

## CHAPTER-VI

### Government Commercial and Trading Activities

#### 6.1 Overview of Government Companies and Statutory Corporations

##### 6.1.1 Introduction

As on 31 March 2007, there were eight Government companies and two Statutory corporations (all working) as against seven Government companies and two Statutory corporations (all working) as on 31 March 2006 under the control of the State Government. The accounts of the Government companies (as defined in Section 617 of the Companies Act, 1956) are audited by the Statutory auditors who are appointed by the 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 the CAG as per the provisions of Section 619 (4) of the Companies Act, 1956. The audit arrangements of the Statutory corporations are as shown below:

Sl. No.	Name of the Corporation	Authority for audit by the Comptroller and Auditor General of India	Audit arrangement
1.	Chhattisgarh State Electricity Board (CSEB)	Under Rule 14 of the Electricity Supply (Annual Accounts) Rules, 1985 read with Section 185(2) (d) of the Electricity Act, 2003	sole audit by the CAG
2.	Chhattisgarh State Warehousing Corporation	Section 31(8) of the State Warehousing Corporation Act, 1962	audit by Chartered Accountants and supplementary audit by the CAG

In addition, the State had formed (October 2001) the Chhattisgarh State Electricity Regulatory Commission (CSERC) whose audit is also being conducted by the CAG.

#### Working Public Sector Undertakings (PSUs)

##### 6.1.2 Investment in working PSUs

The total investment<sup>1</sup> in nine working PSUs (seven Government companies and two Statutory corporations) at the end of March 2006 and ten working PSUs (eight Government companies and two Statutory corporations) at the end of March 2007 respectively was as follows:

<sup>1</sup> Reconciliation of figure with the Finance Accounts is pending.

(Amount: Rupees in crore)

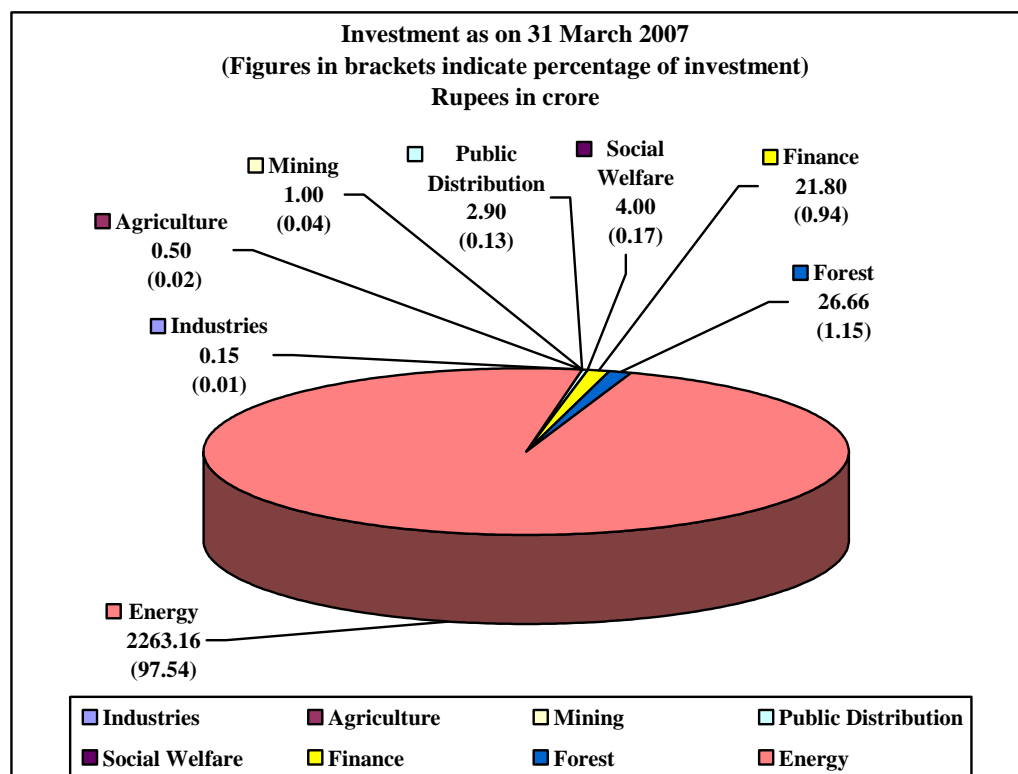
Year	Number of working PSUs	Investment in working PSUs			
		Equity	Share application money	Loans	Total
2005-06	9	39.01	-	958.71	997.72
2006-07	10	39.01	4.00	2277.16	2320.17 <sup>2</sup>

As on 31 March 2007, the total investment in working Government companies and Statutory corporations comprised 1.85 per cent of equity capital and 98.15 per cent of loans, as compared to 3.91 per cent and 96.09 per cent respectively as on 31 March 2006.

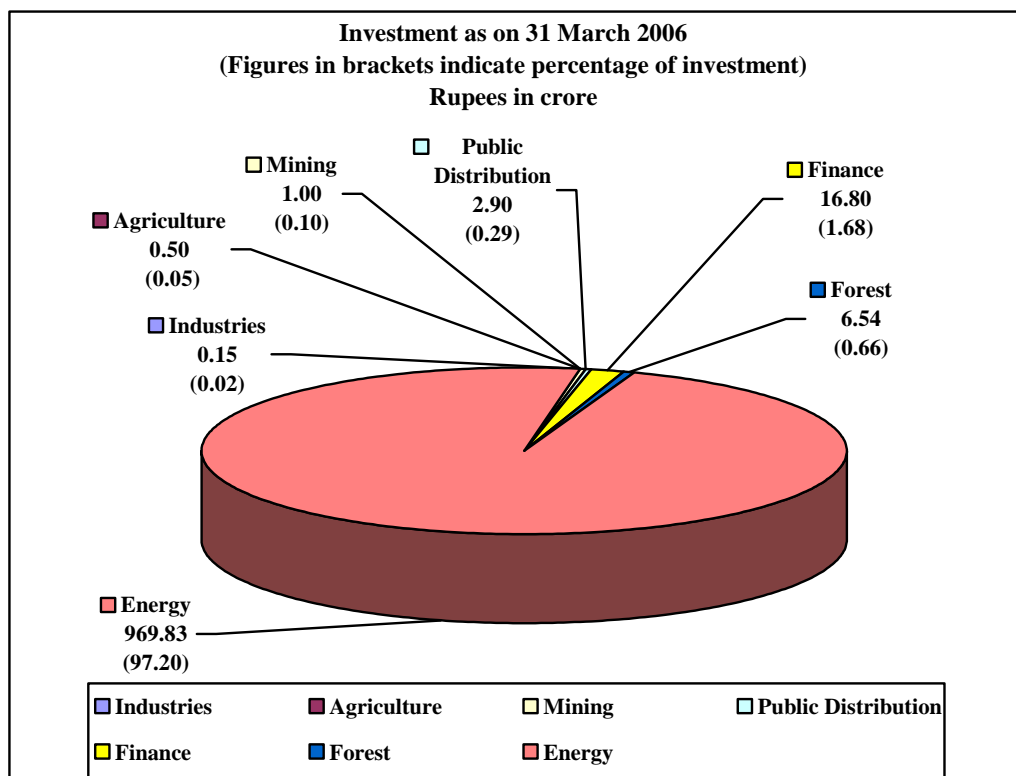
An analysis of investment in PSUs is given in the following paragraphs:

### Sector-wise investment in working Government companies and Statutory corporations

The investment (equity and long term loans) in various sectors and percentage thereof at the end of March 2007 and March 2006 are indicated in the following pie charts:



<sup>2</sup> State Government's investment in working PSUs was Rs 964.23 crore (share capital, share application money and loans).



### 6.1.3 Working Government companies

Total investment in the working Government companies at the end of March 2006 and March 2007 was as follows:

(Amount: Rupees in crore)

Year	Number of companies	Investment in working Government companies			
		Equity	Share application money	Loans	Total
2005-06	7	14.89	-	12.00	26.89
2006-07	8	14.89	4.00	37.12	56.01

The summarised position of Government investment in these Government companies in the form of equity and loans is detailed in **Appendix-6.1**.

As on 31 March 2007, the total investment in working Government companies comprised 33.73 per cent of equity capital and 66.27 per cent of loans as compared to 55.37 and 44.63 per cent respectively as on 31 March 2006.

### 6.1.4 Working Statutory corporations

The total investment in the two working Statutory corporations at the end of March 2006 and March 2007 was as follows:

(Amount: Rupees in crore)

Name of corporation	2005-06		2006-07	
	Capital	Loans	Capital	Loans
Chhattisgarh State Electricity Board	23.12	946.71	23.12 <sup>3</sup>	2240.04
Chhattisgarh State Warehousing Corporation	1.00	Nil	1.00	Nil
<b>Total</b>	<b>24.12</b>	<b>946.71</b>	<b>24.12</b>	<b>2240.04</b>

As on 31 March 2007, the total investment in working Statutory corporations comprised 1.07 per cent of equity capital and 98.93 per cent of loans as compared to 2.48 and 97.52 per cent respectively as on 31 March 2006.

The summarised position of investment in working Statutory corporations in the form of equity and loans is detailed in **Appendix 6.1**.

### 6.1.5 Budgetary outgo, grants/subsidies, guarantees issued, waiver of dues and conversion of loans into equity

The details regarding budgetary outgo, grants/subsidies, guarantees issued, waiver of dues and conversion of loans into equity by the State Government in respect of Government companies and Statutory Corporations are given in **Appendices-6.1 and 6.3**.

