1924.70
5.	Shortfall in capacity addition (MW) (2-3)	7	237	0	-	-
6.	Demand during the year (MU)	12373.12	13083.63	13791.10	15665.14	19209.62
7.	Energy Supplied (MU)					
	a) Own sources	8454.62	8750.46	9414.27	12358.81	12371.33
	b) Import less export	4038.35	4528.51	6193.15	6965.32	7374.85
	Total	12492.97	13278.97	15607.42	19324.13	19746.18
8.	**Shortfall in demand (MU) (6 –7)**	**Nil**	**Nil**	**Nil**	**Nil**	**Nil**

It may be observed from the above table that the Board/ Company was in a position to meet the demand only after the purchase of power from other sources.

The thermal-hydel ratio which was 91:9 during 2005-06 went up to 93:7 after installation of DSPM Thermal Power Project (TPP). This was higher than the ideal ratio of 60:40 prescribed by CSERC.

Some important observations relating to deficient planning are given below:

4.2.8.2 Improper project formulation of Bhaiyathan Thermal Power Project resulted in blocking up of funds to the tune of ₹66.50 crore

Improper project formulation of BTPP resulted in blocking up of funds of ₹66.50 crore.

Erstwhile Board decided (13 January 2005) to establish thermal power project (2X660 MW) at Bhaiyathan (BTPP) in Sarguja District with scheduled commissioning during 2011-12. It was also decided to implement this project through tariff based bidding process. This project was entirely dependent upon the regular and adequate supply of coal from the dedicated captive coal mines of Gidhmuri-Paturiya allotted (September 2004) by GoI for the project. As the above coal block is situated in the dense forest area, it required approval of the Ministry of Environment & Forest, GoI (MoEF) for diversion of 2076.532 hectares of forest land for captive coal mines. However, without obtaining the

8 (A) DSPM TPP Korba East – 2X250 MW, (B) Marwa TPP – 2X500 MW and (C) Korba West TPP – 1X500 MW.

9 (A) Sikasar Hydro Electric Project (HEP) – 2X3.5 MW and (B) Mini Hydel Plant, Korba West 1X0.85 MW.

10 Cogeneration Plant at Kawardha.

11 (A) Bhaiyathan TPP – 2X660 MW, (B) ICPL TPP (JV) – 2X660 MW, (C) Korba South TPP – 2X500 MW and (D) Banji Bundeli TPP – 2X500 MW.

forest clearance, the Board completed bidding process and selected Indiabulls Power Generation Limited for execution of the project at the levelised tariff of ₹ 0.81 per unit for 25 years. A Special Purpose Vehicle (SPV) was also formed (19 May 2008) for the implementation of the project and necessary agreements were executed (13 October 2008) with the SPV. The Company approached the MoEF only in March 2009 for diversion of forest land, which was rejected by the latter (December 2009). By that time, the Board/ Company had already incurred expenditure of ₹ 44.56 crore on land acquisition, ₹ 8.72 crore on rail infrastructure, ₹ 12.59 crore on coal block development and ₹ 0.63 crore on bidding process. After rejection of forest clearance, the implementation of project became uncertain thereby blocking the entire expenditure of ₹ 66.50 crore incurred on the project. Had the erstwhile Board assessed the density of forest in the proposed site vis-à-vis norms of MoEF before taking up the project, the lengthy process of bidding, land acquisition and expenditure thereon could have been avoided.

Management stated (September 2010) that out of the total expenditure incurred, ₹ 50.05 crore had already been paid by the SPV and balance would also be recovered before handing over the possession of land as per contract agreement. However, the Company overlooked the provisions of agreement which enabled the SPV to recover its expenditure from it, in case of land required for power plant and coal mines were not transferred to the SPV in prescribed time (December 2009).

4.2.8.3 Setting up of Cogeneration Plant without ensuring availability of fuel

The erstwhile Board formulated a project for setting up of 6 MW cogeneration plant in the premises of Bhoramdeo Sahakari Shakkar Utpadak Karkhana Maryadit (BSSUKM), Kawardha using bagasse/ rice husk as fuel based on the Memorandum of Understanding (October 2003) with BSSUKM. The plant was synchronised and commercial operation commenced from August 2006. The total expenditure incurred on commissioning of the project was ₹ 16.91 crore.

The Company suffered loss of ₹ 12.61 crore due to uneconomic operation of cogeneration plant at Kawardha.

On review of the operations of the plant for 44 months upto March 2010, it was observed that the plant was actually operated at a very low PLF ranging from 8.69 *per cent* (2006-07) to 13.70 *per cent* (2008-09) due to initial technical problems, erratic supply of bagasse by BSSUKM and non-availability of rice husk. During this period, the plant could be operated only on 374 days as against 1100 days (44 months X 300 days / 12 months) envisaged. As a result, the cost of generation per unit worked out to ₹ 20.55 in 2006-07, ₹ 12.80 in 2007-08, ₹ 9.09 in 2008-09 and ₹ 12.57 per unit in 2009-10 as against the projected cost of ₹ 2.21 per unit and actual average revenue realisation per unit was ₹ 3.01 in 2006-07, ₹ 2.90 in 2007-08 and ₹ 2.93 thereafter. This resulted in operational loss of ₹ 12.61 crore upto March 2010. Since BSSUKM had its own power generation plant, the bagasse available with it were first used in its own plant and balance bagasse, if any, were supplied to the Board as it had not made any firm commitment to the Board for assured supply of bagasse. Similarly, the market for rice husk in Chhattisgarh is unorganised and the Board failed to assess the availability of rice husk in the State before taking up the project. Finally, the Company started using coal as primary fuel since February 2009. Even after switching over to coal, the generation cost per unit worked out to ₹ 12.57. Thus, setting up the project without ensuring availability of required quantity of raw material resulting into heavy recurring loss to the Board/ Company.

4.2.8.4 Inordinate delay in commencement of power projects

The following Hydro-electric and thermal Power Projects planned by the erstwhile Board could not be commenced due to lack of vigorous persuasions, non-fulfilment of stipulated conditions of initial clearances etc. by the Management as discussed below:

- Erstwhile Board decided (April 2001) to revive the Bodhghat Hydro Electric Power Project (4 x 125 MW) in Indravati River at Bastar region which was shelved in 1986 by the then MPEB as MoEF rejected the application for diversion of forest land. Subsequently, approval in principle was obtained (February 2004) from MoEF subject to fulfilment of certain conditions i.e. compensatory afforestation, study of impact on wild life and human, preparation of Catchment Area Treatment Plan etc. However, the erstwhile Board did not fulfil the key conditions of MoEF so far (June 2010) which resulted in non-commencement of a project formulated for improving the thermal hydel ratio of the Company.

Blocking up of funds of ₹ 1.36 crore due to selection of disputed land and consequent interest loss of ₹ 0.24 crore.

- Similarly, the erstwhile Board also decided (5 April 2006) to implement 2 x 500 MW Korba South Thermal Power Project at village Risdi, Korba on 940 acre land at a total project cost of ₹ 4748.30 crore. It was observed that the land selected by the Board for setting up the plant was under dispute and a case was pending before the Honourable High Court of Chhattisgarh. Despite this, the Board deposited (3 March 2008) ₹ 1.36 crore towards service charges to Revenue Department for allotment of land. The erstwhile Board has neither been allotted the land nor the service charges of ₹ 1.36 crore refunded to the Board. Thus, selection of the disputed land and subsequent payment of service charges without finalisation of the land dispute resulted in blocking of ₹ 1.36 crore besides loss of interest of ₹ 0.24 crore upto June 2010 worked out at the interest rate of 7.5 *per cent per annum* being the minimum rate at which the Board borrowed the capital loans.

4.2.8.5 Optimum Utilisation of existing facilities

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

Sl.No.	Name of the Plant	Unit No.	Installed Capacity (MW)	Due Date (as per CEA norms)	Date when actually taken up
1.	HTPS Korba West	1	210	2008-09	Not taken so far
2.	HTPS Korba West	2	210	2008-09	Not taken so far
3.	HTPS Korba West	3	210	2009-10	Not taken so far
4.	HTPS Korba West	4	210	2010-11	Not taken so far

From the above, it may be seen that against the four units due for being taken up for R&M/ LEP, none of the unit was actually taken up as planned. In reply, the Company stated (April 2010) that due to growing demand for power, these units could not be taken up so far and the same will be taken up for R&M/ LEP after commissioning of Korba West and Marwa TPPs. The detailed observations relating to repair/ maintenance and life extension programmes are discussed in succeeding paragraphs.

4.2.9 Project Management

Project management includes timely acquisition of land, effective actions to resolve bottlenecks, obtain necessary clearances from authorities, rehabilitation of displaced families, proper scheduling of various activities etc. For execution of the project, consultants are also appointed for vigorous monitoring. Notwithstanding, time and cost overruns were noticed due to absence of coordinating mechanism throughout the implementation of the projects during the review period as discussed in succeeding paragraphs.

The following table indicates the scheduled and actual dates of completion of the power stations, date of start of transmission, date of commissioning of power stations and the time overrun.

Time overrun

Sl. No.	Phase-wise name of the Unit	Details	As per DPR	Actual date	Time overrun (in months)
1(a)	Unit No. 1 DSPM TPS	Date of completion of unit	10.09.2006	27.01.2008	16
		Date of start of transmission	10.07.2006	30.03.2007	08
		Date of commercial operation/ commissioning of unit	10.09.2006	27.01.2008	16
1(b)	Unit No. 2 DSPM TPS	Date of completion of unit	10.01.2007	30.11.2008	22
		Date of start of transmission	10.11.2006	11.12.2007	13
		Date of commercial operation/ commissioning of unit	10.01.2007	30.11.2008	22
2.	Cogeneration Plant at Kawardha	Date of completion of unit	09.09.2004	10.08.2006	23
		Date of start of transmission	09.09.2004	10.08.2006	23
		Date of commercial operation/ commissioning of unit	09.09.2004	10.08.2006	23
3.	Sikasar Hydro Electric	Date of completion of unit	26.09.2005	19.10.2008	36

	Project	Date of start of transmission	26.09.2005	03.09.2006	11
		Date of commercial operation/ commissioning of unit	26.09.2005	03.09.2006	11
4.	1X850 KW Mini Hydel Plant at Korba West	Date of completion of unit	06.09.2008	29.05.2009	08
		Date of start of transmission	06.09.2008	29.05.2009	08
		Date of commercial operation/ commissioning of unit	06.09.2008	29.05.2009	08

It would be seen from above that out of four projects implemented during review period, none was completed in time and slippages in time schedule were avoidable at various stages of implementation as under:

- Delay in finalization of contracts
- Delay in finalizing the drawing and design
- Changes made in the technical specification after award of work
- Tardy progress in execution of work by contractors
- Non-completion of civil works even after commissioning of plants
- Lack of co-ordination
- Lack of proper monitoring and supervision by the Company

Company never imposed penalty on the contractors for delayed completion even though there was enabling provision in the contracts.

Thus, it would be seen that time overrun varied between eight to 36 months in the execution of power projects.

Cost overrun was noticed in two out of the four projects. The estimated cost of these projects, actual expenditure, cost escalation and the percentage increase in the cost are tabulated below:

(₹ in crore)

Sl. No.	Phase-wise name of the Unit	Estimated cost as per DPR	Awarded Cost	Actual expenditure as on 31 March 2010	Expenditure over and above estimate (4 – 2)	Percentage increase as compared to DPR (5) X100/(2)
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
1.	DSPM TPS	1918.01	1572.62	2095.16	177.15	9.24
2.	Sikasar HEP	24.14	29.50	34.71	10.57	43.79

It would be seen from above that there was cost overrun of 9.24 *per cent* in DSPM TPS and 43.79 *per cent* in Sikasar HEP respectively.

