

CHAPTER-II

2. Performance Audit relating to Government Companies

2.1 Implementation of Restructured Accelerated Power Development and Reforms Programme in Chhattisgarh

Executive summary

Introduction

During 2009-10, the losses in distribution networks of Chhattisgarh State Power Distribution Company Limited (Company) were significantly high at an average of 36.29 *per cent*. To address such issues in Power Sector, Accelerated Power Development and Reforms Programme (APDRP) was modified and renamed (July 2008) as "Re-structured Accelerated Power Development and Reforms Programme (R-APDRP)" by Government of India (GoI) and introduced in Chhattisgarh in September 2009. The main objectives of R-APDRP were to reduce the loss of power in distribution network {Aggregate Technical and Commercial (AT&C) loss} on sustainable basis to 15 *per cent*, to establish reliable and automated systems for collection of accurate base line data, and to adopt Information Technology (IT) for energy accounting and auditing. The Power Finance Corporation (PFC) was designated as the Nodal Agency of GoI for implementation of the Scheme. The total project cost of R-APDRP was ₹ 873.75 crore.

The projects under R-APDRP consist of Part-A (IT enabled system) implemented in 20 selected towns of Chhattisgarh with a project cost of ₹ 122.45 crore, Supervisory Control and Data Acquisition System (SCADA) implemented in two selected towns for a project cost of ₹ 41.06 crore and Part-B (strengthening of distribution network) implemented in 19 selected towns with a project cost of ₹ 710.24 crore.

Part-A included establishment of baseline data, IT applications for energy accounting/ auditing and IT based consumer service centre with 17 modules for implementation. SCADA/ Distribution Management System (DMS) were being established in two large towns of Chhattisgarh. Part-B included regular distribution system strengthening works. Part-A of the Scheme was completed in August 2015. However, there was no progress in implementation of SCADA till March 2016. Physical progress made in respect of Part-B of the Scheme was 84 *per cent* till March 2016.

Power Distribution losses (AT&C losses)

Audit observed that during 2009-10, the Power Distribution losses of 20 project towns ranged between 8.57 *per cent* and 63.52 *per cent*. Despite an expenditure of ₹ 540.46 crore (as on March 2016), only four out of 20 towns in Chhattisgarh could achieve the target of 15 *per cent* AT&C losses during 2015-16. Further, in respect of five project towns, instead of decrease, the towns witnessed increased AT&C losses in 2015-16 as compared to 2014-15. In remaining 11 towns, though the losses were reduced, the target of 15 *per cent* could not be achieved. The reasons for failure to bring down the AT&C losses were mainly poor execution of works, high rate of theft of electricity,

lack of action against the defaulting consumers etc. Thus, the Company failed to achieve the primary objective of the Scheme.

(Paragraph 2.1.13.1)

Go-live without completion of projects

A project town is declared go-live on establishment of IT enabled system as per System Requirement Specifications and online generation of AT&C losses report without human intervention. Under Part-A of the Scheme (IT enabled system), the Company declared all the towns as go-live by August 2015. However, in respect of the 17 modules provided under Part-A of the Scheme, there were deficiencies in three modules. Customer Care Services module does not have a provision for customer's feedback, Maintenance Management module was not recording all the feeder trippings and New Service Connection module was not being fully utilised for new service connections. As a result, resolution of complaints could not be monitored by the Company, maintenance data was not available and consumers could not avail online connection facility.

A beneficiary survey by audit revealed that in 10 towns, 61 *per cent* of the consumers (out of 500 consumers surveyed) were not aware about the benefits of Customer Care Services. As a result, they were not using online or telephone facility to register their complaints, query and other billing related problems. Further, 16 *per cent* (82 consumers out of 500) of surveyed consumers in 10 towns complained that their meter reading was not being taken regularly and received bills for energy charges on average consumption basis. The survey also revealed that nine *per cent* of consumers (47 out of 500) were not receiving energy bills in time. Despite delays in resolving complaints the Government and Chhattisgarh State Electricity Regularity Commission (CSERC) have not issued any instructions to the Company for prompt resolution of complaints.

(Paragraphs 2.1.10.1, 2.1.10.4, 2.1.10.5, 2.1.10.6 and 2.1.10.8)

Updation of consumer database

The Company did not complete the updation of database of consumers as consumer indexing was not done in respect of 1.99 lakh (21 *per cent*) out of 9.51 lakh consumers as the Company has not developed a system for updation of database of consumers on regular basis.

(Paragraph 2.1.10.7)

Modems for obtaining energy data

Out of 10361 modems installed in Distribution Transformers (DTRs) and feeders for obtaining energy data, only 3240 modems were communicating the data as of 31 March 2016 due to network problems, fault in cables, interruption in power supply, defective modems etc. This resulted in poor communication of energy data from DTRs and feeders compelling the Company to fill gaps in the energy data through manual entries thereby defeating the Scheme objective of eliminating human intervention in energy accounting/auditing.