The budgetary outgo in the form of equity capital and loans and grants/subsidies from the State Government to Government companies and Statutory corporations for the three years up to 2006-07 are given below:

(Amount: Rupees in crore)

	2004-05				2005-06				2006-07			
	Companies		Corporations		Companies		Corporations		Companies		Corporations	
	No.	Amt.	No.	Amt.	No.	Amt.	No.	Amt.	No.	Amt.	No.	Amt.
Equity capital outgo from budget	1	1.00	-	-	1	0.50	--	--	1	1.00	-	-
Loans given from budget	-	-	1	47.28	1	11.00	-	-	1	5.00	-	-
Other grants/subsidy	2	40.84	1	75.46	5	59.72	1	129.79	5	148.45	1	538.63
<b>Total outgo</b>	<b>3<sup>4</sup></b>	<b>41.84</b>	<b>1<sup>4</sup></b>	<b>122.74</b>	<b>5<sup>4</sup></b>	<b>71.22</b>	<b>1<sup>4</sup></b>	<b>129.79</b>	<b>5<sup>4</sup></b>	<b>154.45</b>	<b>1<sup>4</sup></b>	<b>538.63</b>

During the year 2006-07, the Government had guaranteed loans aggregating Rs 326.48 crore obtained by one working Government company<sup>5</sup> (Rs 1.32 crore) and one Statutory corporation<sup>6</sup> (Rs 325.16 crore). At the end of the year, guarantees amounting to Rs 224.70 crore against one working Government company<sup>7</sup> (Rs 1.81 crore) and one Statutory corporation<sup>8</sup>

<sup>3</sup> As per Ministry of Power, Government of India order dated 4 November 2004, the share capital of MPEB as on 14 April 2001 of Rs 2,311.50 lakh had remained undistributed, which had been provisionally apportioned to CSEB as its share capital on asset Ratio.

<sup>4</sup> These are the actual number of companies/corporations which have received budgetary support in the form of equity, loans, grants and subsidy from the State Government during the year.

<sup>5</sup> Chhattisgarh Nishakat Jan Vitt Avam Vikas Nigam.

<sup>6</sup> Chhattisgarh State Electricity Board.

<sup>7</sup> Chhattisgarh Nishakat Jan Vitt Avam Vikas Nigam

(Rs 222.89 crore) were outstanding. The guarantee fee/commission paid/payable to State Government by one company during 2006-07 was Rs 1.25 lakh.

### 6.1.6 Finalisation of accounts by PSUs

The accounts of the Government 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 read with Section 19 of Comptroller and Auditor General's (Duties, Powers and Conditions of Service) Act, 1971. These are also to be laid before the Legislature within nine months from the end of relevant financial year. Similarly, in case of Statutory Corporations, their accounts are finalised, audited and presented to the Legislature as per the provisions under respective Statutes.

Out of eight Government companies and two Statutory corporations, none of the companies had finalised their accounts for 2006-07 by 30 September 2007. During the period October 2006 to September 2007, four working Government companies and one Statutory corporation finalised accounts of previous years.

The accounts of all the working Government companies and Statutory corporations were in arrears for periods ranging from one to five years as on September 2007 as detailed below:

Sl. No	Number of working companies/ corporations		Period for which accounts are in arrears	Number of years for which accounts are in arrears	Reference to serial No. of Appendix 6.2	
	Government companies	Statutory corporations			Government companies	Statutory corporations
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	1	-	2002-03 to 2006-07	5	A-6	Nil
2.	1	2	2003-04 to 2006-07	4	A-3	B-1,2
3.	2	-	2004-05 to 2006-07	3	A- 4,5	Nil
4.	3	-	2005-06 to 2006-07	2	A-1,7,8	Nil
5.	1	-	2006-07	1	A-2	Nil
	<b>8</b>	<b>2</b>				

It is the responsibility of the administrative departments to oversee and ensure that the accounts are finalised and adopted by the PSUs within the prescribed period. Though the concerned administrative departments were informed by audit of the arrears in finalisation of accounts, no remedial measures had been taken, as a result of which the net worth of PSUs could not be assessed in audit.

### 6.1.7 Financial position and working results of working PSUs

The summarised financial results of working PSUs (Government companies and Statutory corporations) as per their latest finalised accounts are given in *Appendix-6.2*.

According to the latest finalised accounts, three<sup>9</sup> working Government companies had incurred an aggregate loss of Rs.11.62 crore and four Government companies<sup>10</sup> and two Statutory corporations<sup>11</sup> had earned an aggregate profit of Rs.4.81 crore and Rs.144.29 crore, respectively. Chhattisgarh Rajya Beej Evam Krishi Vikas Nigam Limited had not finalised its first accounts.

#### **6.1.8 Status of placement of Separate audit Report on the accounts of Statutory corporations in the Legislature**

The Separate Audit Report of Chhattisgarh State Electricity Board for the year 2001-02 issued (December 2006) to management has not been placed before the legislature (September 2007). The SAR for the year 2002-03 is under process.

#### **6.1.9 Chhattisgarh State Electricity Regulatory Commission**

The Chhattisgarh State Electricity Regulatory Commission (Commission) was formed (October 2001) under Section 17 of the erstwhile Electricity Regulatory Commission Act, 1998 with the object of determining electricity tariff, advising in the matters relating to electricity generation, transmission, distribution etc. in the State. The Commission is a body corporate and comprises two members including a Chairman, who are appointed by the State Government. The audit of the accounts of the Commission is conducted by the CAG under Section 104(2) of the Electricity Act, 2003. The Commission had finalised its accounts up to 2005-06. Commission had issued two tariff orders during 2006-07.

#### **6.1.10 Results of audit of accounts of PSUs by the Comptroller and Auditor General of India**

During the period from October 2006 to September 2007, the accounts of three companies and one corporation were selected for audit. The net impact of the important audit observations as a result of the audit of the PSUs was as follows:

Details	Government companies	
	Number of accounts	Amount (Rs.in lakh)
Increase in Profit	1	513.00
Decrease in Profit	1	3.50
Non disclosure of material facts	1	19.98

<sup>9</sup> Chhattisgarh State Civil Supplies Corporation Limited, Chhattisgarh Infrastructure Development Corporation Limited and Chhattisgarh State Industrial Development Corporation Limited.

<sup>10</sup> Chhattisgarh State Beverages Corporation Limited, Chhattisgarh Rajya Van Vikas Nigam Limited, Chhattisgarh Mineral Development Corporation Limited and Chhattisgarh Nishakat Jan Vitt Avam Vikas Nigam

<sup>11</sup> Chhattisgarh State Electricity Board and Chhattisgarh State Warehousing Corporation

Some of the major errors and omissions noticed in the course of review of annual accounts are mentioned below:

#### **6.1.11 Chhattisgarh Rajya Van Vikas Nigam Limited (2005-06)**

Netting of Regeneration surplus (representing sale of crops) with Regeneration expenditure in deviation from the existing policy of the company resulted in understatement of inventories as well as profit for the year by Rs.5.13 crore.

#### **6.1.12 Chhattisgarh State Beverages Corporation Limited (2004-05)**

Non provision of expenses has resulted in understatement of current liabilities by Rs. 3.50 lakh and overstatement of profit by the same amount.

#### **6.1.13 Position of discussion of Commercial Chapter by the Committee on Public Undertakings (COPU)**

The status of Audit Reports (Commercial Chapter) and their reviews/paragraphs discussed as at the end of September 2007 is as under:

Period of Audit Report	Number of reviews and paragraphs featured in Audit Report	Number of paragraphs discussed
1999-2000	5 <sup>12</sup>	4
2000-01	7 <sup>13</sup>	7
2001-02	2	1
2002-03	7	2
2003-04	8	--
2004-05	3	3
2005-06	6 <sup>14</sup>	-

#### **6.1.14 619-B Companies**

There were three deemed government companies (all working) coming under section 619-B of the Companies Act, 1956. *Appendix-6.4* gives the details of paid-up capital, investment by way of equity, loans and grants and summarised working results of these companies based on their latest finalised accounts.

#### **6.1.15 Response to Inspection Reports, draft paragraphs and reviews**

Audit observations noticed during audit and not settled on the spot are communicated to the heads of PSUs and concerned departments of the State Government through Inspection Reports. The heads of PSUs are required to furnish replies to the Inspection Reports through respective heads of departments within a period of six weeks. In respect of Inspection Reports issued up to March 2007 pertaining to eight PSUs, 1208 paragraphs in 484 Inspection Reports remained outstanding at the end of September 2007. Of these, 468 Inspection Reports containing 1142 paragraphs had not been replied to for more than one year. Department-wise break-up of Inspection Reports and audit observations outstanding as on 30 September 2007 is given in *Appendix-6.5*.

12 *Pertain to two reviews of Audit Report (Commercial)-Government of Madhya Pradesh.*

13 *Pertain to one review of Audit Report (Commercial)-Government of Madhya Pradesh*

14 *Including one review of Audit report (Comm. & Civil)- Government of Chhattisgarh.*

Similarly, draft paragraphs on the working of PSUs are forwarded to the Principal Secretary/Secretary of the administrative department concerned demi-officially seeking confirmation of facts and figures and their comments thereon within a period of six weeks. Out of the five draft paragraphs and one review forwarded to two departments viz. Department of Food, Civil Supplies and Consumer Protection (one paragraph) and Department of Energy (four paragraphs one review) between April and September 2007, replies to two paragraphs (Department of Food, Civil Supplies and Consumer Protection one paragraph and Department of Energy one paragraph) and review (Department of Energy) are awaited (September 2007).