Our findings of individual irregularities related to time and cost overrun in respect of various projects undertaken during the review period are discussed in the succeeding paragraphs.

4.2.9.1 Dr. Shyama Prasad Mukherjee Thermal Power Station (DSPM TPS)

Generation loss of 4171.21 MU valued at ₹ 1224.68 crore due to delay in commissioning

Time overrun in commissioning of DSPM TPS resulted in generation loss of 4171.21 MU.

The erstwhile Board accorded (2 March 2002) administrative approval for implementing 2 X 250 MW Thermal Power Project (TPP) at Korba East (DSPM TPS) with an estimated cost of ₹ 1918.01 crore. The work of supply and erection was awarded (11 August 2003) to BHEL at a total cost of ₹ 1700.14 crore which was subsequently revised (July 2004) to ₹ 1572.62 crore. As per the terms and conditions of the contract, the Unit I and Unit II were to be commissioned within 37 and 41 months respectively i.e. by 10 September 2006 (Unit I) and 10 January 2007 (Unit II). On scrutiny of records, it was observed that these units were completed on 27 January 2008 and 30 November 2008 respectively i.e. after a delay of 16 months and 22 months respectively. As a result, the Company had to suffer generation loss to the extent of 4171.21 MU valuing at ₹ 1224.68 crore during 11 September 2006 to 29 November 2008. The Company constituted (December 2008) a high level committee to examine the reasons for delay in commissioning of the project. The committee is yet to give its findings (September 2010).

Cost overrun – ₹ 177.15 crore

Cost overrun of ₹ 177.15 crore due to delay in commissioning of DSPM TPS.

Due to delay in completion of the project, the actual expenditure incurred by the Board/ Company upto 31 March 2010 was ₹ 2095.16 crore against the original estimated cost of project of ₹ 1918.01 crore. The main reasons for this additional expenditure of ₹ 177.15 crore were due to increase in EPC cost, non-EPC cost, land acquisition and site development, development of railway infrastructure and Miscellaneous and contingency expenses.

Non-recovery of liquidated damages from the contractor

Undue benefit of ₹ 73.03 crore due to non-recovery of liquidated damages.

Though the contractor completed the works after 16 and 22 months of the scheduled date, no liquidated damages was recovered as stipulated in the contract. This led to undue financial benefit of ₹ 73.03 crore[12] to the contractor.

Premature synchronisation of Unit I of DSPM TPS

As stipulated in the conditions of the contract the Unit I and Unit II of the plant should have been synchronised within 35 months and 39 months respectively and commissioned within two months from the date of synchronisation. It was observed that though Unit I of the plant was synchronised on 30 March 2007 (after a delay of eight months) with fuel oil instead of coal, it was stopped due to non availability of major auxiliaries viz. Milling system, Coal Handling Plant, Ash Handling System, DM Plant etc. Finally the plant was commissioned on 27 January 2008 i.e. after a further delay of about six months. Generally, after synchronisation of the plant,

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[12] Maximum 15 *per cent* of the value of erection contract as envisaged in the contract i.e. ₹ 486.89 crore X 15/100.

generation should have been commenced during the trial operation period. However, it was observed that in the case of Unit I, there was no generation from April 2007 to August 2007. Generation was actually started only from September 2007 and it generated 684.94 MU power as against the target of 1214.10 MU during 2007-08.

From the above it is evident that the Unit I of the DSPM TPS was synchronised prematurely, as there was no generation during the five months after synchronisation due to incomplete system. Our scrutiny revealed that the main reason for this premature synchronisation was to commission the plant on or before 31 March 2007 i.e. before Tenth Five Year Plan to avail the benefit of interest subsidy under Accelerated Generation & Supply Programme (AG&SP) Scheme. However, it could not get the interest subsidy under this scheme as discussed in *paragraph 4.2.16.1*. Further, it also resulted in delay in completion of the project and consequent generation loss.

4.2.9.2 Cogeneration Plant at Kawardha

As mentioned in *paragraph 4.2.8.3*, the erstwhile Board decided (July 2003) to set up a cogeneration power plant at Kawardha. The contract for supply, erection and commissioning of plant was awarded to Walchandnagar Industries Limited, Pune at a negotiated total price of ₹ 18.70 crore on turn key basis. Review of implementation of the project revealed the following:

Time overrun in commissioning resulted in generation loss of 50.82 MU valuing ₹15.39 crore

Time overrun in commissioning of Cogeneration plant resulted in generation loss of 50.82 MU.

As per the terms of the contract, the commercial operation and power export shall be commenced on completion of the 11 month from the zero date agreed, i.e. 9 October 2003. However, the plant was actually synchronised and commercial operation commenced only from 10 August 2006 i.e. after a delay of about two years. The inordinate delay on the part of the contractor in completion of the project resulted in a generation loss of 50.82 MU valuing at ₹ 15.39 crore worked out at the projected operation levels.

Non-recovery of liquidated damages for delay in commissioning and shortfall in performance – ₹ 6.55 crore.

The terms and conditions of the contract provided for levy of liquidated damages/penalties for delay in commissioning as well as shortfall in performance. The plant was actually synchronised and commercial operation commenced after a delay of about two years. Further, the plant could not achieve the guaranteed efficiency and other performance parameters in respect of power generation, auxiliary consumption etc. As such the maximum penalty amounting to ₹ 6.55 crore (35 *per cent* of ₹ 18.70 crore) was recoverable from the firm. The Company, however, did not recover any amount towards penalty except withholding of ₹ 1.87 crore from the bills of the contractor.

4.2.9.3 Sikasar Hydro Electric Project

The erstwhile Board approved (09 October 2002) the setting up of Sikasar Hydro Electric Project (HEP) at an estimated cost of ₹ 24.14 crore. The work contract was awarded (27 September 2003) for a contract value of ₹ 29.50 crore. As per the terms of the contract, the work was to be completed within 24 months from the date of award of contract. However, the work was actually completed only in October 2008. On scrutiny of the records the following observations were made:

Loss of Generation 13.42 MU valued at ₹4.04 crore due to time overrun

Time overrun in commissioning resulted in generation loss of 13.42 MU.

It was observed that the project was commissioned on 03 September 2006 after a time overrun of 11 months. As a result Company had to suffer generation loss of 13.42 MU valuing ₹ 4.04 crore. The main reasons for this delay were change in specifications, delay in approval of vendors, delay in finalisation of station layout and single line diagram, extra work of shot-creting, etc. which could have been avoided.

Cost overrun - ₹10.57 crore

Due to delay in commissioning of project, the actual expenditure incurred was ₹ 34.71 crore against the original estimated cost of ₹ 24.14 crore. Management stated (April 2010) that this additional cost was mainly due to change in technical specification of plant *viz.* increase in size of plant, increase in cost of civil works, increase in size of transmission line, size of power house building etc. In addition to these, some other works worth ₹ 3.78 crore were also executed which were not envisaged in the DPR. This indicates that the DPR of the project was not prepared properly.

4.2.9.4 Mini Hydel Power Plant Unit -II at Korba West

The erstwhile Board awarded (7 July 2007) the work for turnkey execution of 1 X 850 KW Mini Hydel Power Plant Unit II at Korba West at a total negotiated price of ₹ 4.52 crore (including taxes). As per the terms of the contract, the project should have been successfully commissioned within 14 months i.e. by 06 September 2008. On scrutiny of the record the following were observed:

Generation loss of ₹1.08 crore due to inordinate delay in commissioning

Time overrun in commissioning of Mini Hydel plant resulted in generation loss of 3.69 MU.

It was observed that contractor could complete work worth ₹ 1.06 crore only upto the scheduled date of completion. Despite repeated request to contractor, delay was noticed in every stage. Finally the power plant was commissioned on 29 May 2009. As a result the Company had to suffer generation loss of 3.69 MUs valuing ₹ 1.08 crore during 07 September 2008 to 28 May 2009.

Further, though the contract provided for recovery of liquidated damages for delay in commissioning of the project, the Company did not impose any penalty on the contractor despite delay of eight months. This resulted in extension of undue benefit of ₹ 0.42 crore to the contractor worked out at the maximum rate of 10 *per cent* of contract value.

Non-conducting the Performance Guarantee Test by the turnkey contractor

The plant was synchronised and commercial operation commenced in May 2009. However, a number of works are still pending including renovation of Draft Tube Gate, supply of balance spares, installation of protection guard, concreting of stuffing box pipe etc. and the performance test also has not been conducted so far (June 2010).

4.2.10 Contract Management

Contract management is the process of efficiently managing contract (including inviting bids and award of work) and execution of work in an effective and economic manner. The works are generally awarded on turn key (composite) basis to a single party involving civil construction, supplies of equipments and ancillary works.

During review period, contracts valuing ₹ 8106.40 crore were executed. The agreements related to civil works, supply of equipments and other miscellaneous works.

The instances of tardy progress of work leading to time and cost overrun in various projects undertaken during review period are given below.

4.2.10.1 Delay in awarding of civil works of Korba West and Marwa TPP

The erstwhile Board negotiated (March 2008) with BHEL for awarding the contract for setting up of 500 MW TPP at Korba West and 2x500 MW TPP at Marwa. During negotiation meeting, it was decided (25 March 08) to award the contracts for Boiler, Turbine and Generator (BTG) Package at ₹ 1111.00 crore and 1942.00 crore respectively. The work of Korba West TPP was to be completed by 10 October 2011. Similarly, the work of Marwa TPP was to be completed by 10 January 2012 (Unit-I) and 10 March 2012 (Unit-II). It was observed that during the negotiations regarding associated civil works, it was agreed to include the same in the scope of BHEL on actual cost plus 10 *per cent* Supervision Charges. Contrary to this, while issuing the Letter of Intent (LoI) (27 March 2008) and Notification of Award (NoA) (11 April 2008), it was stipulated that Board would place order for associated civil works and BHEL shall prepare specifications, etc. This created lot of confusion and after protracted correspondence, it was finally decided (27 December 2008) to include the same in the scope of BHEL as originally agreed. Amendment to NoA to that effect was issued on 31 December 2008 and consequently the zero date for civil works and services was also shifted from 11 April 2008 to 31 December 2008. This has delayed the award of civil works for both the projects by about eight months which may not only result in cost overrun but also consequential time overrun and delay in commissioning of the project.

4.2.10.2 Undue favour to the contractors due to payment of interest free mobilisation advance of ₹188.87 crore

Payment of interest free mobilisation advance of ₹ 188.87 crore resulted in undue benefit to the contractors.

As per the guidelines issued by Central Vigilance Commission (CVC) (December 1997) payment of mobilisation advance should be made only in selected works and it should be interest bearing so that the contractor does not draw undue benefit. In contravention to these guidelines, the Company paid (October 2003 to December 2006) ₹ 188.87 crore as interest free advance to the contractors for execution of six power projects. In this connection, the following were observed:

- Though the mobilisation advances were paid to ensure speedy execution of the work, none of the projects was completed in time.
- In case of DSPM TPS, though the project was commissioned in January 2008/ November 2008 an amount of ₹ 3.62 crore out of the mobilisation advance of ₹ 183.73 crore paid in May 2004 and July 2004 could not be recovered so far (May 2010) due to non-completion of other related works.
- Since the projects were funded by availing loan from Rural Electrification Corporation Limited (REC) and Power Finance Corporation Limited (PFC) with rates of interest ranging between 7.5 and 11 *per cent*, payment of interest free advance made to the contractors lacks justification. Further the slow progress of the work resulted in advance lying with the contractor for long periods.