(Paragraph 2.1.10.3)

Implementation of SCADA

SCADA was to be implemented in two towns as per guidelines of the Scheme with the sanction cost of ₹ 41.06 crore. However, there was no physical progress in projects even after a lapse of more than four years due to delay in appointment of SCADA Implementing Agency (SIA), inaction on the part of SIA and not providing of SCADA enabling infrastructure by the Company. Thus, the Company failed to improve system reliability under the Scheme through remote operation.

(Paragraphs 2.1.11 and 2.1.11.1)

Financial Management

The Company deposited Scheme funds of ₹ 317.33 crore in its overdraft account instead of Scheme account in violation of the Scheme guidelines causing a loss of interest income of ₹ 1.70 crore in Scheme account. Further, Scheme funds amounting to ₹ 312.09 crore were drawn without immediate requirement and kept in fixed deposits of more than 180 days. Due to payment of higher rate of interest on funds drawn than the interest earned on fixed deposits, there was an avoidable interest burden of ₹ 6.23 crore on the Scheme. Also, interest income of ₹ 21.02 crore earned on Scheme funds was not credited to Scheme account.

(Paragraphs 2.1.8.1 and 2.1.8.2)

Internal Control, Monitoring and Training

The State Level Distribution Reform Committee (SLDRC) meetings were not conducted regularly. This resulted in ineffective monitoring by SLDRC of compliance of conditions of Scheme and achievement of milestones to improve the effectiveness of the Scheme.

(Paragraph 2.1.14.1)

Introduction

2.1.1 Accelerated Power Development and Reforms Programme (APDRP) was modified (July 2008) during the XI Plan as "Re-structured Accelerated Power Development and Reforms Programme (R-APDRP)" by the Ministry of Power (MoP), Government of India (GoI). The main objectives of R-APDRP were to reduce Aggregate Technical and Commercial (AT&C) losses on sustainable basis to 15 *per cent*, to establish reliable and automated systems for collection of accurate base line data and to adopt Information Technology (IT) for energy accounting and auditing. The Power Finance Corporation (PFC) was the Nodal Agency of GoI for implementation of the Scheme. In Chhattisgarh, where the AT&C losses of the State were significantly high at 36.29 *per cent* in 2009-10, the Scheme was implemented by the Chhattisgarh State Power Distribution Company Limited (Company). The Scheme covers urban areas with a population of more than 30000 (as per 2001 census).

The Scheme was divided into Part-A and Part-B. Part-A included establishment of baseline data, IT applications for energy accounting/ auditing and IT based consumer service center, establishment of Supervisory Control and Data Acquisition System/ Distribution Management System

(SCADA/DMS) in large towns¹ and Part-B included regular distribution system strengthening works.

A Steering Committee under Secretary (Power) comprising of representatives of Ministry of Finance, Planning Commission, Central Electricity Authority, PFC, Rural Electrification Corporation (REC), selected State Governments and MoP was constituted by MoP, GoI to monitor the implementation of the Scheme. Further, a State Level Distribution Reform Committee (SLDRC) under the Chairmanship of the Secretary, Department of Energy was constituted (August 2009) for recommendation of the project proposals, monitoring the compliance of conditions of the Scheme and achievement of milestones.

Unbundling of State Electricity Board (Board) was one of the first steps for restructuring the power sector and kicking off the power sector reforms. As per the provisions of the Electricity Act, 2003 (2 June 2003) Part-XIII, Section 131 to 134 the State Government shall re-organise the Board on such date as decided by State Government. Accordingly, the State Government restructured (1 January 2009) the Chhattisgarh State Electricity Board into five Companies i.e. Chhattisgarh State Power Holding Company Limited, Chhattisgarh State Power Generation Company Limited, Chhattisgarh State Power Transmission Company Limited, Chhattisgarh State Power Distribution Company Limited and Chhattisgarh State Power Trading Company Limited. Setting up of Chhattisgarh State Electricity Regulatory Commission (CSERC) was a prerequisite for availing of assistance under R-APDRP and accordingly CSERC was constituted on 3 October 2001.