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



## **6.2 Performance audit review on implementation of Accelerated Power Development and Reforms Programme by Chhattisgarh State Electricity Board**

### **Highlights**

**Project formulation and planning were not effective due to deficiencies in Detailed Project Reports. None of the six Accelerated Power Development and Reforms Programme schemes was completed, though scheduled for completion between February 2004 and November 2005. Jagdalpur town scheme was not started even after two years after its sanction.**

*(Paragraphs 6.2.12, 6.2.15 and 6.2.16)*

**Reduction in Aggregate Technical & Commercial losses to the prescribed level of 15 per cent was not achieved. The losses ranged between 15.65 to 47.66 per cent during 2006-07 even after spending Rs 195.13 crore out of projected cost of Rs 350 crore.**

*(Paragraph 6.2.21)*

**Reliability and quality of power supply was not achieved due to continued high rate of feeder tripping and distribution transformer failure.**

*(Paragraphs 6.2.26 to 6.2.28)*

**There were delays ranging up to 12 months in transfer of funds by State Government to the Board. Further, funds amounting to Rs 40.99 crore were withheld by State Government in contravention of Union Ministry of Power guidelines.**

*(Paragraph 6.2.8)*

**Slow progress in metering of Distribution Transformers and the consumers rendered the mandatory energy audit ineffective.**

*(Paragraph 6.2.22)*

### **6.2.1 Introduction**

A Memorandum of Understanding (MOU) was signed (May 2000) between Union Ministry of Power (MOP) and erstwhile Government of Madhya Pradesh for implementation of Power Sector Reforms with the support of MOP. The MOU was adopted (November 2000) by the Government of Chhattisgarh after formation of the State. MOP launched (February 2001) the Accelerated Power Development Programme (APDP) to finance specific projects which *inter alia* included upgrading and strengthening of sub-transmission and distribution network including energy accounting and metering in a phased manner. The APDP was renamed (2002-03) as Accelerated Power Development and Reforms Programme (APDRP).

The main objectives of APDRP are reduction in Aggregate Technical & Commercial (AT&C) losses to 15 *per cent*, improving reliability and quality of power supply, increasing consumer satisfaction, adopting systems approach with MIS and bringing transparency through computerisation.

MOP sanctioned (August 2002 and December 2006) nine schemes<sup>1</sup> for Chhattisgarh State, with an outlay of Rs 415.86 crore. Chhattisgarh State Electricity Board (Board) concluded (October/December 2002 and June 2006) Memorandum of Agreement (MOA) with MOP for implementation of seven schemes. MOA in respect of two schemes (Ambikapur and Raigarh) are yet to be signed (September 2007). The Board has taken up implementation of six schemes and incurred an expenditure of Rs 195.13 crore (March 2007). MOP appointed (December 2001) National Thermal Power Corporation (NTPC) as Advisor cum Consultant (AcC) for implementation of APDRP schemes in Chhattisgarh.

The Board is headed by a Chairman who is assisted by four Members (Generation, Generation Projects, Transmission & Distribution and Finance) and Secretary. APDRP is implemented by APDRP Cell created in the office of the Chief Engineer (O&M), Raipur. One Additional Chief Engineer is designated as Nodal Officer (APDRP). Superintending Engineers (O&M) who are designated as Chief Executive Officers are responsible for implementing APDRP works in their respective Circles with the assistance of Executive Engineers and Assistant Engineers.

### 6.2.2 Scope of Audit

The performance review was conducted (March – May 2007) to evaluate the implementation of APDRP during 2002-03 to 2006-07 and covers the performance of four<sup>2</sup> out of six<sup>3</sup> schemes selected for detailed study on the basis of simple random sampling without replacement.

### 6.2.3 Audit Objectives

The performance audit of implementation of APDRP was carried out to assess whether:

- the projects were carefully designed with adequate planning, the schemes were implemented as per the time schedule ensuring accrual of the envisaged benefits;
- there was an effective monitoring mechanism to ensure achievement of targets as per the commitments made under the MOA;
- available funds were utilised efficiently, economically and effectively;

---

<sup>1</sup> *Three circle schemes of Bilaspur, Raipur and Rajnandgaon circles approved in August 2002, three town schemes of Bhilai town, Durg town and Raipur city approved in November 2002, Jagdalpur town scheme approved in September 2005 and two town schemes of Ambikapur and Raigarh approved in December 2006.*

<sup>2</sup> *Bhilai town, Durg town, Raipur city and Raipur circle.*

<sup>3</sup> *Bilaspur, Raipur, and Rajnandgaon circles, Bhilai town, Durg town and Raipur City.*

- AT&C losses were reduced in accordance with the benchmarks specified by MOP;
- the tendering and evaluation process were conducted in a transparent manner and competitive rates were ensured; and
- there was improvement in quality and reliability of power supply thereby giving increased customer satisfaction.

#### **6.2.4 Audit Criteria**

The implementation of APDRP was assessed with reference to:

- guidelines issued by MOP for implementation of APDRP;
- MOA signed between the Board and MOP;
- guidelines issued by MOP for formulation of project reports on upgradation of sub-transmission and distribution system;
- detailed project reports for APDRP projects; and
- benchmark parameters prescribed by MOP through instructions in December 2005 in respect of various performance parameters viz. AT&C losses, reliability and quality of power, etc.

#### **6.2.5 Audit Methodology**

Audit followed the following methodology:

- scrutiny of detailed project reports;
- examination of MOA and guidelines of MOP;
- scrutiny of minutes of review meetings of MOP and APDRP progress reports;
- analysis of reports relating to various performance indicators together with related supporting records/data; and
- examination of records relating to accounting of APDRP transactions.

#### **6.2.6 Audit findings**

The Audit findings as a result of performance review were reported (August 2007) to the Management/ Government and discussed in the meeting (1 October 2007) of Audit Review Committee for State Public Sector Enterprises (ARCPSE), which was attended by the Principal Secretary, Department of Energy, on behalf of the State Government and by Member (Transmission & Distribution) and Member (Finance) on behalf of the Board. The views expressed by the Management/Government have been taken into consideration while finalising the review.

Audit findings are discussed in the succeeding paragraphs.

### 6.2.7 Financial Management

As per MOP guidelines (June 2003) 50 per cent of the funds for APDRP Projects would be provided by MOP through a combination of grant (25 per cent) and loan (25 per cent) to the State Governments as additional Central Plan Assistance. The State Electricity Boards were required to arrange the remaining 50 per cent of funds from Power Finance Corporation/Rural Electrification Corporation or other financial institutions as counter part funds. The Board decided (December 2002) to meet the balance 50 per cent cost of the schemes from internal resources. The MOP released (April 2002 and March 2005) Rs 159.21 crore (loan: Rs 79.60 crore and grant: Rs 79.61 crore) for the six projects under implementation.

### 6.2.8 Delay in transfer of funds by State Government

As per MOP guidelines, the State Government is required to transfer APDRP funds to the Board within a week of receipt of such funds from MOP. Failure to do so is tantamount to diversion of funds and attracts recovery of the related amount with 10 per cent penal interest from the next instalment of Central Plan Assistance.

Audit noticed that there were delays ranging up to 12 months in releasing funds to the Board by the State Government as detailed below:

(Amount: Rupees in crore)

Receipt of funds by State Government		Release of funds to the Board		Delay in number of months	Amount adjusted by the State Government
Date of receipt	Amount	Date of release	Amount		
4.4.2002	10.00	25.7.2002	10.00	3 ½	--
24.10.2003	43.07	21.3.2004	6.29	5	36.78
9.2.2005	106.14	31.3.2005	94.56	1 ½	4.21
		17.3.2006	<u>7.37</u> <u>101.93</u>	12	
MOP was to release Rs 175 crore being 50 per cent of reduced APDRP project cost of Rs 350 crore. Rs 15.79 crore was to be released after 75 per cent completion of works.	<b>159.21</b>		<b>118.22</b>		<b>40.99</b>

Source: Sanction/release orders of MOP and State Government

It could be seen from the table above that there was not only delay in release of funds but the State Government also adjusted the dues amounting to Rs 40.99 crore received (Rs 36.78 crore towards dues from the Board and

Apart from delaying the release of APDRP funds to the Board up to one year, the State Government adjusted Rs 40.99 crore towards various dues from the Board contrary to the MOP guidelines.

Rs 4.21 crore towards principal and interest on APDRP loan) from MOP as assistance. This was contrary to the guidelines of MOP. Moreover, the delay in release of funds to the Board resulted in the following financial implication:

- on account of delay in release of funds the MOP would treat it as diversion of funds attracting recovery of related amount with 10 *per cent* penal interest from the next instalment.
- whereas the Board received the funds late it was liable to pay interest of 9 to 11.5 *per cent* per annum on the loan amount despite the fact that it did not use the funds.
- delay in release of funds defeated the purpose of the scheme.

### **6.2.9 Separate bank account not operated by the Board**

As per MOA, Board was required to open a separate fund account in a scheduled/nationalised bank. Funds from APDRP and/or from internal resources earmarked for this purpose and loans from financial institutions should be credited to this account.

Audit noticed that though funds were received by the Board from April 2002 onwards, separate bank account was opened (May 2004) after a delay of two years. Funds received subsequently from MOP instead of being credited to this account, were merged with Board funds. The annual accounts of the Board were in arrears from 2002-03 onwards. In the absence of separate bank account for MOP assistance and non finalisation of annual accounts, audit was unable to verify utilisation of MOP assistance for the schemes and whether there was any diversion.