4.2.10.3 Avoidable expenditure of ₹2.60 crore due to rejection of tenders without analysing reasonability of rates

Rejection of tenders without analysing rates reasonability resulted in avoidable expenditure of ₹ 2.60 crore.

The Company invited (January 2009) tender for supply of 120 Nos. Bogie Open Bottom Rapid Discharge Coal Wagons (BOBRN) for DSPM TPS. The offer of Titagarh Wagon Limited was found lowest (₹ 30.02 lakh per wagon) which was 33 *per cent* lower than the earlier tender, however, the Company rejected (April 2009) the tender without assigning any reason. The Company again invited (July 2009) fresh tenders and the offer of TEXMACO Limited (L-1) (₹ 32.19 lakh per wagon) was accepted and orders were placed (December 2009) for 120 wagons at a total cost of ₹ 38.62 crore. Thus due to rejection of valid tender without assigning any reason and procurement of 120 wagons at higher rates resulted in avoidable expenditure of ₹ 2.60 crore[13].

Management stated (March 2010) that the rates finalised in subsequent tender was lower by ₹ 14.63 crore as compared to earlier tender and considered the same as wise decision. Reply failed to interpret the facts correctly that the rates obtained in the tender dated February 2009 (₹ 30.02 lakh) was much lower than the rates obtained in the subsequent tender (₹ 32.19 lakh). Further, the Management did not explain why the earlier tender was rejected.

[13] (₹ 32.19 – ₹ 30.02)X 120.

Operational Performance

Operations of the generation Company is dependent on input efficiency consisting of material and manpower and output efficiency in connection with Plant Load Factor, plant availability, capacity utilization, outages and auxiliary consumption. These aspects have been discussed below.

4.2.11 Input Efficiency

Coal used in thermal power stations is classified into different grades. The price of the coal depends on the grade of coal. The erstwhile Board signed (January 2001) a Memorandum of Understanding (MoU) with the South Eastern Coalfields Limited (SECL), who agreed to supply coal according to its Coal Supply Agreement (CSA) with MPEB, pending finalization of any new agreement. From 10 September 2009, a new CSA was signed by the Company (Successor of erstwhile Board) for supply of coal.

4.2.11.1 Quality of coal

Avoidable payment of ₹ 8.09 crore due to receipt of inferior grade of coal.

Each thermal station is designed for usage of particular grade of coal. Usage of envisaged grade of coal ensures optimizing generation of power and economizing cost of generation. It was seen that the grade of coal received was not always of the specified grade required by the thermal stations. During review period, erstwhile Board/ Company received 128.91 lakh MT of inferior/ ungraded coal, for which payment was made to SECL on sliding scale basis i.e. depending upon the quality/ grade of coal. However, KTPS had received 8.33 lakh MT inferior/ungraded coal during 1 April 2009 to 11 September 2009, for which payment was made as per declared/ billed grade. This resulted in avoidable payment of ₹ 8.09 crore to SECL. The Company's claim aggregating ₹ 8.09 crore towards grade differences were not admitted so far (June 2010).

4.2.11.2 Excess consumption of coal

The consumption of coal depends upon its calorific value. The norms fixed in the project report for various power generation stations for production of one unit of power in the State vis-à-vis maximum and minimum consumption of coal during the period of five years ending 2009-2010 is depicted in the table below.

(in kgs)

Name of the Station	Norms fixed in the project report	Average min consumption during the year	Average max consumption during the year
KTPS PH-II	0.757	0.8677 (2006-07)	1.0486 (2008-09)
KTPS PH-III	0.612	0.7785 (2006-07)	0.9204 (2009-10)
DSPM TPS	0.740	0.7164 (2008-09)	0.7571 (2009-10)
HTPS	0.705	0.7160 (2009-10)	0.7683 (2008-09)

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

Consumption of coal higher than the DPR norms resulted in excess consumption of 46.44 lakh MT coal valued at ₹ 302.02 crore.

It was observed that in respect of KTPS and HTPS, the consumption remained higher than the norms in all the years under review. Our analysis revealed that consumption above the norms resulted in excess consumption of coal to the tune of 46.44 lakh MT during the review period in the State as detailed in ***Appendix – 4.2.3.*** Apart from the low calorific value, the following reasons also contributed to excess consumption, which could have been *prima facie* controlled by the Management.

- High Ash content
- Air heater/ air leakage in the plant
- Low vacuum in the plant
- Seasonal variation such as increased circulating water inlet temperature in summer and choking of coal pipes in rainy season.

The value of this excess consumption of coal worked out by us amounted to ₹ 302.02 crore (detailed in ***Appendix – 4.2.3***).

4.2.11.3 Consumption of fuel oil in excess of norms valuing ₹59.01 crore

CSERC fixed the norm for consumption of fuel oil per unit of electricity generated as 1.00 ml to 2.00 ml. Actual consumption during the review period at KTPS (2007-08 to 2009-10), DSPM TPS(2007-08) and HTPS (2006-07) ranged between 1.28 ml and 10.58 ml per unit resulting in excess consumption of 20315 KL fuel oil valuing ₹ 59.01 crore. This also resulted in increase in cost of generation during the period. The main reason for this excess consumption was low gross calorific value of the coal received from SECL which resulted in non achievement of fire ball load, therefore continuous oil support was kept for flame stability.

4.2.11.4 Avoidable expenditure of ₹3.05 crore on coal transportation from HTPS to KTPS due to under utilisation of bi-cable ropeway system

Under utilisation of bi-cable ropeway system resulted in avoidable expenditure of ₹ 3.05 crore on coal.

HTPS receives coal from SECL's Kusmunda mines exclusively through double conveyor system and KTPS receives coal from SECL's Manikpur, Kusmunda and other collieries through rail, road and ropeway system. Besides this, the KTPS has been receiving coal from HTPS by road from 2008-09 onwards and incurred ₹ 3.05 crore as transportation charges. Since HTPS received coal in excess of its requirement during 2008-09 and 2009-10, the Company transported 6.08 lakh MT coal from HTPS to KTPS by road. It may be mentioned here that the Company is having a bi-cable ropeway system with a capacity of 10.95 lakh MT *per annum* between Kusmunda mines to KTPS exclusively for transportation of coal. However, the Company transported only 1.00 lakh MT coal and 0.59 lakh MT during the years 2008-09 and 2009-10 respectively through this system. Had the Company utilised this system for transportation of coal from Kusmunda to KTPS instead of receipt of the same at HTPS and its subsequent transportation to KTPS, it could have saved ₹ 3.05 crore on coal transportation from HTPS to KTPS. Further, by transporting coal from Kusmunda mines to HTPS and then from HTPS to KTPS, the Company had to suffer double stacking and transit losses.

4.2.12 Manpower Management

Deployment of staff in excess of CEA norms resulted in extra expenditure of ₹267.47 crore

Extra expenditure of ₹ 267.47 crore due to deployment of staff in excess of CEA norms.

Consequent upon the unbundling of erstwhile Board (19 December 2008) and Chhattisgarh State Generation Company Limited coming into existence from 1 January 2009, State Government declared (19 December 2008) that the staff strength available in the power Stations on the date would be taken as their respective sanctioned strengths, however, the same has not yet been notified by the State Government (September 2010). The position of actual manpower in position as on 31 March 2010, manpower as on 1 January 2009 and manpower as per CEA recommendation is given in ***Appendix– 4.2.4***.

As per the information furnished in the ***Appendix– 4.2.4***, the actual manpower available was more than the norms prescribed by CEA (except in DSPM TPS). In KTPS excess manpower in respect of technical staff ranged from 842 to 1079 and in respect of non-technical staff ranged from 123 to 218 during the review period. Similarly, in HTPS it ranged from 500 to 668 in respect of technical staff and from 36 to 163 for non- technical staff. The deployment of staff in excess of the CEA norms resulted in extra expenditure of ₹ 267.47 crore[14] on salaries. Despite having excessive manpower, the generating stations were regularly employing temporary/contract staff for regular jobs such as housekeeping, cleaning of coal handling plant, cleaning of condenser etc. During the years 2007-08 to 2009-10 generating stations deployed on an average 138 temporary employees annually for such jobs by incurring an expenditure of ₹ 1.35 crore during 2007-10. Besides, overtime was regularly paid to the regular staff. The overtime wages paid by generating stations during the period of review was ₹ 56.76 crore[15]. No action was taken to rationalise its staff strength or explore ways to utilise them optimally.

4.2.13 Output Efficiency

4.2.13.1 Shortfall in generation

The targets for generation of thermal power for each year are fixed by the MoP and approved by the CEA. It was observed that the Company's all the three TPSs were able to achieve its generation targets except on four occasions as detailed below:

Year	KTPS			HTPS			DSPM		
	Target (MU)	Actual Generation (MU)	Shortfall (MU)	Target (MU)	Actual Generation (MU)	Shortfall (MU)	Target (MU)	Actual Generation (MU)	Shortfall (MU)
2005-06	2600	3197.59	-	5800	5746.39	53.61	-	-	-
2006-07	3270	3283.18	-	5800	5944.31	-	-	-	-
2007-08	3184	3203.65	-	5750	6086.37	-	1876	774.74	1101.26
2008-09	3230	3112.43	117.57	5750	6383.95	-	3400	3714.07	-
2009-10	3150	2934.36	215.64	5210	6519.62	-	3220	3838.93	-

[14] KTPS = ₹ 163.12 crore and HTPS = ₹ 104.35 crore

[15] KTPS = ₹ 25.31 crore, DSPM TPS = ₹ 0.12 crore and HTPS = ₹ 31.33 crore

From the above it may be seen that it resulted in generation loss of 1488.08 MU valued at ₹ 433.56 crore. The reasons for shortfall in achieving the target in DSPM TPS during 2007-08 was premature synchronisation of Unit I as already been discussed in *paragraph 4.2.9.1*.

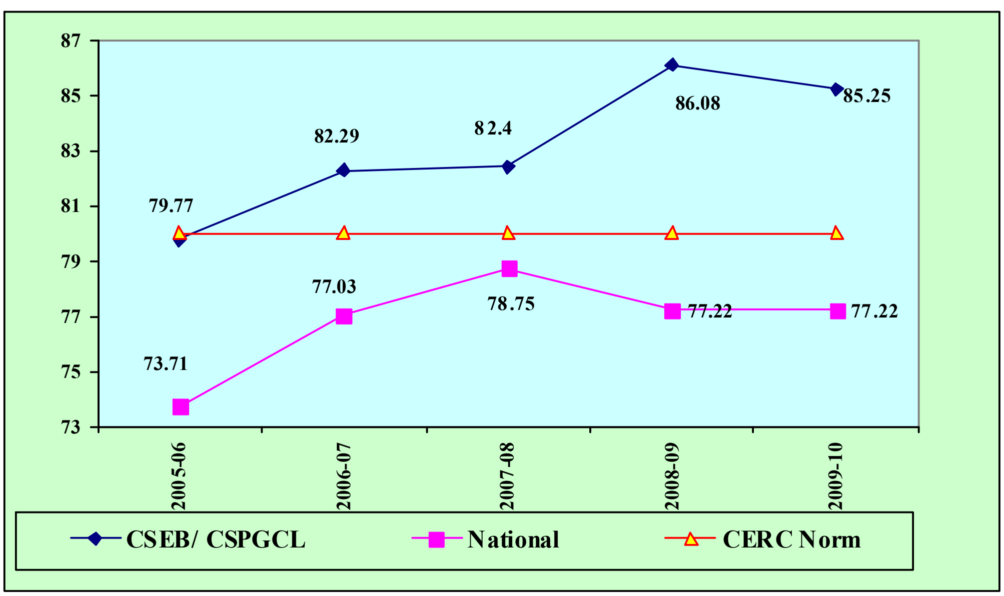
The year-wise details of energy to be generated as per design, actual generation, plant load factor (PLF) as per design and actual plant load factor in respect of the power projects commissioned up to March 2010 are given in ***Appendix- 4.2.5***.