Funding mechanism and benefit from the Scheme

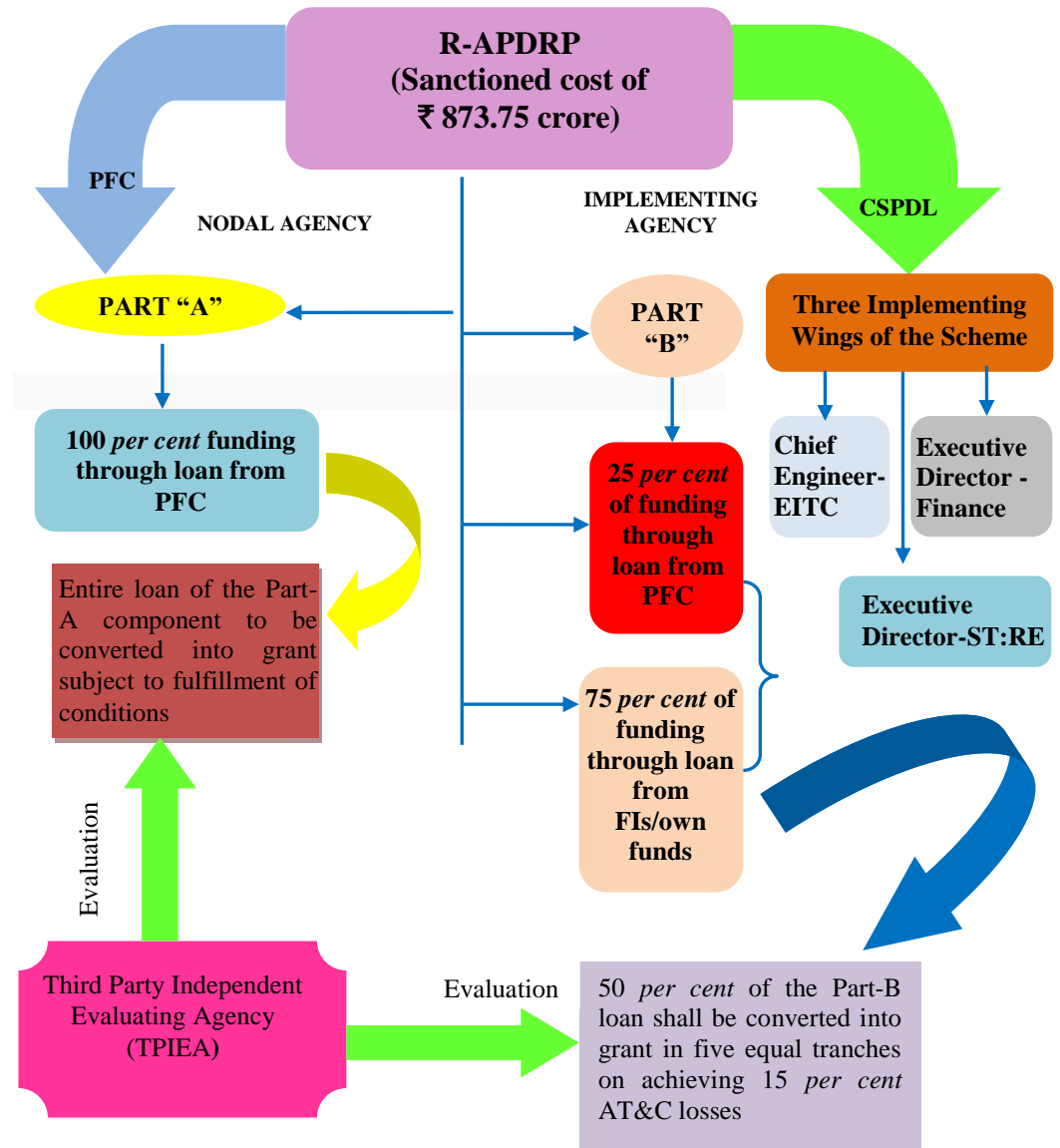
2.1.2 In Chhattisgarh, the sanctioned cost of the Scheme was ₹ 873.75 crore. The Scheme provided for 100 *per cent* loan for Part-A (including SCADA) and 25 *per cent* loan for Part-B by GoI through PFC. The balance fund (75 *per cent* for Part-B) was to be raised by the Company from Financial Institutions (FIs) namely PFC/REC and own resources. The entire loan of Part-A along with interest was to be converted into grant subject to completion of the Scheme within the scheduled period or extended period from the date of sanction and duly verified and reported by Third Party Independent Evaluating Agency (TPIEA) to be appointed by PFC. Upto 50 *per cent* of the entire loan of Part-B along with interest was to be converted into grant in five equal tranches on achieving 15 *per cent* AT&C losses in project towns and duly verified by TPIEA on a sustainable basis over a period of five years. Thus, considering the financial health, scarcity of funds and huge losses incurred by the Company, timely completion of the Scheme provided an opportunity to the Company to establish IT enabled systems and improve its power distribution infrastructure, thereby to reduce its AT&C losses upto 15 *per cent* and also avail benefit of the grant.