The Board stated (October 2007) that the un-spent APDRP funds along with the matching fund from the Board will be deposited in the separate APDRP account shortly, after completing the reconciliation of progress reported by APDRP cell and expenditure booked in the designated accounting head. The reply indicated that there was abnormal delay in opening separate bank account and despite opening of the separate account, funds were not taken into the account in violation of APDRP guidelines.

### **6.2.10 Retention of high cost borrowings**

Board, in view of their comfortable financial status, informed (November/December 2002) the MOP to draw the grants only under APDRP and not to avail the loan component. Despite this, the Board withdrew (July 2002 to March 2006) the entire APDRP funds of Rs 159.21 crore, out of which Rs 79.60 crore was loan component carrying interest at rates ranging from 9 to 11.5 *per cent*. It was noticed that the Board held surplus funds in term deposits with banks ranging from Rs 202 crore to Rs 1347.50 crore during the last five years ending 2006-07, on which the Board earned maximum interest of 8.34 *per cent*. Hence, drawal of loan funds carrying higher rate of interest was not commercially justified in view of availability of surplus funds. In addition the State Government also released the funds (including the loan amount) late. The Board paid avoidable interest of Rs 2.23 crore up to March 2007.

**Non-liquidation of high cost loan component of APDRP funds by the Board despite having adequate surplus funds resulted in avoidable interest.**

The Board stated (October 2007) that due to lack of response from MOP on the request of the Board to release only grant under APDRP, the Board had drawn the APDRP loan. It was further stated that with the release of equal component of grant and loan under APDRP, the effective rate of interest on the loan component of APDRP assistance had become half of the applicable rate. The reply is not logical. The interest related to loan component was payable irrespective of quantum of grant availed. Moreover, the Board could have refunded the entire loan immediately after drawal, from its surplus funds, and avoided the additional interest burden. Thus, retention of APDRP loan has resulted in avoidable interest payment of Rs 2.23 crore.

#### **6.2.11 Delay in submission of utilisation certificates**

MOA provided that the beneficiary shall provide to Central Government, bi-monthly report of the work indicating utilisation of funds and the progress of the project. Works valued at Rs 72.24 crore were completed up to March 2005 and that of Rs 59.85 crore during 2005-06 relating to the six APDRP projects under implementation. Against these works the UCs were furnished (April 2007) for Rs 70.34 crore and Rs 55.13 crore respectively. Utilisation certificates (UCs) since inception (August 2002) of the APDRP scheme up to March 2005 were furnished (March/April 2006) to the Advisor cum Consultant (AcC), which is still under scrutiny before these are sent to MOP. Though completion of works in respect of these schemes valued at Rs 65.58 crore was reported for the year 2006-07, UC is yet to be submitted to NTPC (March 2007).

The Board stated (October 2007) that utilisation account initially prepared was rejected by the AcC due to completion of works by using old equipments. All such equipments were replaced by new ones and utilisation account was resubmitted which caused the delay. The fact remains that the Board not only failed to follow APDRP guidelines regarding installation of new transformers but also failed to submit utilisation account as per MOA directives which in turn affected future release of MOP grants and the Board could not benefit from improved power supply and reduction of AT&C losses etc.

### **Project formulation**

#### **6.2.12 Deficiencies in formulation of Detailed Project Reports**

NTPC as AcC prepared (July – November 2002) DPRs for the six APDRP schemes under implementation. In the DPRs it was stated by NTPC that due to non-availability of authentic data (in the absence of electronic feeder meters, incomplete substation data, absence of consumer indexing, etc.) the proposals have been made based on the reported conditions of overloading, poor voltages and long line lengths. This also indicates a weak MIS system which APDRP aimed at improving. Scrutiny of records revealed the following deficiencies in DPRs:

- In order to assess the achievement of major objectives of APDRP viz., reduction of AT&C losses, improvement in reliability and quality of supply, increasing customer satisfaction, etc. the DPRs were required to indicate the existing benchmarks relating to various performance

**DPRs did not specify existing level of benchmarks and targets to be achieved over a specified period.**

parameters and set targets to be achieved over a specified period. The DPRs, however, did not contain existing level of bench marks and no targets were fixed. In the absence of any targets, the improvement in performance could neither be evaluated nor could any responsibility/accountability be fixed on the circle CEOs. The DPRs did not provide for cent *per cent* metering of consumers, which was a mandatory condition of the MOA.

- As per the MOP guidelines (September 2002), the DPRs should cover the entire requirement for improvement of the system of the selected Circle. It was stated in the DPRs of the three circles<sup>4</sup> selected for implementation of APDRP that provision was made for prioritised items only in view of limited availability of funds under APDRP. This indicated that the DPRs were not complete and comprehensive. They should have prepared comprehensive plans and execution could have been done in phases according to priority and availability of funds.
- The Board informed (March 2006) MOP that the main reason for unsatisfactory progress of APDRP was that the DPRs prepared by NTPC earlier were not up to the mark. However, as mentioned above, the fact is that the NTPC was not provided with authentic data on electronic meters, incomplete substation data, absence of consumer indexing etc. Hence, the Board's argument is an afterthought. NTPC was further informed (March 2006) by the Board that during scheme formation the reduction of AT&C loss below 15 *per cent* in the town areas was not considered. It was evident that the DPRs did not adequately address the prime objective of reduction of AT & C losses and obviously achieving the level of 15 *per cent* was ruled out as mentioned in paragraph 6.2.21.

### 6.2.13 Deviations from Detailed Project Reports

Audit observed that there were deviations from the DPR provisions as discussed below:

- The approved DPRs (August/November 2002) provided *inter alia* installation of 14908 LT capacitors at a cost of Rs 17.82 crore for improvement in system voltage. After a lapse of over three years and in contravention of approved DPRs the Board decided (January 2006) not to install LT capacitors based on its past experience that LT capacitors became non-functional within a short time of installation. This should have been considered during preparation of DPRs or when these were presented to the Board for approval. The decision (January 2007) to install HT capacitors in place of LT capacitors had also not been implemented completely so far (September 2007). Consequently the envisaged system voltage improvement and reduction in line loss was not achieved.

The Board stated (October 2007) that 360 HT capacitors had been installed (September 2007) under ongoing APDRP schemes and installation of remaining HT capacitors was under process. Thus, as against 1334 HT capacitors to be installed in place of 14908 LT capacitors, the actual achievement (September 2007) was only 27 *per cent* and in the bargain

<sup>4</sup> Bilaspur, Raipur and Rajnandgaon circles

upgrading and strengthening of subtransmission and distribution network was delayed and not completed. Hence the related benefits could not be achieved.

- The six DPRs provided for setting up of 182 new 33/11 KV sub stations. Out of this 83 sub stations (45.60 per cent) with 1.6 MVA capacity transformers were to be constructed but only 15 sub stations were set up (March 2007). It was noticed that the Board decided (July 2005) to construct 33/11 KV sub stations with 3.15 MVA capacity transformers instead of 1.6 MVA transformers provided in APDRP scheme. MOP approval for this deviation involving additional estimated cost of Rs 8.25 crore for the balance 68 sub stations, had not been obtained (September 2007). Thus, the deviation deprived the Board from availing grant of Rs 2.06 crore (25 per cent of the additional cost) from MOP.

#### 6.2.14 Execution of projects

The table below shows the details of the sanctioned project cost, expenditure incurred upto March 2007 and percentage of achievement against revised scheme cost:

(Amount: Rupees in crore)

Circle/Town scheme	MOP sanctioned scheme cost (August 2002 to November 2002)	Revised scheme cost (November 2006)	Date of commencement	Scheduled date of completion	Expenditure as on 31 March 2007	Percentage of expenditure to revised scheme cost
Bilaspur circle	125.82	104.97	26.8.2002	26.2.2004	59.36	56.66
Raipur circle	143.14	119.42	26.8.2002	26.8.2004	71.29	59.69
Rajnandgaon circle	59.07	49.27	26.8.2002	26.8.2004	34.16	69.33
Bhilai town	15.81	15.81	27.11.2002	27.11.2005	7.21	45.60
Durg town	13.33	13.33	27.11.2002	27.11.2005	5.78	43.66
Raipur city	47.20	47.20	27.11.2002	27.11.2005	17.33	36.71
<b>Total</b>	<b>404.37</b>	<b>350.00</b>			<b>195.13</b>	

Source: MOP Sanction orders, DPRs, APDRP progress reports of the Board, etc.

The estimated cost of three<sup>5</sup> projects were revised by Rs 54.37 crore (November 2006) downward by the MOP owing to reduction in price of electronic meters. Against total estimated cost of Rs 350 crore in respect of the six projects, MOP released Rs 159.21 crore (25 per cent grant and 25 percent loan). As per APDRP guidelines 25 per cent of the total share of MOP would be released only after expenditure of 75 per cent of the total project cost. It would be seen from the table that as of March 2007, achievement of the six schemes was 36.71 to 69.33 per cent only as against the originally scheduled

<sup>5</sup> Bilaspur circle, Raipur circle and Rajnandgaon circle.



completion dates between February 2004 and November 2005. MOP permitted (May 2007) the Board to complete the schemes by March 2008.

#### **6.2.15 Slow progress of the projects**

**Implementation of the six APDRP projects got delayed by 22 to 43 months**

As per project implementation schedule, the works of the six schemes were to be completed by February 2004 and November 2005 as shown above. However, none of the schemes were completed (September 2007) as per schedule with delays ranging from 22 months to 43 months. Delays were also attributable to taking up works departmentally against turnkey contracts prescribed in the MOP guidelines. Taking up work on turnkey basis would have eliminated administrative delays in tendering, procurement etc.