The details in the *Appendix* indicate that:

- The actual generation and actual PLF achieved were far below the energy to be generated and PLF as per design during the five years upto 2009-2010.
- As against the total designed generation of 65875.06 MU of energy during the five years ended 2009-2010 the actual generation was 54739.59 MU leading to the shortfall of 11135.47 MU (16.90 *per cent*), which could have been technically produced.
- As the PLF had been designed considering the availability of inputs the loss of generation (total 11135.47 MU) during the period 2005-2006 to 2009-2010 indicated that resources and capacity were not being utilised to the optimum level due to poor quality of coal, non-taking up of R&M work for HTPS, delay in taking up of annual maintenance and overhauling and non-replacement of vital equipments in time as discussed subsequently.

4.2.13.2 Plant Load Factor (PLF)

Plant load factor (PLF) refers to the ratio between the actual generation and the maximum possible generation at installed capacity. According to norms fixed by CERC, the PLF for thermal power generating stations should be 80 *per cent,* against which the national average was 76.79 *per cent* during the review period. A line graph depicting the PLF of the erstwhile Board/



Company over the review period is given below:

The above graph indicates that PLF of the erstwhile Board/ Company has been much better than national average during the review period.

4.2.13.3 Plant availability

Plant availability means the ratio of actual hours operated to maximum possible hours available during certain period. As against the CERC norm of 80 *per cent* plant availability during 2004–2009 and 85 *per cent* during 2010–2014, the average plant availability of power stations was 89.13 *per cent* during the five years up to 2009-10 which was better than the national average of 84.07 *per cent*. However, the plant availability in respect of DSPM TPS was only 74.01 *per cent* in the year 2007-08. This was mainly due to excess forced outages[16] during the stabilisation period of the plant.

4.2.13.4 Outages

Outages refer to the period for which the plant remained closed for attending planned/ forced maintenance. We observed following deficiencies in planned and forced outages:

- In respect of KTPS and HTPS, the total number of hours lost due to planned outages increased from 4296 hours in 2005-06 to 4545 hours in 2009-10 i.e. from 4.90 *per cent* to 5.19 *per cent* of the total available hours in the respective years.
- The forced outages in HTPS and KTPS increased from 5213 hours in 2005-06 to 5437 hours in 2009-10 i.e. from 5.95 to 6.21 *per cent* of the total available hours in the respective years. The forced outages remained less than the norm of 10 *per cent* fixed by CEA in all the five years ending 31 March 2010 in both the TPSs.
- In the DSPM TPS, the forced outages were 3378.33 hours which was 19.23 *per cent* of the total 17568 hours available in 2007-08. This has resulted in a generation loss of 1621 MU valued at ₹ 470.09 crore.

4.2.13.5 Auxiliary consumption of power

Thermal

Energy consumed by power stations themselves for running their equipments and common services is called Auxiliary Consumption. Norms prescribed by CSERC in its Tariff Orders for Auxiliary consumption for Company's TPSs was ranged between 9 and 11 *per cent.* As against this, the actual auxiliary consumption of Company's two TPSs *viz*. HTPS and KTPS were higher than the above norms. In KTPS, the percentage of auxiliary consumption was ranged between 9.35 and 11.44 during the years 2007-08 to 2009-10. In case of HTPS, the percentage of auxiliary consumption was 9.66 during the year 2005-06. The auxiliary consumption of these TPSs was much higher in comparison with national average which was ranged between 8.29 *per cent* and 8.71 *per cent* in the same period. With reference to CSERC norms, there

[16] Forced outages is closure of plant in excess of prescribed limit due to break down in the system.

was excess consumption of 53.20 MU valuing ₹ 15.69 crore which could not be dispatched to the grid.

Cogeneration plant at Kawardha

As per norms fixed by the CSERC for Cogen plant at Kawardha, the auxiliary consumption should be 8.9 *per cent* (2007-08 and 2008-09) and 10 percent (2009-10). However, the actual auxiliary consumption recorded was 31.88 *per cent* in 2007-08, 32.97 *per cent* in 2008-09 and 30.79 *per cent* in the year 2009-10. This resulted in excess consumption of 4.08 MU valued at ₹ 1.19 crore.

4.2.14 Repairs & Maintenance

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

It was observed that out of 52 annual maintenance of units due during the review period, only 24 were done in time. In other cases, there was delay ranging between 24 and 579 days (details given in the ***Appendix–4.2.6***). The delayed maintenance caused continuous deterioration in the condition of machines causing forced outages besides increased consumption of oil, coal and loss of generation of power as discussed in the input performance.

4.2.15 Renovation & Modernisation

R&M and refurbishment activities involve identification of the problems of unit of TPS, preparation of techno economic viability reports, preparation of DPR to lay down benefits to be achieved from these works. 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. R&M activities are undertaken in TPS operating at PLF of 40 *per cent* and below after assessing the performance and requirement of the units.

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*. Necessary permission and clearance for R&M and Refurbishment activities from CSERC/CEA/State Government are obtained. Residual Life Assessment (RLA) study are also conducted for all Refurbishment activities and in major R&M works. For Refurbishment and R&M activities PFC sanctions loan equal to 70 *per cent* of the estimated cost of the activity against guarantee furnished by the State Government and rest of the fund is met through internal sources or loan from State Government. In this regard, the following observations were made:

4.2.15.1 Non-taking up R&M/ LEP for HTPS

HTPS consists of four units of 210 MW each. These units were commissioned during 1983-86 and had rendered a useful life of about 25 years. As the station was near to complete its designed life, the erstwhile Board identified (January 2006) these units for 11th Five Year Plan in a meeting with CEA and other power utilities. However, the Company had not taken up the R&M / LE Programme till date (July 2010) due to growing demand of power in the State and has shifted the above work to 12^{th} Five Year Plan i.e. after the commissioning of Korba West and Marwa TPPs.

4.2.15.2 Non- replacement of Air Pre Heaters of Unit- I & II at HTPS

The installation of modified Rotary Air Pre Heater (RAPH) shall facilitate maximum heat recovery from hot flue gases, less auxiliary consumption and lesser erosion in flue gas ducting. Erstwhile Board decided (January 2006) for retrofitting/ replacing the existing RAPH of Unit I and II at HTPS with modified and renovated RAPH through original equipment manufacturer (OEM) to reduce the generation loss by ₹ 19.50 crore *per annum* for two units. Accordingly, order was placed (June 2007) to BHEL at a total cost of ₹ 32.14 crore.

Non-replacement of RAPH resulted in blockage of ₹ 11.59 crore.

It was observed that the material worth ₹ 12.15 crore for Unit-I was received in October 2008 against which ₹ 11.59 crore was released (from July 2008 to April 2009) by the Company. However, these equipments remained uninstalled (June 2010). This resulted in blockage of ₹ 11.59 crore besides non-reduction of estimated generation loss of ₹ 9.75 crore *per annum.*

Management stated (April 2010) that the prevailing system conditions which include the availability of power, system frequency, demand etc. did not permit to provide the long shut down of Unit I. However, the Company had taken up the work of Annual Overhauling of Unit I from 23 October to 07 November 2009. Had the Company taken up the Capital overhauling work in place of annual overhauling, the generation loss could have been avoided.

4.2.15.3 Non-replacement of TAS/ BAS PRDS system at HTPS

The Pressure Regulating Desuperheating Station (PRDS) System for Turbine Auxiliary System (TAS)/ Boiler Auxiliary System (BAS) is one of the vital system for safe operation of Turbines. The erstwhile Board approved (October 2004) the proposal for retrofitting/ replacing the existing scheme with proposed R&M scheme i.e. supply and supervision of erection, testing and commissioning of Turbine and Boiler Auxiliary system PRDS for HTPS Korba West. Accordingly, order was placed (19 March 2007) to Dresser Valve India Private Limited at a total cost of ₹ 9.19 crore.

Non-replacement of TAS/ BAS PRDS System resulted in blockage of ₹ 3.40 crore.

It was observed that the supply of equipment for first PRDS station for TAS and BAS with desuperheaters was to be completed in October 2008. However, the first PRDS system for TAS and BAS was received in February 2009 and ₹ 3.40 crore was released by the Company but it was not replaced so far (June 2010) even after a lapse of more than 15 months. This resulted in blocking up of ₹ 3.40 crore. Further, it resulted in inordinate delay in replacement of other units of HTPS as the remaining units would be replaced after the successful operation of unit selected for replacement.

Management stated (April 2010) that the delay was mainly due to analysis of loading details, development of new isometric, displacement of existing PRDS etc. which is very critical in nature and requires heavy design, engineering. However, all these exercise could have been done before placing the supply order.

4.2.15.4 Non-commissioning of Fire Protection System for Coal Handling Plant at KTPS

Non-commissioning of Fire Protection System at KTPS resulted in locking of ₹ 6.85 crore apart from depriving of critical fire protection facility.

The erstwhile Board issued (10 December 2008) order for Supply, Erection, Testing and Commissioning of Fire Protection system (FPS) for Coal Handling Plant at KTPS at a total cost of ₹ 7.49 crore. As per the terms of the contract, all materials should be delivered and commissioned within 40 weeks from the date of receipt of the order i.e. by 16 September 2009. It was observed that all materials worth ₹ 6.85 crore were received at site between December 2008 and June 2009. However, the system could not be commissioned so far (June 2010). Thus placing of order for FPS without plans for their installation resulted in locking up of funds of ₹ 6.85 crore for more than 12 months apart from depriving the plant for critical fire protection facility.

Management stated (August 2010) that FPS was not commissioned as it needs longer shutdown and the existing system did not permit for the longer shut down of the plant. However, it may be mentioned here that CEA had recommended (December 1983) for taking effective measures for fire fighting by all power utilities in view of the vulnerability of these plants to fire. Further, the KTPS had incurred (January 1996) a generation loss of 20.28 MU valued at ₹. 2.28 crore due to a fire accident in its unit 5 and 6.

4.2.15.5 Operation & Maintenance

The operation and maintenance (O&M) cost includes expenditure on the employees, repair & maintenance including stores and consumables, consumption of capital spares not part of capital cost, security expenses, administrative expenses etc. of the generating stations besides corporate expenses apportioned to each generating station etc. but exclude the expenditure on fuel.

Excess O&M expenditure at HTPS resulted in loss of ₹ 23.52 crore.

CERC in its regulation 2009 allowed O&M norm for 2009-10 as ₹ 18.20 lakh per MW in respect of 200-250 MW capacity thermal power units. In accordance with these regulation, CSERC approved (May 2009) ₹ 18.27 lakh per MW as O&M expenses for the year 2009-10. Against the above mentioned norms the total O&M cost per MW incurred by the Company for HTPS was ₹ 21.07 lakh. Thus, the expenses amounting to ₹ 23.52 crore incurred over and above the norm during the year 2009-10 added to the loss of the Company, as this amount was not considered by CSERC in tariff fixation. In respect of DSPM TPS, the per MW O&M expenditure in 2009-10 was ₹ 11.71 lakh which was significantly lower than the above norms. The details of O&M expenditure in respect of KTPS were not furnished by the Company.