The Scheme was to be completed within three years from the sanction of project (Part-A upto September 2012, SCADA upto January 2015 and Part-B

¹Towns with population of more than four lakh as per 2001 census and annual input energy of 350 MUs.

upto January 2015), but the same was extended upto September 2015 for Part-A, upto March 2017 for SCADA and upto January 2017 for Part-B of the Scheme. The R-APDRP Scheme has not been completed so far (March 2016). A schematic diagram describing the details of the Scheme is as follows:

Schematic diagram of the implementation of R-APDRP Scheme



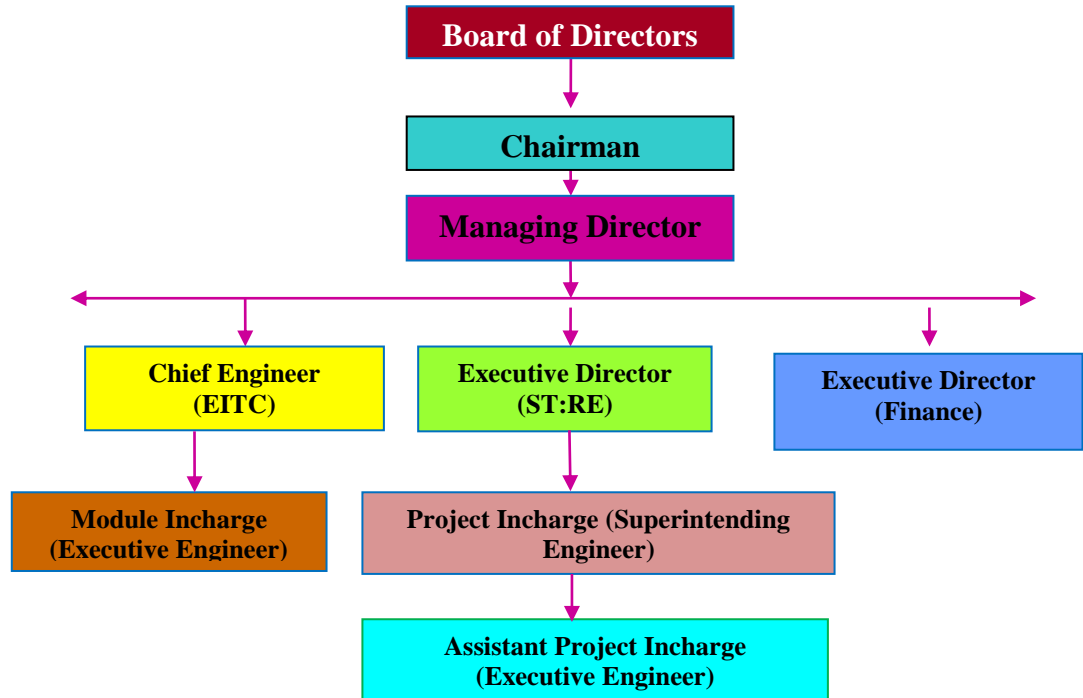
Organisational Setup

2.1.3 The Company is a fully owned subsidiary of Chhattisgarh State Power Holding Company Limited. The Management of the Company is vested in Board of Directors (BoD) and the Managing Director (MD) is the Chief Executive officer of the Company. The head office of the Company is at Raipur. In order to oversee the implementation of the Scheme, the MD is assisted by the heads of three wings i.e. Chief Engineer (CE) Energy Info Tech Centre (EITC), Executive Director (ED) Sub Transmission and Rural Electrification (ST:RE) and Executive Director (ED) Finance.

CE-EITC is nodal officer for implementation of Part-A of the Scheme who has further distributed the work into modules and the each module is headed by Executive Engineer. ED-ST:RE is the nodal officer for implementation of

Part-B who in turn has appointed Project Incharge and Assistant Project Incharge for each of the towns. ED (Finance) looks after the overall financial management of the Scheme. The organisational chart of the Company for implementation of the Scheme is as follows:

Organisational Chart of the Company for implementation of R-APDRP



Audit Objectives

2.1.4 The Performance Audit was conducted to assess whether:

- The formulation of Detailed Project Reports (DPRs) was in line with the Scheme objective to derive maximum benefits;
- The funds received under the Scheme were utilised economically, efficiently and effectively;
- The Scheme was implemented efficiently, economically and effectively as per the Scheme guidelines and whether envisaged objective of Scheme were achieved; and
- The effective internal control and monitoring mechanism was put in place to monitor the Scheme works efficiently.

Audit Criteria

2.1.5 The audit criteria adopted to assess the achievement of audit objectives were drawn from:

- Electricity Act, 2003 and Scheme guidelines issued by PFC and MoP, GoI;
- Agenda and Minutes of the meetings of Board of Directors, Steering Committee and SLDRP; Monitoring reports/returns of the Company;
- Quadripartite agreement among GoI, PFC, Government of Chhattisgarh (GoCG) and the Company and DPRs;

- Request for Proposals (RFP), Tender documents, Agreements and System Requirement Specifications (SRS) document; and
- Chhattisgarh State Electricity Regulatory Commission (Standard of Performance in Distribution of Electricity) Regulation 2006 and General Financial Rules 2005.