The component-wise details of projections of DPR and achievement there against up to March 2007 are shown in **Appendix-6.6**. It would be seen (**Appendix-6.6**) that in the case of seven items including capacitors, modernisation of DTs and revamping of sub stations and data logging, the physical progress was either zero or negligible. It was further observed that the progress was also slow (*27 per cent*) in respect of other important component *viz.* providing 11KV additional bay with Vacuum Circuit Breaker.

Audit observed that departmental execution of works such as installation of meters, transformers, capacitors, vacuum circuit breakers, etc., instead of turnkey contracts as per the MOP guidelines, was the main reason for delay in completion of works as discussed in paragraph 6.2.17. As a result of delay, the projects suffered from time overrun besides non-receipt of Rs 15.79 crore from MOP on account of non completion of even *75 per cent* of the works under the six APDRP schemes (March 2007). The abnormal delay also resulted in reduction of grant amount by Rs 13.59 crore (*25 per cent* of Rs 54.37 crore) due to revision of the estimated cost.

#### **6.2.16 Delay in commencement of Jagdalpur Town scheme**

**Jagdalpur town scheme was not started even after 24 months from the date of sanction**

The MOP approved (September 2005) Jagdalpur Town under Jagdalpur circle scheme for completion (September 2008) within 36 months on turn key basis. The Board sent (June 2006) MOA to MOP after lapse of eight months. Even though more than half of the completion period is over (September 2007), the Board is yet to initiate action for tendering process. Audit observed that the delay in implementation of the scheme was mainly due to delay in finalisation of tender specification for turnkey contract.

The Board stated (October 2007) that turn key rates are finalised and work orders are being issued to complete APDRP works of Jagdalpur Town scheme at the earliest. Thus, the public of Jagdalpur Town could not benefit from reliable and quality power supply.

#### **6.2.17 Non-adoption of turn key mechanism for execution of contracts**

As per MOP guidelines, the APDRP works are to be executed on turn key basis. The project execution mechanism is required to be finalised by the Board within six months of signing of the MOA. It was noticed that the Board had not formulated any turnkey project execution mechanism and carried out

most<sup>6</sup> of the works departmentally. In the absence of planned project execution mechanism field offices carried out the works using old/repared equipment, which did not have a performance guarantee and also not in conformity with APDRP norms. The Board installed (August 2002 to March 2006) 1605 old/repared transformers under APDRP. As the installation of old/repared transformers were objected (September 2004) by AcC stating that such work do not qualify for financing under APDRP, the same were replaced (April 2006 to July 2007) with new transformers. This situation could have been avoided, had the Board consulted the NTPC, its AcC, before starting the work. Non consultation with AcC resulted in incurring avoidable expenditure of Rs 90.67 lakh on labour and transportation for replacement of old transformers. This also delayed the installation of distribution transformers and construction of 33/11 KV sub stations within the time frame which could have been avoided had the work been done on turnkey basis requiring installation of new transformers.

The Board stated (October 2007) that initially the work was done departmentally as per the prevailing practice and in the later stage, due to retirement of staff, the procurement process had slowed down. Therefore, the process for awarding work on turnkey basis for major items like consumer indexing, construction of new 33/11 KV sub stations, etc. was started. The reply is not acceptable, as APDRP guidelines emphasised that work was to be executed on turnkey basis. Had this been done, the Board could have used its own manpower to supervise and monitor the works to ensure completion within time frame.

#### **6.2.18 Execution of works out side APDRP scope**

**Expenditure of Rs 45.12 crore incurred on replacement of working electro-mechanical meters with electronic meters is not in the scope of APDRP.**

APDRP does not envisage the replacement of functioning consumer meters. It was, however, noticed that the Board incurred (March 2007) Rs 45.12 crore on replacement of 5.56 lakh single/three phase working electro-mechanical meters with electronic meters under six<sup>7</sup> APDRP schemes. Thus, the APDRP funds were diverted by Rs 45.12 crore. It was observed that the UC was given for installation of high precision electronic meters and did not indicate whether the utilisation of the fund was against replacement of existing meters or installation in respect of unmetered consumers.

#### **6.2.19 Extra commitment due to delay**

The DPRs provided for constructions of 182 Nos. 33/11 KV sub stations under six<sup>8</sup> APDRP schemes (March 2003 to March 2007) at a cost of Rs 59.69 crore<sup>9</sup>. The Board took construction of different sets of substation works at different time and completed (March 2007) construction of 108 sub stations

---

<sup>6</sup> *Installation of meters, distribution transformers, capacitors, LT lines, etc. Repairing of distribution transformers, construction of 33/11 KV sub stations*

<sup>7</sup> *Bilaspur circle, Raipur circle, Rajnandagaon circle, Bhilai town, Durg town and Raipur city.*

<sup>8</sup> *Bilaspur circle, Raipur circle, Rajnandagaon circle, Bhilai town, Durg town and Raipur city.*

<sup>9</sup> *Average estimated cost per sub-station: Rs 32.80 lakh as per DPR*

**Delay in awarding of the turnkey contract for construction of sub-stations resulted in extra commitment of Rs 53.42crore.**

(59 per cent) at a cost of Rs 39.95 crore<sup>10</sup> on semi-turnkey<sup>11</sup> basis. Based on the actual average cost (Rs 37 lakh per substation) of 108 substations, the remaining 74 substations could have been constructed at a total cost of Rs 27.38 crore. The Board, however, belatedly invited (May 2005) tenders and awarded (June 2006) construction of 76 Nos (including 74 not taken up) 33/11 KV sub stations on turnkey basis under APDRP at a tendered cost of Rs 82.98 crore. The average cost per sub station (Rs 1.09 crore) of this work was much above actual average cost of Rs 37 lakh per sub station in respect of 108 sub stations constructed. The main reasons for higher rates were stated as steep increase in raw material and labour cost (ranging from 78 to 200 per cent). Therefore the delays in awarding the turnkey contracts resulted in extra commitment of Rs 53.42 crore<sup>12</sup> on construction of remaining 74 sub stations.

The Board stated (October 2007) that there was extreme hike in the cost of the major items used in the 33/11 KV sub stations and advanced technology had been adopted which was not included in the sanctioned DPRs. It was further stated that revised proposals are under preparation for submission to MOP for approval. The reply is not tenable. Awarding of turnkey contracts at the beginning of all sub stations, envisaged by APDRP, could have resulted in timely completion and the increase in cost of equipment could have been avoided. Thus, by taking up works departmentally, the formalities like tendering, approvals, placement of orders, material procurement etc. contributed to time and cost overrun.

### **6.2.20 Non maintenance of proper records**

The Board issued (January 2002) instructions duly indicating the accounting heads and procedure to be followed in respect of accounting of expenditure and maintenance of records relating to APDRP works. A test check of records of eight<sup>13</sup> divisions involved in implementation of four<sup>14</sup> APDRP schemes revealed that the total expenditure (Rs 66.32 crore) of APDRP was being compiled from expenditure statements submitted by distribution centres of the above eight divisions. The details of works executed by the distribution centres were to be updated in works registers at divisional level and assets registers were to be updated from the works registers. It was observed that separate work registers were not maintained in four<sup>15</sup> divisions and the entries in the work register were incomplete in all the eight divisions. None of the divisions maintained asset registers to record the assets created under APDRP. Consequently the expenditure of Rs 195.13 crore in respect of the six APDRP schemes under implementation was not reconciled with works registers and not verifiable in audit. Moreover, details of assets created from this

<sup>10</sup> Average actual cost per sub-station: Rs 37.00 lakh

<sup>11</sup> In semi turnkey contract the Board supplies major sub station equipment viz. power transformer, vacuum circuit breaker, control panel, distribution transformer and lightning arrestors. The contractor has to execute the work by procuring balance material like iron and steel structures, hardware, ground leveling, yard metalling, foundations and plinth for the equipment, etc.

<sup>12</sup> (Rs 82.98 crore ÷ 76 × 74) – Rs 27.38 crore = Rs 53.42 crore

<sup>13</sup> Bhilai, Dhamtari, Durg-I, Raipur, Raipur City East and Raipur City West O&M divisions and STRE Durg and Raipur divisions

<sup>14</sup> Bhilai town, Durg town, Raipur city and Raipur circle

<sup>15</sup> Dhamtari, Durg-I, Raipur and Raipur City East O&M divisions

expenditure was not known. In the absence of proper records there was delay in furnishing progress of expenditure and utilisation certificates.

The Board stated (October 2007) that the differences between the expenditure report of APDRP cell and the expenditure booked in the designated accounting head are under reconciliation and is likely to be completed by December 2007. The fact, however, remains that instructions of the Board for maintenance of records have not been complied with even after lapse of more than five years.

### Achievement of programme objectives

#### 6.2.21 High aggregate technical and commercial losses

**6.2.21** Reduction in AT&C<sup>16</sup> losses below 15 per cent was the primary objective of APDRP. MOP opined (December 2005) that it would be possible to achieve parameters for AT&C losses wherever the implementation is more than 25 per cent. In the areas covered in APDRP, the AT&C losses ranged between 15.65 and 47.66 per cent during 2006-07 even after spending Rs 195.13 crore ( 55.75 per cent) out of projected cost of Rs 350 crore. The table below shows the percentage of AT&C losses of the three circles and three towns in which APDRP is being implemented:

In respect of Bilaspur and Rajnandgaon circles there was increase in the AT&C losses as compared to base year.