4.2.16 Financial Management

Efficient fund management is the need of the hour in any organisation. This also serves as a tool for decision making for optimum utilisation of available resources and borrowings at favourable terms at appropriate time. The power sector companies should, therefore, streamline their systems and procedures to ensure that:

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

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

Details of cash inflows and outflows of the erstwhile Board during the review period (upto December 2008) are given below:

(₹ in crore)

Sl.No.	Particulars	2005-06	2006-07	2007-08	2008-09*
Cash inflow					
1.	Net Profit/(loss)	395.01	432.77	464.37	764.19
2.	Add: adjustments	60.92	122.69	143.38	246.07
3.	Operating activities	609.72	179.79	67.28	56.09
4.	Investing activities	0	0	0	0
5.	Financing activities	593.56	1227.23	522.27	68.53
	Total	**1659.21**	**1962.48**	**1197.30**	**1134.88**
Cash outflow					
6.	Operating activities	442.10	418.57	335.94	62.38
7.	Investing activities	1373.83	1620.06	931.66	1251.90
8.	Financing activities	45.58	128.81	38.25	251.36
9.	Net increase/decrease in cash and cash equivalent	(202.30)	(204.96)	(108.55)	(430.76)
	Total	**1659.21**	**1962.48**	**1197.30**	**1134.88**

* upto 31 December 2008

It may be seen from the above table that there was cash deficit in all the years ranging from ₹ 108.55 crore (2007-08) to ₹ 430.76 crore (2008-09). The cash deficit was overcome mainly by increased borrowings in the form of cash credit/loans from commercial banks/FI. Main reasons for cash deficit identified by us were due to poor/delay in recovery of power supply bills, locking up of funds in inventory not required immediately and heavy capital expenditure. It was observed that dependence on borrowed funds increased from ₹ 1948.34 crore in 2005-06 to ₹ 2862.33 crore in 2008-09. This entailed interest burden of ₹ 472.75 crore (REC and PFC loan) during review period thereby increasing the operating cost of the Company. Therefore, there is an urgent need to optimise internal resource generation and vigorous persuasion of outstanding dues relating to distribution subsidy as well as effective recovery of energy bills. This would have enabled increased availability of funds to the extent of ₹ 1862.87 crore (distribution subsidy ₹ 669.01 crore and outstanding debtors for sale of power ₹ 1193.86 crore).

Some important observations relating to financial management of the erstwhile Board/ the Company are given below:

4.2.16.1 Loss of interest subsidy of ₹243.60 crore under AG&SP scheme

For implementation of the 2X250 MW DSPM TPP the erstwhile Board had availed (January 2004) loan of ₹ 1431 crore from REC. Meanwhile, GoI extended (24 December 2002) its Accelerated Generation & Supply Programme (AG&SP) to 10th Plan Period. As per the Scheme, the GoI would provide a subsidy on the interest paid on loan taken for establishment of TPP to those where order was placed before February 2004 and plant commissioned within the Plan period i.e. up to 31 March 2007. As the work order for DSPM TPP was placed on 11 August 2003, the project was also eligible for this scheme. As mentioned in *paragraph 4.2.9.1*, the target dates for commissioning of the plant were 10 September 2006 (Unit I) and 10 January 2007 (Unit II). However, the units were finally commissioned in 27 January 2008 (Unit I) and 30 November 2008 (Unit II) respectively.

Delay in commissioning of DSPM TPS resulted in loss of interest subsidy of ₹ 243.60 crore under AG&SP scheme.

It was observed that as the project was commissioned after 31 March 2007, the Board could not avail the benefit of interest subsidy of ₹ 13.43 crore (upto 31 March 2007) and ₹ 230.17 crore[17] for the remaining period of loan from GoI. Further, the Company would be required to return ₹ 10.22 crore which was received by it towards interest subsidy as per the AG&SP scheme.

4.2.16.2 Non-realisation of loan given to BSSUKM and irregular adjustment of Government revenue – ₹9.95 crore

The erstwhile Board sanctioned ₹ 8.00 crore to BSSUKM on the following conditions:

1. Loan would be guaranteed by State Government.
2. Interest would be charged at the rate of 9 *per cent per annum*.
3. Loan would be re-payable in six years with half yearly instalment.
4. When BSSUKM starts sale of power to Board the energy charges payable by Board would be adjusted against instalments payable by BSSUKM towards repayment of loan.

Non-realisation of loan given to BSSUKM and irregular adjustment of Government revenue – ₹ 9.95 crore.

The loan was disbursed in three instalments i.e. ₹ 5.00 crore in October 2002, ₹ 2.00 crore in January 2003 and ₹ 1.00 crore in August 2003 and the State Government guaranteed (January 2003) the same. As BSSUKM failed to make payment of instalments of loan and interest, the Board adjusted (June 2008) ₹ 9.95 crore against Electricity Duty and Cess payable to the

[17] As calculated by the Company

Government by invoking the guarantee. Scrutiny of the records revealed that the loan was released without executing any loan agreement with BSSUKM. Further, as per the guarantee given by the State Government, the liability of the State Government would arise only when the loanee fails to repay the instalments of loan and interest and after failure of the Board to recover the same from all the available properties of the loanee. The Board, however, neither took any action for recovery of the loan from BSSUKM nor attached the available properties. Instead, the Board recovered the same from the Electricity Duty and Cess payable to State Government in contravention of the terms of guarantee and also in violation of the provisions of General Financial Rules as per which all moneys received by or on behalf of the Government either as dues of Government or for deposit, remittance or otherwise, shall be brought to Government Account without delay. Thus the adjustment made by the Board was irregular. Even after this adjustment an amount of ₹ 2.15 crore is still outstanding. Here it is pertinent to mention that the period of guarantee also expired on 31 March 2010 and there is remote possibility of the recovery of the balance amount.

4.2.16.3 Inventory control

Material and inventory management involves meticulous forecasting of requirements, procurement and utilisation of material with a view to exercising control over their receipt, storage, transfer to user units and inventory holding so as to minimise procurement and inventory holding costs. The Company had not fixed maximum, minimum and economic re-ordering level of stock. This has resulted in overstocking of various materials without any requirement and Company's valuable funds remained blocked as discussed below:

Blocking up of ₹107.06 crore due to holding of spares in excess of norms and consequent interest loss

Holding of spares in excess of norms resulted in locking up of ₹ 107.06 crore.

As per the guidelines of CERC the TPSs were required to maintain spares of ₹ 4.00 lakh for each MW of installed capacity. As worked out by the Company, the value of spares to be maintained on the basis of the above guidelines was ₹ 71.20 crore. As at the end of 2009-10, the TPSs held stock of spares valued at ₹ 178.26 crore resulting in excess holding by ₹ 107.06 crore. This resulted in locking up of funds and corresponding loss of interest.

Stock of furnace Oil

Furnace oil is secondary fuel for thermal power generation. It was observed that as on 31 March 2010 Company was holding a stock of 4694.24 KL of furnace oil valuing ₹ 13.66 crore (₹ 7.18 crore for KTPS and ₹ 6.48 crore for HTPS). The stock held by the Company was equal to 93 days consumption in respect of KTPS and 425 days consumption in respect of HTPS. From this, wide variation in the inventory holding at different TPS can be observed. In view of the same, the Company should have fixed standard norms for inventory holding at all TPS.

4.2.17 Tariff Fixation

The erstwhile Board/ Company is required to file the application for approval of Generation Tariff for each year 120 days before the commencement of the respective year or such other date as may be directed by the CSERC. The Commission accepts the application filed by the Company with such modifications /conditions as may be deemed just and appropriate and after considering all suggestions and objections from public and other stakeholders, issue an order containing targets for controllable items and the generation tariffs for the year within 120 days of the receipt of the application.

The CSERC sets performance targets for each year of the Control Period for the items or parameters that are deemed to be "controllable" and which include:

(a) Station Heat Rate;
(b) Availability;
(c) Auxiliary Energy Consumption;
(d) Secondary Fuel Oil Consumption;
(e) Operation and Maintenance Expenses;
(f) Plant Load Factor
(g) Financing Cost which includes cost of debt (interest), cost of equity (return); and
(h) Depreciation.

Any financial loss on account of underperformance on targets for parameters specified in Clause (a) to (e) is not recoverable through tariffs.

The table below shows the due date of filing tariff petition, actual date of filing, date of approval by CSERC and the effective date of the revised tariff:

Year	Due date of filing of Tariff Petition	Actual date of filing	Delay in days	Date of approval of Tariff	Effective date of revised tariff
2005-06[18]	--	01.03.2005	--	15.06.2005	01.07.2005
2006-07	01.11.2005	13.04.2006	163	13.09.2006	01.10.2006
2007-08	01.11.2006	17.08.2007	289	22.10.2007	01.11.2007
2008-09	01.11.2007	No petition filed			
2009-10	01.11.2008	26.02.2009	117	30.05.2009	01.07.2009

Delayed implementation of new tariff resulted in depriving consumers of the benefit of ₹ 248.15 crore.

From the above it may be seen that the Board/ Company never filed the tariff petition in time and the delay ranged from 117 days to 289 days. Due to the same, the CSERC made the revised tariff effective from a later date. This deprived the consumers of the benefit of lower tariff to the tune of ₹ 248.15 crore during 2006-08 as the tariff for the years 2005-06 to 2007-08 reduced the average rate of supply of power from ₹ 3.45 (2005-06) to ₹ 3.20 (2006-07) and further to ₹ 2.98 (2007-08). However, the average rate of supply was marginally increased for 2009-10 to ₹ 3.04 per unit.

[18] Since the CSERC was formed in 2004-05, delay in filing of the first petition has not been worked out in Audit.

Non-allowance of expenditure by CSERC resulted in loss of ₹ 101.43 crore.

We also noticed that CSERC did not allow various expenditure amounting ₹ 101.43 crore for the year 2009-10 on account of underperformance by the Company for reasons deemed to be controllable thereby reducing the profits.

4.2.18 Environment issues

In order to minimize the adverse impact on the environment, the GoI had enacted various Acts and statutes. At the State level, Chhattisgarh Environment Conservation Board (CECB) is the regulating agency to ensure compliance with the provisions of these Acts and statutes. MoEF, GoI and Central Pollution Control Board are also vested with powers under various statutes. The Company has no separate environmental wing at the corporate office and Chief Chemists of the concerned TPSs look after the environmental issues. Our scrutiny relating to compliance with the provisions of various Acts in this regard revealed the following:

4.2.18.1 Operation of plant without consent

- The Company was required to renew consent from CECB before the expiry of previous consent to run its power plants. However, it was observed that HTPS and DSPM TPS applied for renewal of consent to CECB in October 2009 and November 2009 respectively after expiry of the previous consent. There was delay of 32 days in each case. Renewal of consent by CECB thereafter, was not received so far (June 2010). However, the Company did not pursue in this regard. Further, it was observed that due to non-compliance with conditions set out in consent letter, the Company was issued (23 October 2009) show-cause notice for DSPM TPS and threatened with closure of plants in the interest of public health and environment.
- Similarly, for Cogeneration Plant at Kawardha, though the consent of CECB expired on 10 November 2006, the Company applied for renewal of consent only on 05 February 2010 (i.e. after a delay of 38 months 25 days). However, the renewal of consent letter by CECB thereafter, was not received so far (June 2010). Further, it was observed that due to non-compliance with conditions set out in consent letter, the Company was issued several show cause notices and threatened with closure of plants in the interest of public health and environment.

Air Pollution

Coal ash, being a fine particulate matter, is a pollutant under certain conditions when it is airborne and its concentration in a given volume of atmosphere is high. Control of dust levels (Suspended Particulate Matters - SPM) in flue gas is an important responsibility of thermal power stations. Electrostatic Precipitator (ESP) is used to reduce dust concentration in flue gases. Control of dust level is dependant on effective and efficient functioning of ESPs.

4.2.18.2 Non-achievement of specified SPM levels

Non-achievement of specified SPM levels resulted in unproductive expenditure of ₹ 12.14 crore.