Scope and Methodology of Audit

2.1.6 The Performance Audit was conducted during April 2016 to June 2016 covering the period from 2009-10 to 2015-16. The records maintained at head office of the Company and at the 20 towns in respect of 20 projects under Part-A, two projects under SCADA and 19 projects² under Part-B were examined, thereby 100 per cent of units under the Scheme were covered (*Annexure - 2.1.1*)

Besides, consumer survey in 10 project towns was also conducted. The Audit findings were reported to the Company and GoCG in July 2016 and discussed with Additional Chief Secretary (Department of Energy), GoCG and MD of the Company in an Exit Conference held on 27 October 2016. The reply of Government and views expressed by them in Exit Conference have been considered while finalising the Performance Audit Report.

Audit acknowledges the cooperation extended by the Management in timely completion of Audit.

Financial and physical progress

2.1.7 The Scheme was sanctioned in September 2009 at a total cost of ₹ 873.75 crore of which ₹ 122.45 crore was for Part-A (20 projects), ₹ 41.06 crore for SCADA (two projects) and ₹ 710.24 crore was for Part-B (19 projects). Out of this an amount of ₹ 518.63 crore³ would be converted into grant on completion of the Scheme subject to fulfillment of conditions. As per the Scheme guidelines expenditure on each of the projects would only be incurred on the basis of the DPRs duly approved by the Steering Committee of MoP.

The financial and physical progress of the Scheme as on 31 March 2016 is shown in **Table - 2.1.1** and the project wise status is given in *Annexure – 2.1.2*.

Table 2.1.1: Details of financial and physical progress as on 31 March 2016

Part of Scheme	Sanctioned cost	Funds released/received	Funds utilised	(₹ in crore)	
				Financial progress (per cent)	Physical progress (per cent)
Part-A	122.45	71.28	84.02	68.62	100
SCADA	41.06	12.32	2.59	6.31	0
Part-B	710.24	551.97	540.46	76.10	83.97
Total	873.75	635.57	627.07		

(Source: Data furnished by the Company)

² Part-B of Scheme was implemented in 19 towns by excluding one town (Chirmiri) as the existing AT&C losses of this town was below 15 per cent.

³ ₹ 122.45 crore (100 per cent) for Part-A, ₹ 41.06 crore (100 per cent) for SCADA and ₹ 355.12 crore (50 per cent of ₹ 710.24 crore) for Part-B of the Scheme.

Audit observed that in Part-A, all the projects were completed within extended time period upto September 2015 and in case of SCADA, there was no progress except expenditure of ₹ 2.59 crore incurred towards payment to SCADA Consultant (SDC) and payment of mobilisation advance to SCADA Implementing Agency (SIA). In case of Part B, after incurring an expenditure of ₹ 540.46 crore the Company could achieve physical progress of 83.97 *per cent* despite availability of funds. Further in Part-A the excess expenditure than the funds received was met from internal resources.

Audit Findings

The audit findings are discussed in the succeeding paragraphs.

Financial Management

2.1.8 The deficiencies noticed in management and utilisation of funds are as follows:

Deposit of Scheme funds in Company's overdraft account

2.1.8.1 As per the Scheme guidelines, Scheme funds was to be kept in a Scheme bank accounts. However, audit noticed that ₹ 317.33 crore received under the Scheme was initially deposited into overdraft (OD) account of the Company during 2013-14 to 2015-16 in violation of the Scheme guidelines. Out of this, ₹ 306.18 crore was transferred to the Scheme account on various dates for expenditure. Evidently the Company used the Scheme funds to reduce its own overdraft. Had the Scheme funds been kept in the Scheme account, an interest of ₹ 1.70 crore could have been earned and credited to Scheme funds. Thus, by depositing the Scheme funds in its own overdraft account the Company benefited at the cost of the Scheme.

The Government stated (November 2016) that the funds kept in OD account was counterpart funding which required to be financed by the Company either from its internal sources or by way of loan from FIs. Since, the Company had opted for loan from FIs, the same was parked in OD account to reduce the interest burden.

The reply is not acceptable because as per the guidelines, Scheme funds were to be kept in the Scheme account only. Further, as 50 *per cent* of entire loan of Part-B (GoI loan and counterpart funds loan including interest) is to be converted into grant. So the borrowed amount for counterpart funds should have been kept in Scheme account only to reduce the interest burden on Scheme.

Drawal of funds without immediate requirement

2.1.8.2 The Company claimed funds from PFC/REC to meet the expenditure under the Scheme and PFC/REC released the funds. Audit noticed that the Scheme funds were being drawn much before requirement and were kept in Fixed Deposits (FDs), with various banks. During 2011-12 to 2014-15, Scheme funds amounting to ₹ 312.09 crore were kept in FDs for a period more than 180 days which shows that the funds were drawn without immediate requirement. While the funds kept in FDs carried an average interest rate of 9.08 *per cent* per annum, the Company had to pay interest at the average rate of 11.25 *per cent* per annum on the funds drawn from PFC/REC. This resulted

The Company parked Scheme funds of ₹ 317.33 crore in its overdraft account by violating the Scheme guidelines which resulted in loss of interest income of ₹ 1.70 crore on the Scheme funds.