Circle/Town	2002-03	2003-04	2004-05	2005-06	2006-07
Bilaspur circle	41.24	46.54	47.15	46.23	47.66
Raipur circle	43.03	42.27	41.30	36.66	27.24
Rajnandgaon circle	31.81	32.62	30.84	32.62	35.77
Bhilai town	35.39	34.53	36.41	34.10	29.65
Durg town	38.27	32.94	39.15	44.91	25.76
Raipur city	22.20	16.34	15.57	17.46	15.65

*Source: Bench mark parameter statements of the Board*

An analysis of the table above shows that:

- except Raipur city, the AT&C losses continued to be high in remaining circles and towns;
- improvement was, however, noticed in respect of Raipur circle, Bhilai town and Durg town; and
- in respect of Bilaspur and Rajnandgaon circles the losses increased in 2006-07 as compared to base year i.e. 2002-03. The Board has not analysed the reasons even though 57 to 69 per cent of the projected expenditure has already been incurred on these schemes.

It was further observed that:

- in respect of Raipur city circle (having three divisions: Urla, City east and City west) the overall Transmission & Distribution (T&D) losses<sup>17</sup> were 15.57, 13.94 and 16.82 per cent during 2004-05, 2005-06 and

<sup>16</sup> AT&C losses represent the excess of input energy over the energy for which actual revenue is realised.

<sup>17</sup> T&D losses represent the excess of input energy over the billed energy.

2006-07 respectively. In Urla Division, which was not covered under APDRP and is exclusively catering to HT consumers the T&D losses for the above three years were less than one *per cent*, whereas in respect of remaining two divisions (City east and City west divisions), where the APDRP is under implementation, the T&D losses were high ranging between 27.33 to 32.20 *per cent* during the same period. Thus, even though the overall T&D losses of the Raipur city circle appear to be under control, the T&D losses in respect of City east and City west division were high even after incurring expenditure of Rs 17.12 crore under APDRP.

- AT&C losses for 2006-07 in excess of the bench mark level of 15 *per cent* worked out to 1074.46 MUs i.e. potential loss of revenue of Rs 355.46 crore.
- T&D losses during 2006-07 for all the divisions/ circles was higher except in Raipur City division. The T&D losses ranged between 25.96 and 43.85 *per cent* in respect of these five divisions/ circles<sup>18</sup>.
- the data relating to input energy, metered and billed energy etc. were not found supported by any working details, in the absence of which the veracity of the AT&C/ T&D losses could not be vouchsafed in audit;
- the figures of AT&C losses of Chhattisgarh State furnished by the Board to MOP and to Chhattisgarh State Electricity Regulatory Commission (CSERC) were at variance as detailed below:

Name	2001-02	2002-03	2003-04	2004-05	2005-06
CSERC	43.17	38.68	38.87	45.07	NA
MOP	42.99	36.70	36.55	36.77	36.24

*Source: AT & C loss data furnished to CSERC and MOP by the Board*

These differences were required to be reconciled to arrive at reliable and authentic figures of AT&C loss. Non maintenance of authentic data relating to input energy, metered and billed energy shows the existing state of affairs of the Board. Due to non reliable data, the projections regarding, tariff fixation, revenue and transmission losses were unreliable and the actual impact of APDRP was not verifiable.

### 6.2.22 Ineffective energy audit

The MOA (October 2002) between the MOP and the Board stipulated mandatory energy audit and accounting for each 11 KV feeder on actual meter reading basis. It was observed that the Board identified only 120 feeders (13 *per cent*) out of 907 feeders existing (March 2007) in the six APDRP circles and towns for energy audit up to consumer level. Owing to large number of unmetered DTs and consumers in the system and non completion of consumer indexing as detailed in paragraphs 6.2.24 and 6.2.25 all the feeders could not be covered by energy audit. Test check indicated that in respect of 20 identified feeders the reported AT&C losses ranged between 26 and 85 *per*

**All the 11 KV feeders could not be covered by energy audit due to large number of unmetered DTs and consumers.**

<sup>18</sup> Bilaspur circle, Raipur circle, Rajnandagaon circle, Bhilai town and Durg town.

cent during October 2006 to February 2007. In view of 100 per cent metering done up to consumer level in respect of these identified feeders, continued high line losses indicated lack of remedial action. As the details of input energy, energy sold etc. are not available the money value could not be worked out.

The Board stated (October 2007) that remedial measures like bifurcation of lengthy feeders, replacement of conductor with PVC cable in theft prone areas, separation of irrigation pump connections in rural areas, etc. are being taken up to bring down the AT & C losses to acceptable limit. The fact, however, remains that the AT&C losses are still very high, indicating that benefits of strengthening and upgrading of subtransmission and distribution network were not fully achieved.

#### **6.2.23 Assessed energy consumption in respect of agricultural pump connections**

The data relating to billed energy for working out AT&C losses in respect of three<sup>19</sup> APDRP circles include assessed energy ranging from 27 to 46 per cent of the billed energy during 2004-07. The power consumed by agricultural pump consumers ranged from 17 to 36 per cent of the total units sold in the three circles. Agricultural pump connections were released without meters and the consumption was assessed based on average consumption of check meters installed in few pump connections. Audit observed that the assessment is not fair, consequently adversely affecting the correctness of the source data for computation of AT&C losses as discussed below:

- The CSERC, in its tariff order (June 2005) stated that the Board should provide meters to at least one per cent of agriculture consumers for realistic assessment of consumption. The Board installed (up to July 2006) 771 check meters (cost: Rs 17.05 lakh) against total 1,57,924 pumps in the state, which works out to 0.49 per cent only. Thus, adequate numbers of check meters were not installed to assess realistic consumption of the whole population of pumps.

The Board stated (October 2007) that due to lack of man-power and equipments it is not possible to install a huge number of check meters at a time. The reply is not tenable. The Board could have achieved metering of adequate number of agricultural pumps by awarding the work on turnkey basis instead of executing departmentally. Due to non installation of check meters to at least one per cent of agricultural consumer, as recommended by the CSERC, the Board is not in a position to assess the consumption on a realistic basis.

- A test check of records, for the period 2005-07, of 12<sup>20</sup> distribution centres (DC) revealed that the assessment of power in respect of agricultural pumps was not done on uniform basis. In one DC (Raipur Rural) highest of the recorded consumption was taken instead of

---

<sup>19</sup> Bilaspur, Raipur and Rajnandgaon circles

<sup>20</sup> Raipur rural, Dharsiwa, Saragaon, Mana, Arang (Town), Arang (Rural), Rewa, Tilda, Tulsi, Silyari, Kharora and Chhati

average consumption and in three<sup>21</sup> DCs basis for the average units adopted was not available.

The Board stated (October 2007) that necessary instructions to the field engineers will be issued to follow uniform basis for assessing consumption of agricultural pumps.

- Even though meters were installed (March 2007) in 15500 pumps (Rs 3.43 crore) in Raipur circle for recording actual consumption, meter readings were not taken and the consumption of energy was assessed based on a few check metered pumps ( total of 771) rendering the utility of installed meters ineffective.

The Board stated (October 2007) that an attempt made to take meter reading of metered agricultural pumps by outsourcing failed due to the involvement of the outsourced meter readers in other activities. This re-enforces the need to have more check meters against total number of 1,57,924 pumps for arriving at assessment of consumption and need to change the agency engaged for outsourcing.

#### **6.2.24 Cent per cent metering of Consumers and DTs not achieved**

As per the provisions of the MOA feeder metering from point of input up to 11 KV feeder, which include metering of DTs, should be completed within six months (April 2003) of signing the MOA. The MOA also stipulated installation of tamper proof static/high precision energy meters for all unmetered consumers within two years (October 2004) of signing the MOA. Metering of feeders, DTs and consumers is essential for effective energy audit, accounting and consequent reduction of AT&C losses. It was observed that though the Board achieved 77 to 100 *per cent* of feeder metering, the progress in respect of DT metering and consumer metering is slow as detailed below:

- against 28,375 DTs installed (March 2007) in the APDRP circles/towns, metering was done for 9,839 DTs only (35 *per cent*) at a cost of Rs 983.90 lakh. No reasons were available on records for slow progress in installation of DT meters.
- there were 4.50 lakh (28 *per cent* of total consumers) unmetered SLP/BPL<sup>22</sup> consumers and agricultural pump consumers at the end of March 2007 in the APDRP areas; and
- though the terms and conditions of the MOA stipulated that no new connections should be released (April 2003 to March 2007) without meters, the Board released 2.68 lakh connections without meters after signing (October 2002) the MOA (1.58 lakh connections to SLP/BPL consumers and 1.10 lakh connections to agricultural pump consumers). No recorded reasons were available for release of connections without meters.

During ARCPSE meeting (October 2007) the Management stated that connections were issued without meters due to non availability of stock meters and urgency to meet the targets set by the State Government for release of

<sup>21</sup> Rewa, Tilda and Kharora

<sup>22</sup> Single Light Point/Below Poverty Line

pump connections. The fact remains that unmetered connections were released under the plea that meters were not available whereas existing working meters were replaced though not permissible under APDRP guidelines as stated in paragraph 6.2.18 *infra*.

#### **6.2.25 Consumer indexing**

As per MOA (October 2002) Consumer Indexing in respect of areas covered by the five<sup>23</sup> circles/towns was to be done within one year of signing the MOA. This work was awarded (April 2006) to an agency for completion by February 2007 in four cities/towns<sup>24</sup>. It was observed that the firm had not completed the work in any of the cities/towns (August 2007). This was adversely affecting the energy audit as discussed in para 6.2.21.

The Board stated (October 2007) that the delay was due to some problem faced by the contractor in obtaining permission for conducting GIS<sup>25</sup> based mapping. The reply did not indicate the reasons for awarding this work with a delay of four years after MOA. Even after delayed award of work, the operational problems could not be sorted out after more than a year and the non completion of consumer indexing deprived the Board of implementing effective energy audit.