- ESP installed at Powerhouse II in KTPS was designed to achieve an SPM level of 300-350 *μ gram per cubic metre* (μg/m^3). In order to reduce the SPM level to 150 μg/m^3, the Company placed an order for installing new ESPs. Consequently, the ESPs were installed (January 2008) at a total cost of ₹ 12.14 crore. However, CECB stated (January 2010) that based on its inspection of the power house, the recorded SPM levels were found to be higher than the norms. As the desired level of reduction in SPM levels were not achieved even after installation of new ESPs, investment of ₹ 12.14 crore was rendered unproductive.
- Against the norms of 50 μg/m^3 for emission of SPM as prescribed by CECB, the actual emission was 70 to 95 and 60 to 85 μg/m^3 for Unit I and Unit II of DSPM TPS respectively. The reason for the excess emission is mainly due to installation of ESP of lower capacity.
- ESP installed at Cogeneration plant at Kawardha was designed to achieve an SPM level of 100 μg/m^3. CECB directed (May 2007) the Company to achieve an SPM level of 50 μg/m^3. However, no progress was made by the Company in this regard so far (June 2010).

4.2.18.3 Use of high ash content coal

As per MoEF notification (July 2003) coal based power stations located in urban, sensitive and critically polluted areas were required to use coal having less than 34 *per cent* ash on an annual weighted average basis. It was observed that the Company's all TPSs are located in Korba Industrial Cluster which is an Urban, sensitive and critical area. During review period, all three TPSs of the Company received 4.35 crore MT of coal, in which the weighted average of ash ranged from 39.3 to 46.4 *per cent*. CECB also instructed the Company (January 2008) to use washed and beneficiated coal to bring down the ash content and thereby reducing the pollution level. However, no action was taken in this regard so far (June 2010).

4.2.18.4 Ash disposal

Annual generation of fly ash from all the three TPSs of the Company was around 24.74 lakh to 37.01 lakh MT. MoEF issued a notification (September 1999) which provided that every thermal plant should supply fly ash to building material manufacturing units free of cost at least for 10 years. Our scrutiny of generation and disposal of fly ash for the years under review revealed that against the total fly ash of 1.52 crore MT generated by the Company, only 57.07 lakh MT was utilised. This suggested that no concerted efforts were made to improve the utilisation of ash.

Further, MoEF issued (27 August 2003) another notification which provided that every new thermal power station should utilise 100 *per cent* fly ash generated from the date of operation. However, it was observed that DSPM TPS which was commissioned on January 2008, did not utilise any quantity out of 22.10 lakh MT fly ash generated till March 2010 and entire fly ash generated was disposed of in ash bunds due to non-availability of Dry Fly Ash Collection System (Silo).

4.2.18.5 Non-commissioning of Dry Fly Ash Handling System at HTPS resulted in blocking up of funds of ₹ 29.94 crore

Non-commissioning of Dry fly ash handling system resulted in blocking up of funds ₹ 29.94 crore.

In compliance with the instruction of CECB regarding prevention of air pollution, the Company placed (October 2007) an order for installation of Dry Fly ash Handling System (DFHS) for all the four units of HTPS to Macawber Beekay Private Limited, New Delhi at a total value of ₹ 39.50 crore (supply ₹ 30.05 crore and erection ₹ 9.45 crore). As per the terms and conditions of work order, the work should have been completed within 12, 15, 18 and 21 months for unit 1, 2, 3 and 4 respectively from the date of approval of drawing (August 2008). However, it was observed that the supply of all required materials worth ₹ 29.94 crore were received during February 2008 to December 2009 and the commissioning of the system was not done so far (July 2010). This has not only resulted in non-compliance of CECB's orders, but also led to blocking up of funds to the tune of ₹ 29.94 crore besides non-reduction of air pollution.

Management stated (June 2010) that the commissioning of DFHS got delayed mainly due to approval of drawings decision of position for Silos, route for pipe racks, MCC drawing finalisation etc. However, we are of the opinion that all these exercise could have done before placing the order.

Noise Pollution

4.2.18.6 Noise Pollution (Regulation and Control) Rules, 2000 aim to regulate and control noise producing and generating sources with the objective of maintaining ambient air quality. To achieve the above, noise emission from equipment be controlled at source, adequate silencing equipment should be provided at various noise sources and a green belt should be developed around the plant area to diffuse noise dispersion. The TPSs are required to record sound levels in all the areas stipulated in the rules referred to above.

Our scrutiny revealed that noise levels recorded by KTPS and HTPS during day time in industrial areas for a period of five years up to 2009-10 ranged from 78.4 to 88.2 db and 80 to 90 db respectively against the prescribed level of 75 db due to old technology based equipments in the plant. Thus, these two TPSs not only violated the laws but also made a continuous adverse impact on the environment. At the night time the prescribed level of noise should be 70 db, however the Company did not record noise levels at night in any of its TPS.

Water pollution

4.2.18.7 The waste water of the power plant is the source of water pollution. As per the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the TPSs is required to obtain the consent of CECB which *inter-alia* contains the conditions and stipulations for water pollution to be complied with by the TPSs.

Our scrutiny revealed that as per the norms prescribed by CECB, total suspended solids (TSS) in effluents from the TPSs should not exceed 100 parts per million (ppm). We noticed that TSS in effluent discharges from the KTPS ranged between 119 and 133 ppm during the review period. The main reasons for exceeding TSS standards were absence of sedimentation tanks and ineffective functioning of effluent treatment plants. As both the reasons were controllable, effective and time bound steps could have avoided the non-repairable damage caused to the water bodies.

4.2.18.8 Avoidable expenditure on Water Cess – ₹1.91 crore

Avoidable expenditure of ₹ 1.91 crore on Water Cess due to failure to bring down the water pollution to specified level.

As per the provisions of the Water (Prevention & Control of Pollution) Cess Act, 1977 water cess at rates specified is collected for water utilised for the purposes specified in the Act *ibid*. Compliance with the standards laid down by GoI under Environment (Protection) Act, 1986 makes the consumer eligible for concessional rate of Water Cess (50 *per cent*) and also rebate in payment of Cess. In this connection, our scrutiny revealed that Company's all TPSs failed to bring down the pollution to specified levels and had to pay Water Cess of ₹ 3.82 crore during the review period at rate specified under Section 3 (2A) of the Act. Had the erstwhile Board/ Company taken effective steps, it could have become eligible for rebate. This led to avoidable payment of Water Cess of ₹ 1.91 crore.

Management stated (June 2010) that due to non-commissioning of Effluent Treatment Plant and Sewage Treatment Plant (ETP & STP), the Water Cess was paid at higher rates and after commissioning the same the rebate as per section 3 (2) will be applied for.

4.2.18.9 Non-installation of Ash Water Recycling System resulted in loss of water

Non-installation of AWRS resulted in loss of 75.20 cubic metre water worth ₹ 2.71 crore.

The turnkey contract awarded to BHEL for DSPM TPS included installation of Ash Water Recycling System (AWRS). For running the plant Company arranged water from Water Resources Department and paid water charges to them. It was observed that water used for disposal of ash through slurry was to be recycled through AWRS. However, AWRS was not installed as yet (September 2010). In absence of installation of AWRS, a quantity of 188.00 lakh cubic metre (cu.m) of water used for ash disposal through slurry could not be recycled during the period from August 2007 to March 2010. The quantity of water that should have been collected through recycling worked out to 75.20 lakh cu.m. (40 *per cent* of water used) valuing ₹ 2.71 crore (at the rate of ₹ 3.60 per cu. m.). Had the AWRS been installed timely the company could have saved 75.20 cu.m water worth ₹ 2.71 crore.

4.2.19 Monitoring by top management

The erstwhile Board/ Company plays an important role in the State economy. For such a giant organisation to succeed in operating economically, efficiently and effectively, there should be documented management systems of operations, service standards and targets. Further, 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. The targets should generally be such that the achievement of which would make an organisation self-reliant. The Company developed an MIS whereby information on various operational parameters/targets to reach its headquarters on a daily/monthly/quarterly basis. These reports are regularly reviewed by the top Management of the Company.

4.2.20 Internal control

Internal control is a management tool used to provide reasonable assurance that the objectives of the organisation are being achieved in an efficient, effective and orderly manner. A good system of internal control comprise proper allocation of functional responsibilities within the organisation, proper procedures for operating and co-ordination among different units/ wings of the organisation. Review of internal control system followed by the erstwhile Board/ Company revealed the following:

- Various vital equipments remained un-installed even though the supplies were completed long back (discussed in p*aragraphs 4.2.15.2 to 4.2.15.4, 4.2.18.5 and 4.2.18.9*).
- Accumulation of non moving stock and spares were noticed in all the generation Stores of the Company. Inventory management system was deficient as the Company did not fix any maximum, minimum and economic re-ordering level of stock which resulted in overstocking of various materials without any requirement and Company's valuable funds remained blocked. (discussed in *paragraph 4.2.16.3*)
- Even though the main function of Office of the Chief Engineer (Stores & Purchase : Generation) is to procure stores and spares etc. of routine nature regularly required for generating stations, no system was developed to create database and to monitor the prices of key raw material to independently assess the reasonability of the rates quoted. Instead rate reasonability was compared with the last tender and orders placed by generation entities in other States.
- In respect of items like grinding elements, ceramic lined material, conveyor belts etc., performance guarantee clause with standard performance level was incorporated in the terms and conditions. If the performance was below the standard, either the material was to be replaced or pro-rata value of the materials was to be recovered from the firms. However, performance of such material was not watched to safeguard the financial interest of the Company.
- Sometimes extension orders were placed with the same party citing urgency. As per the standing instructions, before placing any extension order prevailing market trend should have been assessed and extension order placed only if the ruling prices are higher. However, such exercise was not carried out.

Conclusion

- The Company's failure to obtain requisite clearances resulted in non-commencement/ abandonment of power projects;
- Four new power projects taken up by the Company were not commissioned as per the schedule resulting in time and cost overrun due to inadequate project monitoring system;
- The Company did not recover liquidated damages from the defaulting contractors;
- Operational performance of the Company's power stations were affected due to excess consumption of fuel, excess auxiliary consumption and non-replacement/commissioning of vital equipments;
- The Company failed to take up the R&M/LE programme of HTPS during Eleventh Plan period as planned though it had already completed its designed life;
- The Company was not adhering to its own maintenance plan of power stations and there was delay in taking up of annual and capital overhauling;
- During the review period the Board faced cash deficit due to poor recovery of outstanding energy bills and subsidy receivable from the State Government which resulted in increased borrowings;
- Delayed filing of tariff petition with CSERC by the Board/ Company led to deprival of the benefit of lower tariff to the consumers amounting to ₹ 248.15 crore during 2006-08;
- There was lack of control over inventory holding. The Company did not fix minimum/maximum level stock which resulted in excess procurement of consumable stores; and
- On the environmental side, the Company did not adhere to the provisions of various Acts, regulations and norms as prescribed resulting in adverse impact on the environment.

Recommendations

The Company may consider:

- developing a mechanism to obtain necessary clearances before investing huge funds in upcoming projects;
- strengthening its project monitoring system so as to achieve project completion targets as scheduled;
- incorporating suitable clauses in all future contracts to protect its financial interests such as (a) linking supply payments to erection milestones, (b) recovery of consequential losses and (c) giving advances in accordance with CVC guidelines;
- enhancing thermal and fuel efficiencies with improved technology, to ensure consumption of fuel within the prescribed norms;
- taking up R&M/ LE Programme of HTPS Korba West at the earliest;
- adhering to the schedule for periodic maintenance plan strictly;

- filing tariff petition in time with the CSERC;
- fixing minimum, maximum and re-ordering level of various inventories; and
- ensuring strict adherence to environmental laws thereby minimising the adverse impact on environment.