Drawal of loan funds without immediate requirement resulted in avoidable interest burden of ₹ 6.23 crore on the Scheme.

in an avoidable interest burden of ₹ 6.23 crore on the Scheme. It was also noticed that the Company earned interest of ₹ 23.24 crore on FDs of Scheme funds out of which only ₹ 2.22 crore was credited to the Scheme account and balance of ₹ 21.02 crore was credited to own income of the Company. This was in violation of decision (2 June 2010) of the Steering Committee for depositing the interest earned on FDs in Scheme accounts.

The Government stated (November 2016) that decision regarding drawal was made by the Nodal Offices of the Scheme to maintain the pace of work and for completion in time and received funds were kept in fixed deposits by Finance Wing for short period till utilisation of funds. The Government further stated that if PFC will demand for the refund of interest earned on GoI loan/grant, the same will be complied with.

The reply is not acceptable because due to lack of coordination between nodal offices and Finance Wing, the nodal officers drew funds without taking into account available scheme funds deposited in FDs by Finance Wing of the Company. Further, crediting interest earned on Scheme funds to Company own income was also not appropriate as it violated the decision of the Steering Committee.

Conversion of Facility Management Services Cost into grant

2.1.8.3 As per DPRs of Part-A projects, cost of Facility Management Services (FMS)⁴ undertaken for completed projects within three years (scheduled completion period for Part-A projects) of approval of project DPR will be covered under R-APDRP. Beyond this period, the Company shall bear the FMS cost as its revenue expenditure. Thus, the loan component for FMS cost incurred after three years of DPR sanction was not convertible into grant. Further, the scheduled completion period of three years was extended to six years upto September 2015 by GoI.

Audit observed that the Company included one year's FMS cost in the DPRs of Part-A assuming that the project would be completed one year in advance of scheduled completion period. However, the Company could not complete six projects⁵ one year prior to the scheduled completion period as projected for conversion of their FMS cost into grant. Thus, the FMS cost of ₹ 4.03 crore of these projects has to be borne by the Company as its own revenue expenditure.

The main reasons for delay in completion of the projects were delay in finalisation of contract with Information Technology Implementing Agency (ITIA), delay in commencing the field activities of Part-A and failure on the part of ITIA in implementing various stages of the project as per schedule as discussed in the *paragraph 2.1.10.2*.

The Government while accepting the audit observation stated (November 2016) that the Company will be approaching MoP, GoI through PFC, while submitting final DPR at the time of closure of the project for considering FMS charges for one year as considered in the original DPR.

⁴ FMS provided to manage entire IT system installed & commissioned by ITIA to enable Company to realise its desired business objectives.

⁵ Naila Janjgir, Raigarh, Korba, Durg-Bhilai Nagar, Raipur and Bilaspur.

Funds of Accelerated Power Development and Reforms Programme

2.1.8.4 Accelerated Power Development and Reforms Programme (APDRP) was a Scheme implemented in Chhattisgarh State during 2002 to 2009 with a similar objective of reducing the AT&C losses to 15 *per cent*.

Audit observed that unutilised funds of ₹ 7.58 crore of APDRP were utilised for the R-APDRP, but the same was not adjusted against the cost of the R-APDRP Scheme while submitting the DPRs as the availability of unutilised funds under APDRP was not intimated by the Finance Wing to nodal offices for implementation of the Scheme i.e. STRE and EITC Wings. This resulted in excess sanction of loan and increase in cost of the Scheme by ₹ 7.58 crore.

The Government while accepting the observation stated (November 2016) that it was informed to PFC on 27 February 2016.

The fact remains that unutilised funds of APDRP Scheme was not adjusted against the cost of R-APDRP leading to excess sanction of loan.

Cost variation guidelines of Power Finance Corporation

2.1.8.5 As per the Scheme guidelines, quantity variation of individual items of works were to be accepted upto +/- 20 *per cent* of the awarded Bill of Quantity (BOQ) subject to +10 *per cent* of the awarded cost with the approval of SLDRC within one year from the date of Letter of Intent (LOI).

Audit observed that under Part-A of the Scheme the Company has placed (22 April 2013 and 20 May 2013) additional orders on ITIA at the cost of ₹ 4.80 crore (4.19 *per cent* of the awarded cost) for servers, data concentrators, modems and Geographical Information System (GIS) survey. However, the Company neither obtained approval from SLDRC, nor submitted the matter to PFC so far (31 March 2016). Thus, due to failure of the Company in taking SLDRC approval, additional cost of ₹ 5.72 crore⁶ is not convertible into grant.