#### **6.2.26 Reliability and quality of power supply**

Reliability and quality of power supply are gauged with reference to frequency of feeder tripping and average duration of outage of feeders, failure rate of DTs, number of consumer complaints, etc. The objectives of APDRP include improvement in reliability and quality of power supply and consequent increase in consumer satisfaction. It was, however, noticed in audit that the level of consumer satisfaction had not improved as is evident from the following:

#### **6.2.27 Feeder tripping and outage**

The Feeder tripping/outages in APDRP circles and towns are shown in the *Appendix-6.7*. MOP had prescribed that feeder outage should be less than one per feeder per month. It was noticed that feeder tripping in respect of Durg town has been brought down to the norm of one per feeder per month. In respect of Raipur City, Bhilai town and Rajnandgaon circle the failure rate is showing a decreasing trend where as in respect of Bilaspur and Raipur circles, the failure rate continued to be high. In Raipur Circle it was as high as 41 in 2005-06. The high feeder outage indicated inadequate preventive maintenance. Further, NTPC had indicated in DPRs that the failure/interruption details of feeders at sub stations were incomplete and suggested to devise detailed formats for recording failure/interruption details. The Board has not formulated any format so far (September 2007) and the requisite data required for framing a comprehensive maintenance plan was still not getting compiled.

**Except Durg town feeder tripping was high upto 41 trippings per feeder per month as against the MOP norm of one tripping.**

---

<sup>23</sup> *Bhilai town, Bilaspur City, Durg town, Raipur Circle and Raipur City*

<sup>24</sup> *Bhilai town, Bilaspur City, Durg town and Raipur City.*

<sup>25</sup> *Geographical Information System*



### 6.2.28 High DT failure rate

Despite expenditure (upto March 2007) of Rs 23.45 crore (60.99 *per cent* of total provision for DTs) the DT failure rate did not come down to below 1.5 *per cent* as per the prescribed (December 2005) norm of MOP. The reports prepared by the Board revealed that the percentage of DT failure ranged between 4.32 and 25.14 during 2002-07 in respect of APDRP circles/towns. The following table indicates the details of year-wise DT failure rate for the past five years ending 2006-07 in respect of APDRP circles/towns:

APDRP Circle/Town	2002-03	2003-04	2004-05	2005-06	2006-07
Raipur circle	15.00	17.00	20.22	18.02	15.54
Bilaspur circle	24.63	23.00	25.14	23.31	20.59
Rajnandgaon circle	16.10	16.62	18.06	13.85	15.91
Raipur city	7.20	7.48	6.48	7.90	4.32
Durg town	9.81	9.69	9.33	8.17	8.63
Bhilai town	8.35	9.03	9.69	9.27	10.00

Source: DT failure reports of the Board

**DT failure remained very high in all APDRP circles as compared to target of below 1.5 *per cent*.**

- It is seen from the table above that in 2006-07 there was significant reduction in DT failure rate in respect of Raipur City and marginal reduction in respect of Bilaspur, Rajnandgaon circles and Durg town as compared to the base year 2002-03. The failure rate, however, remained much above the norms of 1.5 *per cent* prescribed under APDRP. The management has not analysed the reasons for the high incidence of DT failure rate.

The Board stated (October 2007) that special efforts like checking and replacement of earthing in each DT etc. are being done to achieve the target of 1.5 *per cent* DT failure in the towns covered under APDRP. The fact, however, remains that the high DT failure rate continued to deprive the consumers of the envisaged benefit of reliable power supply.

- It was noticed in audit that against 16407 DTs proposed for repairs up to December 2005 under APDRP to control high DT failure rate the Board completed (March 2007) repairs of 1212 DTs only. The reasons for not taking up this work were not on record.

The Board stated (October 2007) that due to insufficient provision (Rs 3500) for repair of each DT, as against actual requirement of Rs 10000 to Rs 12000, no agency was interested in doing the work. Management further stated during ARCPSE meeting (October 2007) that revised proposals are under preparation for submission to MOP for approval. Fact is that because of late receipt of APDRP funds from the State Government by 45 days to 12 months, there was bound to be escalation. Further, the reply also indicates failure of the Board to assess the actual funds requirement at the time of preparation of DPRs and provide for it accordingly. Despite five years after sanction of the APDRP schemes the Board had not prepared (September 2007) revised proposals, which resulted in non execution of the work.

### **6.2.29 Consumer complaint centers not established**

The DPRs envisaged for establishment of 26 consumer complaint centers at a cost of Rs 59.40 lakh in all the APDRP circles and towns. It was, however, observed that the Board had not taken up this work so far (September 2007). It was further noticed that there is no system of MIS or periodical reporting of details of consumer complaints at division/circle/Board level. In the absence of any supporting data or records, the figures relating to consumer complaints ranging from 3,856 to 5,04,000 during 2002-07 (*Appendix-6.7*) furnished by the APDRP circles/towns are not susceptible to verification by audit.

### **Monitoring and control**

### **6.2.30 Distribution reforms Committee meetings not held regularly**

**6.2.30** According to MOA, a State Level Distribution Reforms Committee (SLDRC), comprising of representatives from State Government, NTPC, MOP and Head of SEB, should be constituted within one month of signing MOA. SLDRC should meet once in two months and review the progress of APDRP project implementation, compliance of MOU and MOA conditions. SLDRC was constituted (June 2003) after a delay of seven months from the stipulated time. It was noticed that since commencement of APDRP till March 2007 only 3 meetings were held as against the required 21 meetings. Thus, there was lack of adequate monitoring of APDRP at the highest level in the state.

Monitoring over  
the execution of  
works was  
inadequate

### **6.2.31 Reforms and administrative measures**

Important administrative and reform related milestones yet to be achieved are as given below:

- Though the Board designated the Superintending Engineer of the Circle as Chief Executive Officer (CEO) and Junior Engineers as Feeder Managers, no administrative measures were taken up to operate the distribution circles as independent profit centres.
- CSEB did not fix targets for CEO/Feeder Managers on performance parameters viz., reduction of AT&C losses, DT failure rate, feeder outage, energy theft, etc., which would have facilitated achievement of objectives.

### **Conclusion**

**Implementation of Accelerated Power Development and Reforms Programme was delayed and none of the projects was completed even after a lapse of 22 to 43 months after the projected dates. Reduction in Aggregate Technical and Commercial losses to the prescribed level of 15 per cent was not achieved. Energy audit was not effective. Metering of Distribution Transformers was low and 100 per cent consumer metering was not achieved. Feeder tripping and Distribution Transformer failure rate remained high, due to which the envisaged improvement in reliability**

**and quality of power supply and consequent consumer satisfaction was not achieved. The Board had not maintained proper records for recording expenditure on the works relating to Accelerated Power Development and Reforms Programme.**

### **Recommendations**

The Board may :

- consider setting up of a monitoring cell to foresee efficient and effective implementation of APDRP projects;
- maintain work registers and asset registers as required under rules for recording all expenditure incurred on the related works. This will ensure transparency;
- ensure effective steps for reduction of AT & C losses through an efficient Feeder Renovation Programme;
- set up monitoring committees at the grid and sub station level comprising officials, eminent citizens and farmers; and
- evolve effective management information system for all important parameters viz. feeder tripping, outage, load factor on Distribution Transformers, consumer complaints. Grievances should be satisfactorily attended to between 24 to 72 hours depending on the nature of the complaint.



### 6.3 Transaction Audit Observations

#### Chhattisgarh State Electricity Board

##### 6.3.1 Loss due to favour to suppliers

**Chhattisgarh State Electricity Board suffered a loss of Rs 81.37 lakh on procurement of Vacuum Circuit Breakers due to favour to suppliers.**

Chhattisgarh State Electricity Board (Board) invited (October 2002) tenders for procurement of 400 Vacuum Circuit Breakers. (VCBs) (11 KV and 33KV) The quantity put to tender was tentative. The tender conditions stipulated that the Board reserved the right to extend the order by 100 *per cent* of the original quantity ordered and at the same rates, terms and conditions within six months from the date of original order. The lowest prices per 11 KV VCB and 33 KV VCB was Rs 1,36,685 and Rs 2,61,056 respectively.

Thus, Board had the option of purchasing 800 VCBs (400 + additional 400 VCBs) against this tender. However, Board placed (August 2003) order for supply of 200 VCBs within three months (November 2003). Audit observed that Board's actual requirement was for 922 VCBs. The Board further placed (December 2003) orders for 200 VCBs which the suppliers fulfilled. However, the suppliers did not accept the additional order for 363 VCBs on the ground that they had already fulfilled the conditions of supply. Thereafter the Board called for fresh tenders (October 2004) and placed (April 2005) orders for 595 VCBs (both 11 KV and 33 KV) at higher rates. This led to excess expenditure of Rs 81.37 lakh against 400 VCBs. Had the original order placed for 400 VCBs, Board could have placed additional order of 400 VCBs also at the same rate within six months leading to saving of Rs 81.37 lakh.

The Management stated (February 2007) that entire requirement could not be procured under the tender as the requirement was not received from the field at the time of NIT. The reply is not tenable as Board did not exercise its right of first placing order for 400 VCBs as stipulated in NIT which led to consequential loss of Rs 81.37 lakh.