4.3 Transaction Audit Observations

CHHATTISGARH STATE CIVIL SUPPLIES CORPORATION LIMITED

4.3.1 Avoidable expenditure

The Company incurred avoidable expenditure of ₹ 12.11 crore due to non-payment of Advance Income Tax and non-submission of IT Return in time

As per Section 208 of Income Tax Act, 1961(Act), advance income tax shall be payable during a financial year where the amount of such tax payable by the assessee during that year is ₹ 5000 or more. Further as per section 210 read with section 211 of the Act, each person who is liable to pay advance tax under section 208 shall, of his own accord, pay it in four installments during each financial year (on or before 15 June, 15 September, 15 December and 15 March). Where the return of income for any assessment year (AY) is filed after the due date or is not filed, the assessee shall be liable to pay simple interest at the rate of one *per cent* for every month or part thereof commencing on the date immediately following the due date. Further, section 72 allows a company to carry forward its business loss and to set off the same against future business profits. Section 80, however, stipulates that business loss for an accounting year can be carried forward for setting off against the profits of subsequent years only if the Return of Income for the loss year was filed within the time limit prescribed under section 139 (1) i.e. 31st day of October of the respective assessment year.

The preparation of the annual accounts of Chhattisgarh State Civil Supplies Corporation Limited (Company) was in backlog and annual accounts of the Company for the year 2005-06 was finalised and certified by the Auditor on 9 April 2008. As per the Income Tax (IT) Return filed (24 December 2008) by the Company for the accounting year 2005-06, the Company had claimed for setting off of brought forward loss of ₹ 7.36 crore, which pertained to the accounting years 2001-02 and 2004-05. As per the provisions of the Act, the Company was eligible to avail set off of the above losses against the profits for subsequent years only if the IT Returns for the loss years (viz. accounting years 2001-02 and 2004-05) were filed within the prescribed time limits viz. by 31 October 2002 and 31 October 2005 respectively. We, however, observed that the Company filed the IT Returns for the accounting years 2001-02 and 2004-05 (AYs 2002-03 and 2005-06) belatedly in February 2005 and November 2008 respectively. As a result the claim of the Company for setting off the previous losses (₹ 7.36 crore) was disallowed by IT Department and the Company had to pay tax of ₹ 2.48 crore thereon.

Further, the Company could not assess the profit/loss on quarterly basis during the year 2005-06 and failed to pay the advance income tax as required under sections 210 and 211 resulting in payment of penalty under the Act. On finalisation of accounts (April 2008), the Company reported profit of ₹ 44.25 crore[1] in 2005-06. While working out the tax liability for the accounting year 2005-06, Company adjusted the loss figures for 2001-02 and 2004-05 in anticipation of its eligibility for setting off of these brought forward losses under IT Act. We observed that the Company had to pay penalty of ₹ 9.63 crore on account of non-payment of advance tax, delayed filing of IT Returns etc. under Section 234 A (₹ 3.70 crore), 234 B (₹ 5.18 crore) and 234 C (₹ 0.75 crore) of IT Act.

Thus, delayed filing of IT Returns and failure on the part of the Company to assess its income on quarterly basis for paying advance tax resulted in non setting off of the brought forward loss and avoidable tax liability of ₹ 2.48 crore besides avoidable payment of penalty of ₹ 9.63 crore for non-payment of advance tax, delayed filing of returns, etc.

The Government stated (July 2010) that consequent upon the re-organisation of the State it took nearly two years to distribute the assets, liabilities and staff between erstwhile Madhya Pradesh State Civil Supplies Corporation and the Company. This delayed the compilation of accounts and consequently IT returns were also filed belatedly. Further, as there was loss during the years 2001-02 to 2004-05, no advance tax was paid in 2005-06.

The reply lacks justification as earlier years' performance is only a guiding factor. The subsidy from the Government against losses incurred in implementation of PDS scheme was the main source of Company's income and the same was promptly reimbursed by the Government every year. As such, the Company was aware of the fact and should have worked out the quarterly tax liability duly taking into account the said subsidy component on estimation basis. The Company should have paid advance tax accordingly within the prescribed time. Further, the Company failed to prepare accounts in time which was the prime cause for delay in filing of IT returns.

The Company needs to clear backlog of accounts in a phased manner. It should also devise a system for estimation of quarterly profits and timely payment of advance tax so as to avoid such losses in future.

4.3.2 Incorrect fixation of selling price led to loss

Fixation of selling price of the soyabean oil without reckoning the element of CST led to loss of ₹ 80.98 lakh

Government of Chhattisgarh authorised Chhattisgarh State Civil Supplies Corporation Limited (Company) to procure imported refined soyabean edible oil from the authorised Central Public Sector Undertakings (PSUs) and to distribute it to ration card holders under the Public Distribution System (PDS). The Company entered (28 April 2008) into an agreement with PEC Limited,

[1] The profit of ₹ 44.25 crore occurred mainly due to receipt of revenue grants of ₹ 951.78 crore from Government during 2005-06.

New Delhi, a Central PSU, for supply of 4,500 MT per month of imported soyabean oil at the rate of ₹ 57,000 per MT after deducting the subsidy element of ₹ 15,000 per MT but exclusive of Central Sales Tax (CST). The Company worked out the total cost of the oil at ₹ 57.38 per litre and also proposed to fix the selling price of oil for PDS at ₹ 58.00 per litre, which was agreed to (June 2008) by the Government. The Company procured (July-October 2008) 7202.78 MT oil (79,15,143 litre) worth ₹ 41.88 crore (including CST) from PEC Limited and distributed (July 2008 – June 2009) 7103.61 MT oil under PDS in the State.

On scrutiny (January 2010) of records, we observed that while submitting the proposal for fixation of selling price of ₹ 58.00 per litre, the company had taken into account various incidental expenses. The element of CST of two *per cent* was, however, not reckoned as part of the cost of the oil. As a result, the Company had to bear the burden of CST resulting in loss of ₹ 80.98 lakh on 7103.61 MT oil supplied through PDS.

The Government (August 2010) stated that the Company suffered loss due to fall in oil prices at national and international level which were beyond the control of the Company.

The reply was, however, silent about the failure of the Company to take into account the element of CST while fixing the selling price, which resulted in loss to the Company.

The Company, while submitting proposal to Government for fixation of selling price of commodities under PDS should take into account all the incidental expenses involved including CST so as to avoid such loss in future.

4.3.3 Loss due to improper fixation of Selling Price

The Company failed to include all incidental costs in fixation of selling price resulting in loss of ₹ 62.33 lakh

The Chhattisgarh State Civil Supplies Corporation Limited (Company) at the instance of Government of Chhattisgarh, submitted (23 January 2008) a proposal for distribution of kerosene oil at selected 350 weekly local markets (*Haat bazaars*) in rural and remote areas of the State by diverting 50 mobile outlets which were used for transportation of food grains. In the proposal submitted to State Government (January 2008), it was stated that the Company would buy the kerosene oil from the authorised dealers at ₹ 8.50 per litre and sell the same in the local markets at ₹ 10.00 per litre. The Company had projected to earn a net profit of ₹ 2000 in the sale of one trip (4000 litre) of kerosene (i.e. at ₹ 0.50 per litre). The State Government approved (02 February 2008) the proposal and the scheme was named *"Ujiyara"*. The scheme was in addition to the existing Public Distribution System (PDS) and was implemented from 16 February 2008.

We noticed (January 2010) that on review (July 2008, September 2008 and October 2009) of the financial implications, the Company found that it was actually incurring loss on implementation of the scheme. The Company reported (October 2009) loss of ₹ 74.55 lakh as of 31 March 2009 in the scheme by selling 18,36,439 litre kerosene oil at the rate of ₹ 10.00 per litre and requested the State Government to reimburse the said loss. The State Government considered (November 2009) the proposal of the Company and allowed it to raise the selling price of kerosene from ₹ 10.00 per litre to ₹ 11.00 per litre. Subsequently, the Company reported (May 2010) a total loss of ₹ 132.52 lakh[2] as of 31 March 2010 in the scheme and again requested the State Government to reimburse the loss. There was, however, no commitment from the Government for reimbursement of the loss incurred by the Company so far and the scheme was still in operation (September 2010).

We noticed that the main reason for loss was the inadequate selling price of the kerosene oil as while submitting the proposal to State Government for fixation of selling price, the Company failed to take into account the vehicle repair and maintenance cost and other incidental expenses. As per our working, the Company had incurred actual loss of ₹ 62.33 lakh as on March 2010, after excluding the components of fixed cost elements such as pay and allowances, etc. Thus, the Company had incurred a per litre loss of ₹ 1.74[3] on an average during 2008-09 and 2009-10 against the projected profit of ₹ 0.50 per litre and would continue to incur further losses at this rate till the scheme remains operational.

Government stated (June 2010) that the loss was due to usage of old vehicles which increased the transportation cost. It was further stated (June 2010) that as the Company is an authorized agency for implementation of various PDS schemes, it is bound to carry out the directives as issued by the State Government. The reply is not valid as the scheme was proposed by the Company itself and implementation of the scheme resulted into losses due to failure of the Company to take into account all related costs of distribution of kerosene oil.

In order to avoid such losses, the Company needs to carry out adequate feasibility study duly taking into account all related direct and indirect costs involved in implementation of the scheme.

4.3.4 Avoidable expenditure on bank commission

Non-availment of commission free DD facility offered by PNB resulted in avoidable expenditure of ₹ 18.57 lakh

The Chhattisgarh State Civil Supplies Corporation Limited (Company) had procured food grains from Food Corporation of India (FCI) for distribution to beneficiaries under various welfare schemes of Government of India and State Government. Payments to FCI were made by the district offices of the Company through Demand Draft (DD). Commission charges of ₹ 18.57 lakh

[2] Includes ₹70.19 lakh being from pay and allowances for the years 2008-09 and 2009-10.

[3] Average cost per litre ₹ 12.13 – Average selling price per litre ₹ 10.39.

was paid by the District Offices to various banks other than Punjab National Bank (PNB) during 2007-08 and 2008-09.

On scrutiny (January 2010) of records we observed that PNB offered (September 2005) Multi City Cheque facility and free fund remittance facility through DD to the Company. The same was accepted in October 2005 and it was decided to open accounts in PNB. The General Manager (GM) of the Company, accordingly, instructed (December 2005) the District Managers to avail the commission free DD facility offered by PNB. However, 14 out of 16 District offices having branches of PNB in their locality failed to avail the commission free facility and paid commission on DD amounting ₹ 18.57 lakh to other banks. Thus, non-implementation of the instructions of the GM to avail commission free DD facility by the District Offices resulted in avoidable expenditure of ₹ 18.57 lakh on bank commission.

The Government stated (September 2010) that offer of PNB was meant for fund transfers to district offices from Head Office and *vice versa*. However, for business purpose the cheques/DDs were obtained on payment of commission and properly accounted for. The reply is not in consonance with the issue pointed out in the para since PNB's offer already exists for free transfer of funds through cheques/drafts at par at all branches having Centralised Banking System (CBS). Further, PNB in its offer letter clearly mentioned that Commission free facility is applicable to DD also.

The Management should devise effective monitoring system to ensure that its instructions are strictly adhered to by field offices and should fix responsibility for the reported violation. Company should also explore the possibility to enter into similar arrangements with other Nationalised Banks where PNB branches are not available.