The Government stated (November 2016) that during various review meetings, PFC/MoP instructed the Company that any variation within 20 *per cent* ceiling of BoQ or 10 *per cent* of cost shall be considered only after completion of the project. Accordingly, revised final DPRs have been submitted (August 2016) to PFC for closure of the project. Formal acceptance of closure is awaited (November 2016).

The reply is not acceptable as the Company did not produce any such records of PFC's instructions though called for by audit. Further, as per the guidelines, quantity and cost variation were to be submitted within one year from the date of LOI and the Company failed to do so.

⁶ ₹ 4.16 crore loan and interest of ₹ 0.92 crore thereon at the rate of 9 *per cent* for 30 months (10 October 2013 to 31 March 2016) plus ₹ 0.64 crore loan amount only interest was not considered as the payment was not made so far (March 2016).

Project wise separate account/ sub-account head

2.1.8.6 Clause 12 (b) of Quadripartite Agreement⁷ envisages opening of project wise separate account/sub-account head for separate accounting classification to enable proper audit certification.

In Chhattisgarh 41 projects (Part-A-20, SCADA-2 and Part-B-19) were sanctioned for implementation of the Scheme. Audit noticed that inspite of the requirement under Scheme guidelines for keeping separate account/sub-account head for each of the projects so as to track and monitor release and utilisation of funds, the Company has opened only two heads of accounts, one for Part-A and other for Part-B. This has resulted in violation of the Scheme guidelines and also there was no mechanism to detect cases of diversion of funds from one project to another. Audit, further, noticed that in the monthly progress reports for Part-A projects, the Company did not depict the project wise utilisation of funds.

The Government stated (November 2016) that to simplify the accounting process in SAP, common GL code is being maintained. The Government further stated that project-wise expenditure incurred can be retrieved from SAP.

The reply is not acceptable because Scheme guidelines clearly stated to open project wise separate account/sub-account head. Further, in the absence of separate project wise account head the Company failed to work out project wise expenditure so far (November 2016).

Submission of Utilisation Certificates

2.1.8.7 PFC instructed (22 April 2010) the Company to submit utilisation certificates (UC) duly certified by the Auditors in form General Financial Rules (GFR) 19 B within 18 months from the date of expiry of the financial year in which the loan was disbursed in compliance to rule 226 (2) of the GFR.

PFC disbursed the GoI loan of ₹ 36.74 crore and ₹ 34.54 crore during the years 2009-10 and 2013-14 respectively for Part-A, ₹ 12.32 crore in the year 2012-13 for SCADA and ₹ 106.53 crore in 2012-13 for Part-B projects. Audit observed that in case of Part-A, UC without Auditor's certification was submitted to PFC with a delay of 24 months and five months for the loan disbursed during 2009-10 and 2013-14 respectively. In case of SCADA, UC was not submitted to PFC so far (March 2016).

The Government while accepting observation stated (November 2016) that the Company will ensure compliance of the GFR rules and submit UCs duly verified by the Auditor.

The above deficiencies in Financial Management of the Scheme were discussed (January 2017) with Department of Energy, Government of Chhattisgarh who assured that for better financial management the Company would follow the provisions of scheme guidelines.

⁷ Quadripartite agreement executed (18 March 2010) among GoI, PFC, GoCG and the Company for implementation of R-APDRP in Chhattisgarh.

Implementation of the Scheme

2.1.9 Audit objective wise findings are discussed separately under Part-A (IT enabled system and SCADA) and Part-B of the Scheme in succeeding paragraphs.

Part-A - IT enabled system

2.1.10 The Part A of the Scheme envisaged establishment of baseline data, IT applications for energy accounting/auditing and IT based consumer service centre. The Scheme provided 17 modules under Part-A.

This component of the Scheme was implemented in 20 towns with sanctioned cost of ₹ 122.45 crore, out of which ₹ 71.28 crore was released to the Company by PFC and ₹ 84.02 crore (including ₹ 12.74 crore incurred from internal resources) was spent upto March 2016. The town wise breakup of sanctioned cost, receipt of funds and total expenditure of projects is given in *Annexure - 2.1.2*.

The IT enabled system was to be established by ITIA within 18 months from the date of award of work (28 March 2012). However, ITIA took more than three years to complete the works up to August 2015. The deficiencies in IT enabled system are discussed in succeeding paragraphs.

Declaring projects 'go-live'

2.1.10.1 A project town is declared go-live on establishment of IT enabled system as per SRS and online generation of AT&C losses report without human intervention. As per the Scheme guidelines projects were to be completed upto September 2015.