The matter was referred to the Government (May 2007); the reply had not been received. (September 2007)

### 6.3.2 Additional financial commitment

**The Board had to make additional financial commitment of Rs 57.77 lakh on construction of staff quarters at Dantewada and Kanker districts due to improper assessment of requirement followed by delay in finalisation of tenders.**

- The Board accorded (January 2003) Administrative Approval (AA) for construction of 59 staff quarters at Dantewada district at an estimated cost of Rs 2.02 crore. After due process, tenders were opened (April 2003). Subsequently, with a view to minimising the expenditure on civil works, the requirement of quarters was reassessed (March 2004) to 29. After negotiations (April 2004) the lowest bidder agreed to reduce his rates from 36 to 34.50 *per cent* above Schedule of Rates (SOR) of 1998 i.e. Rs 1.16 crore. The validity of these rates was extended from time to time till 15 June 2004. The Board, due to procedural delays, could accord (July 2004) approval for awarding the work at negotiated contract value of Rs 1.16 crore only after expiry of the extended validity period. The lowest bidder agreed to undertake the work subject to certain conditions, which *inter alia* included escalation clause for labour, material, etc.

As the above conditions of the firm were post tender conditions, the Board cancelled (September 2004) the tender. After inviting tenders twice (December 2004 and December 2005) the work was finally awarded (November 2006) at negotiated contract price of Rs 1.56 crore resulting in additional financial commitment of Rs 40 lakh.

- In a similar case, AA was accorded (December 2002) for construction of 46 staff quarters at 132 KV sub station at Kanker. After due process tenders were opened (April 2003). Subsequently, with a view to minimising the expenditure on civil works, the requirement of quarters was reassessed (March 2004) to 21. After negotiations, the lowest bidder agreed to reduce the rates from 29.79 to 24.20 *per cent* above SOR i.e. Rs 79.27 lakh and validity of the offer was extended from time to time up to 15 May 2004.. The Board, due to procedural delays, could accord (July 2004) approval for awarding the work at negotiated contract value of Rs 79.27 lakh only after expiry of the extended validity period. As the bidder did not agree to extend the validity of offer beyond 15 May 2004, the tender was cancelled (July 2004).

Fresh tenders were invited in September 2004 and the work was awarded (August 2005) at negotiated contract value of Rs 97.04 lakh, resulting in additional financial commitment of Rs 17.77 lakh.

Thus, due to delay in finalisation of tenders in these two cases, the Board incurred additional financial commitment of Rs 57.77 lakh.

The Management/Government stated (February/June 2007) that AA was accorded for construction of 59 and 46 staff quarters at Dantewada and Kanker districts respectively (December 2002/January 2003) based on the strength of employees working during that period. However, later on due to considerable reduction in the employees strength it became necessary to reassess the requirement of quarters in the changed scenario, which took quite some time and the delay in decision for award of contract may be considered justified. The reply is not tenable since after completing reassessment (March 2004) of number of quarters, the Board failed to finalise the tenders within the validity periods upto 15 June 2004 and 15 May 2004 respectively. Thus delay in finalisation of tenders within the validity of the offer had resulted in additional financial commitment of Rs 57.77 lakh.

### 6.3.3 Loss due to not invoking tender clause

**The Board suffered a loss of Rs 16.82 lakh due to non-supply of GS Pins by the suppliers and subsequent procurement by the Board at higher rates without invoking risk and cost clause against the defaulting suppliers.**

The Board placed orders (April 2003) with five<sup>1</sup> firms for the supply of 11/33 KV GS Pins at the lowest Free On Rail (FOR) destination rates as below:

Sl. No.	Item	Total quantity ordered (Nos.)	Rate (in rupees)	Total value (Rupees in lakh)
1.	11 KV GS Pins	1,53,000	23.48	35.92
2.	33 KV GS Pins	28,560	73.15	20.89
<b>Total</b>				<b>56.81</b>

The supply was to be made during May 2003 to July 2004 as per the supply schedule. After delivering (May to December 2003) 50 per cent of the quantity, four firms backed out whereas the fifth firm (Standard Fabricators) did not make any supply due to increase in the price of raw material. The purchase order provided that if the supplier failed to deliver the materials within the time specified, the Board could purchase the material at the risk and cost of the supplier. The Board, however, did not initiate action in this regard though, to meet the requirement, it procured (December 2004) the material at higher rates (Rs 42.15 per 11 KV and Rs 121.08 per 33 KV) after inviting (August 2004) fresh tenders incurring extra expenditure of Rs 22.10 lakh. Failure of the Board to initiate action to recover the extra expenditure from the defaulting suppliers by invoking the risk purchase clause resulted in loss of Rs 16.82 lakh (Rs 22.10 lakh – Rs 5.28 lakh<sup>2</sup>) after adjusting the amount realised by encashing Bank guarantee.

<sup>1</sup> Hemco Industries, Sushila Industries, Firetech, Hightension and standard Fabricators.

<sup>2</sup> Amount recovered from Security Deposit

The Government/Management stated (July/January 2007) that the EMD exemption granted to the firms were withdrawn for three years and the security deposits were also forfeited. The reply is not tenable. Even after forfeiture of security deposit (Rs 5.28 lakh), Rs 16.82 lakh was to be recovered but Board had not initiated action to recover it from the defaulting suppliers as per the risk and cost clause of purchase order. The Board has also not blacklisted these firms.

#### 6.3.4 Non-recovery of dues

##### **Abnormal delay of the Board in taking action against a defaulting High tension consumer resulted in non- recovery of Rs 27.55 lakh.**

The Board released (14 January 2003) an High Tension (HT) connection to Hanuman Minor Oil (Private) Limited (consumer) for two years under an agreement. The supply to the consumer was disconnected (June 2003) due to non-payment of energy charges (Rs 4.15 lakh) and subsequently reconnected (February 2004) as the consumer paid Rs 7.46 lakh being 50 per cent of arrears and also agreed to pay the balance Rs 7.46 lakh in two equal monthly installments along with the current monthly bills. The cheque amounting to Rs 8.39 lakh issued (19 April 2004) by the consumer against the bill for the month of March 2004 was, however, dishonored (May 2004). The supply was again disconnected on 24 May 2004. The consumer was billed up to January 2005 i.e. the date of expiry of HT agreement and after adjusting the security deposit an amount of Rs 27.55 lakh remained recoverable (July 2007).

To recover the dues under the Negotiable Instruments Act (the Act) the Board was required to issue a notice to the consumer within 15 days from the date of receipt of intimation from bank of the dishonored cheque and file a suit under section 138 of the Act within 45 days from the date of issue of notice. The Board, however, did not file suit under the Act despite legal opinion (June 2004) that it is easy to affect recovery under this Act. After a gap of two years the Board gave (March 2006) approval for filing a civil suit and appointed a Counsel. The court fee of Rs 1.43 lakh was deposited (November 2006) and civil suit was filed (January 2007) which is pending for hearing (September 2007). Thus, the Board could take action for recovery after almost three years.

Government stated (July 2007) that as per procedure mentioned in manual of instructions revenue, the dishonored cheque was returned to the consumer by Sr. A.O., Raipur requesting the consumer to make payment. Since the dishonored cheque was not available, suit under section 138 of the Act was not tenable. The reply indicated that the instructions of the manual was not convergent with the Act. Therefore Government was required to examine the provisions of the manuals and effect changes, if necessary, to best protect the interests of the Board and the Government in similar cases.



## **Chhattisgarh State Warehousing Corporation**

### **6.3.5 Manipulation of tendering process**

#### **Manipulation of tendering process in award and execution of “anti termite treatment” work leading to doubtful expenditure of Rs 20.69 lakh**

The Chhattisgarh State Warehousing Corporation (Corporation) invited tender (May 2004) in a weekly news paper<sup>3</sup> with no known circulation, for anti termite treatment of 20 lakh square feet at various godowns of the Corporation on piecemeal basis . Four offers were received (May 2004) and the lowest rate of Rs 6.95 per square feet offered by National Pest Control (NPC) was accepted. Work order was placed (June 2004) for 3.04 lakh square feet area of godowns in 13 branches. Payments of Rs 20.69 lakh were made to (July to December 2004) the firm.

Scrutiny of the records revealed that there were no requisitions from field offices for termite treatment. The matter was initiated by an order (February 2004) from the Minister, Food and Civil Supplies and ex-officio Chairman of the Corporation stating that NPC had done a survey in different warehouses of the Corporation to assess the requirement of pest control and the same firm was to be awarded the work of pest control treatment.

As per Chhattisgarh Government Store Purchase Rules, the contract was to be awarded after publishing the NIT in two widely circulated news papers of state and national level as the estimated cost was over Rs 20 lakh. Similarly purchase should be made only from the firms registered with Commercial Tax Department and Income Tax Clearance Certificate should also be obtained. As wide publicity was not given for invitation of tender, the tender procedure lacks transparency. Further, the order was placed (June 2004) with the firm without calling for proof of registration with the Commercial Tax Department and without obtaining Income Tax Clearance Certificate

---

<sup>3</sup> *The antecedents of this news paper were examined and though it was shown as a daily evening news paper owned by Shri Milan kumar Bhattacharya, verification from the Registrar of Newspapers of India (RNI) revealed that it was registered (Registration No. 71491) as a weekly news paper owned by Ku. Suman Dixit.*

The faulty invitation of tender and placement of order without verifying the full credentials of the firm indicates lack of transparency in selection of firms and throws doubts on the veracity of payment of Rs 20.69 lakh. On being pointed out by Audit (August 2006), Government stated (December 2006) that departmental enquiry had been initiated (October 2006) and action would be taken based on the enquiry report. Progress of enquiry had not been received (September 2007).

**Raipur**  
**The**



**(SUBIR MALLICK)**  
**Accountant General, Chhattisgarh**

*Countersigned*



**New Delhi**  
**The**

**(VINOD RAI)**  
**Comptroller and Auditor General of India**