Chhattisgarh State Beverages Corporation Limited

4.3.5 Blocking up of funds due to selection of unsuitable site

Failure in selection of appropriate site for construction of godown led to unfruitful expenditure of ₹ 13.26 lakh and blocking of funds of ₹ 79.11 lakh

Chhattisgarh State Beverages Corporation Limited (Company) decided (6 July 2005) to construct godowns at Raipur to avoid huge expenditure on godown rent incurred for storage of liquor. Accordingly, an application for allotment of 5.00 acres of land at Siltara Industrial Area, Raipur was submitted (24 August 2005) to Chhattisgarh State Industrial Development Corporation Limited (CSIDC) and a sum of ₹ 5.02 lakh was also deposited (26 September 2005) as advance towards land premium for the purpose. CSIDC issued (17 Oct 2005) Letter of Intent (LoI) offering 4.940 acres of land in Siltara Industrial Area, Raipur for allotment on lease for 30 years and requested the Company to deposit ₹ 61.33 lakh as full cost. However, on inspection of the site

(17 January 2006), the Company found it unsuitable for its operation, as Electrical High Tension lines were passing over it.

The Company requested (January 2006) CSIDC to allot an alternate site. In response, CSIDC intimated (March 2007) the alternate site in amenities sector in the same industrial area and informed (July 2007) that the land premium and other charges were revised with retrospective effect from 1 April 2006. Thereafter, the Company submitted (9 August 2007) specification of land site.

CSIDC issued (29 August 2007) revised LoI allotting the alternate site of 5.315 acres of land in lieu of the earlier one and requested the Company to deposit ₹ 92.37 lakh towards premium and other charges as per revised rate. The Company deposited ₹ 87.35 lakh (October 2007/ May 2008) and obtained possession of the land (16 January 2008). After a delay of 20 months from the date of depositing the amount and 17 months from obtaining possession of land, the Company found (26 June 2009) the alternate site also unsuitable for its business operation because of heavy pollution in the industrial area and hence requested CSIDC to allot land in a pollution free area in the vicinity of Raipur. CSIDC informed (7 August 2009) that no suitable land is available in its possession within a radius of 20-25 kms from Raipur. As a result even after incurring ₹ 92.37 lakh, the Company could not implement the project initiated as early as in July 2005 to construct its own godown for storage of liquor at Raipur. Out of the total payment of ₹ 92.37 lakh made by the Company, ₹ 13.26 lakh related to annual lease rent, annual maintenance charges and annual lighting charges for two years (May 2008-April 2010).

Thus, failure on the part of the Company to plan and select the appropriate site led to infructuous expenditure of ₹ 13.26 lakh on payment of annual lease rent, annual maintenance charges and annual street light charges apart from blocking of the Company's fund of ₹ 79.11 lakh due to non commencement of the construction of the godown even after lapse of 3 years. Apart from this, the Company incurred ₹ 1.38 crore towards hire charges of godown during August 2005 to May 2010.

In reply, Management/Government stated (June/July 2010) that in the year 2005 when the decision to acquire land in Siltara Industrial Area was taken, there was no pollution in the area. During inspection of site prior to execution of lease deed it was found that there were lot of pollution and therefore the site was unsuitable for storage of liquor. It was further stated that in the meeting held on 7 June 2010, the Board of Directors decided to construct godown in the land.

The reply is not acceptable as the failure of the Company in assessing the suitability of the land before taking possession (January 2008) and making payment for the land (October 2007/May 2008) led to loss to the Company. This was avoidable by better planning and timely inspection of the site. Further, the reply regarding Company's belated decision of constructing the godown on allotted site does not explain the justification on suitability of land for storage of liquor in highly polluted area.

The Management needs to set up adequate mechanism to monitor the implementation of committed capital works through better planning, timely inspection of site, etc. so as to ensure selection of appropriate land and completion of the work in time.

4.3.6 Extra expenditure due to delay in payment

The Company incurred extra expenditure of ₹ 27.89 lakh due to delay in payment of cost of land

Chhattisgarh State Beverages Corporation Limited (Company) decided (July 2005) to construct godown at Bilaspur to avoid huge expenditure on godown rent incurred for storage of liquor. Application for allotment of 5.00 acres of land at Sirgitti Industrial Area, Bilaspur was submitted (August 2005) to Chhattisgarh State Industrial Development Corporation Limited (CSIDC). CSIDC intimated (September 2005) the Company to remit ₹ 4.66 lakh as 10 *per cent* advance towards land premium and service charges to process the applications further. The Company deposited (26 September 2005) a sum of ₹ 4.66 lakh. CSIDC issued (11 November 2005) letter of intent (LoI) stating that 5.00 acres of land in Sirgitti Industrial Area, Bilaspur is proposed for allotment on lease for 99 years and requested the Company to deposit ₹ 49.67 lakh towards land premium (₹ 40.48 lakh), lease rent (₹ 1.01 lakh), security deposit (₹ 3.04 lakh), additional premium (₹ 4.05 lakh) and other charges (₹ 1.09 lakh) within 45 days of LoI (*viz.* by 26 December 2005), failing which the LoI would automatically stand cancelled. CSIDC had given the Company advance possession of land measuring 5.62 acres on 21 December 2005.

Scrutiny of records (August 2009) revealed that the Company did not make payment for the land premium and the other charges within the prescribed time limit (26 December 2005) and remitted ₹ 35.82 lakh[4] in January 2007 i.e. after delay of 13 months. In the meantime, CSIDC revised the land premium and other charges upward with retrospective effect from 1 April 2006 and demanded (November 2007) the balance amount of ₹ 43.24 lakh including the extra expenditure of ₹ 27.89 lakh on account of the said revision which was also deposited (March 2009) by the Company. Thus failure on the part of the Company to remit the land premium and other charges in time led to avoidable extra expenditure of ₹ 27.89 lakh.

Further, inaction of the Company in constructing the godown even after a lapse of more than four years of taking the possession of the land (December 2005) led to avoidable expenditure towards payment of hire charges of godown to the extent of ₹ 91.67 lakh during January 2006 to May 2010.

[4] After deducting advance of ₹ 4.66 lakh from the land premium of ₹ 40.48 lakh.

In reply, the Government stated (July 2010) that for remitting the amount of land premium and other charges, necessary decision was taken by the Board of Directors only on 28 December 2006 and thereafter the amount was remitted.

The reply does not address the reasons for not including this item in the Agenda for discussion though the Board of Directors met three times between November 2005 and December 2006. Ultimately it took more than one year for the Board of Directors to decide on payment of land premium and other charges.

The company should prioritise the issues to be discussed in the Board meeting in future to avoid delay in execution of important projects and also to avoid extra expenditure.

4.3.7 Loss of Interest due to idling of funds

The Company incurred loss of interest of ₹ 22.69 lakh due to parking of huge cash balances in the current account

Chhattisgarh State Beverages Corporation Limited, Raipur (Company) was operating (since July 2002) two current accounts with Punjab National Bank one at Bilaspur and the other at Raipur. While account at Bilaspur was operated only for collection of amount, all payments were effected by the Company through the current account at Raipur. In June 2007, the company made Auto Sweep arrangement with the Raipur Branch of the Bank. As per the above arrangement, the Company would get interest at the prescribed rate ranging from 3.75 to 6.25 *per cent* on the amount kept with the bank upto 179 days provided that the minimum balance of ₹ 5.00 lakh is maintained with the bank for more than seven days.

During scrutiny of the records of the Company (August 2009), we observed that no such arrangement was made in respect of the current account maintained with Bilaspur branch. Balances ranging from ₹ 5.00 lakh to ₹ 12.77 crore were lying in the current account for the period ranging from seven to 170 days during July 2007 to August 2009. On pointing out by us (August 2009), the Company made the Auto Sweep arrangements for the current account with Bilaspur branch also with effect from September 2009. Thus, the failure on the part of the Company to make Auto Sweep arrangement with Bilaspur branch in June 2007 simultaneously with Raipur branch resulted in loss of interest of ₹ 22.69 lakh.

The Government in their reply (July 2010) stated that Auto Sweep arrangement was made in respect of current account with Bilaspur branch also with effect from September 2009. The reply is silent as to why the arrangement was not made in June 2007 simultaneously with Raipur branch.

The Company should devise a system for preparation of anticipated cash flow statement based on past business experience/commitment to ascertain surplus funds available for investments in fixed deposits so as to maximise return on surplus funds.

Chhattisgarh *Rajya Beej Evam Krishi Vikas* Nigam Limited

4.3.8 Avoidable payment of interest due to pendency of accounts

Inadequate efforts of the Company in clearance of accounts arrears resulted in shortfall in remittance of advance tax and consequent payment of interest of ₹ 52.68 lakh on income tax

Section 210 of the Companies Act, 1956, read with Sections 166 and 216, casts the duty on the Board of Directors of a Company to place the accounts of the Company along with Auditor's Report (including supplementary comments of CAG) in the Annual General Meeting of the shareholders within six months of the close of its financial year. As per Section 210(5), if any person, being a 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 ten thousand rupees or with 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, Chhattisgarh *Rajya Beej Evam Krishi Vikas* Nigam Limited has not been finalising its accounts since inception (08 October 2004) and there were arrears of six years in finalisation of its accounts as of 30 September 2010. We have been bringing out the issue of arrears in finalisation of accounts to the notice of the Chief Secretary (24 May 2010) and Registrar of Companies (24 May 2010). However, there has been no effective action to liquidate the arrears.

The Company had engaged (February/April 2007) two outside agencies for preparing the basic records and finalising the accounts. Though the said agencies have been paid ₹ 16.79 lakh (up to May 2009) and were still attending the work, the exercise proved to be ineffective as none of the accounts could be finalised till date (September 2010). This indicated lack of seriousness in Company's approach in clearance of huge arrears of pending accounts.

Further, we observed that due to delay in finalisation of accounts, the Company failed to precisely assess the profit/loss on a quarterly basis for the purpose of payment of Advance Income Tax (AIT) as required under Sections 210 and 211 of the Income Tax Act, 1961 (Act). The Company earned an estimated profit of ₹ 20.29 crore during 2005-06 to 2008-09 (₹ 0.72 crore in 2005-06, ₹ 4.43 crore in 2006-07, ₹ 7.70 crore in 2007-08 and ₹ 7.44 crore in 2008-09) and the total tax liability on the said income worked out to ₹ 7.64 crore. The Company paid only ₹ 1.71 crore (₹ 0.26 crore in 2006-07 and ₹ 1.45 crore in 2008-09) as advance tax and failed to pay advance tax in 2005-06 and 2007-08. Even the advance tax remitted was less than the tax liability as per the returned income. Further, during 2005-06 and 2006-07, the Company failed to file the Income Tax Return on due date. As a result, the

Company had to pay (February/March 2008 and March 2009) ₹ 52.68 lakh towards interest under Section 234 A/B/C of the Act (₹ 8.77 lakh u/s 234 A, ₹ 19.75 lakh u/s 234 B and ₹ 24.16 lakh u/s 234 C). Thus, inadequate efforts of the Company in clearing the backlog of accounts has resulted in accumulation of accounts arrears besides causing failure in correctly estimating the quarterly taxable income, which resulted in avoidable payment of ₹ 52.68 lakh towards interest for non payment/ short remittance of AIT and delayed submission of return.

In reply, Government admitted (July 2010) the facts and stated that specific directions were issued to the Company to prepare the accounts in time so as to avoid recurrence of similar lapse in future.

The Company should identify the constraints faced in finalisation of pending accounts and should ensure clearance of backlog of accounts in a time bound manner by taking appropriate steps through effective planning. It should also devise a system for estimation of quarterly profits and payment of advance tax so as to avoid such losses in future.

Raipur **(PURNA CHANDRA MAJHI)**

The **Accountant General (Audit), Chhattisgarh**

Countersigned

New Delhi **(VINOD RAI)**

The **Comptroller and Auditor General of India**