Audit observed that the Company has declared all 20 towns as go-live in all respect during June 2013 to August 2015 and intimated the same to PFC. These included 16 towns (except Bilaspur, Raipur, Raigarh and Durg-Bhilai-Charoda) declared as go-live till March 2015; however, the Meter Data Acquisition System (MDAS) module was not functional in these town at the time of declaring go-live as evident from the fact that no reports were generated from the module. Audit further noticed that in 12 towns declared go-live, the Customer Care Service (CCS) module started functioning after lapse of one to 15 months from the date of go-live of these towns.

The Government stated (November 2016) that there was some issue with the MDAS report server, which was resolved and at present the system is generating all the reports. The Government further stated that for implementation of CCS module the Company has established centralised call centre at Raipur and Fuse of Call Centre (FOCs)⁸ at all R-APDRP towns and after making all arrangement towns have been declared go-live.

The reply is not acceptable as at the time of declaring towns as go-live MDAS module was not generating any reports and CCS module had not started functioning.

Sixteen out of 20 project towns were declared go-live without functioning of the Meter Data Acquisition System module and Customer Care Service module.

⁸ FOCs means call centre where consumers complaints were registered.

Implementation of Part-A of the Scheme

2.1.10.2 For implementation of Part-A of the Scheme, Information Technology Consultant (ITC) was to be appointed by the Company from consultants empanelled with PFC. The ITC was responsible for preparation of DPR and monitoring of progress of the work. Further, an ITIA was to be appointed from firms empanelled with PFC for establishment of IT enabled system.

There were instances of tardy implementation of the Scheme as discussed below.

- As per the RFP, the selection of ITC was to be completed within 15 to 25 days from empanelment of ITC (9 January 2009) i.e. latest by 4 February 2009. However, the Company appointed the ITC on 30 May 2009 with a delay of 116 days.

The Government stated (November 2016) that due to discrepancies in model RFP and enforcement of 'model code of conduct' issue of Notice Inviting Tender (NIT) and its opening was delayed, which led to delay in appointment of ITC.

The reply is not acceptable as MoP informed on 27 January 2009 that RFP would be amended. However, the Company had not pursued the matter with MoP to obtain amended RFP. After lapse of more than one month NIT was issued on the basis of old RFP. Had the Company pursued the matter with MoP immediately, the process could have been completed within stipulated period and before coming into force of model code of conduct on 5 March 2009.

- As per DPR, selection process of ITIA was to be completed within three months from the sanction of DPR (4 September 2009) but first ITIA (M/s KLG Systel) was selected on 15 November 2010 with a delay of seven months. On termination of the first ITIA due to poor execution of work, NIT was issued on 18 October 2011 for selection of new ITIA. The selection process was to be completed within three months (17 January 2012) but same was completed on 28 March 2012. So new ITIA (M/s Reliance Infrastructure) was selected with a further delay of more than two months.

- The ITIA completed the works of fast track town⁹ and pilot town¹⁰ in June 2013 and August 2015 after a delay of three and 28 months respectively from the scheduled completion date (March, 2013). Project works in balance 18 towns were completed by June 2015 with a delay ranging between one and 21 months from scheduled completion date (September 2013). The main reasons for delay in completion of projects were delay in finalisation of contract with ITIA, delay in commencing the field activities and failure on the part of ITIA in implementing various stages of the project as per schedule.

⁹ Bhatapara town being small and near to Data Centre as well as headquarter was considered as Fast Track Town to complete the work fast.

¹⁰ As per model RFP the town where Data Centre was located had to be considered as Pilot Town (Raipur).

The delay in execution of projects delayed the delivery of envisaged benefits of the Scheme.

The delay in execution of projects delayed the delivery of envisaged benefits of the Scheme i.e. reduction in AT&C losses, reduction in outages and interruptions, increase in consumer satisfaction etc.

The Government stated (November 2016) that the Part-A projects involved significant time consuming activities spread across 20 towns. The Government further stated that considering the less available time for completion of such a big project, GoI had extended the period of execution of the project from 36 months to 60 months for all the States.

The fact remains that the Company took abnormal time at each stage of projects viz selection of ITC/ITIA, execution of work leading to delay in completion of the project.

Communication of energy data

2.1.10.3 As per SRS, energy accounting and auditing reports should be generated in an automated way by capturing the data through modem without human intervention. Accordingly, the Scheme provided for installation of meters, modems and GPRS SIMs¹¹ at each Distribution Transformer (DTRs) and feeder to capture the energy data on continuous basis. In this connection audit observed the following:

- Under Part-A, 9612 modems were installed on DTRs and 749 modems were installed on feeders. Out of these only 2792 DTR modems and 448 feeder modems were communicating energy data as of March 2016. The percentage of modems successfully communicating energy data of DTRs ranged between 11.43 *per cent* and 67.39 *per cent* in 20 project towns and percentage of those successfully communicating energy data of feeders ranged between 0 *per cent* and 85.71 *per cent* in 17 towns and 100 *per cent* in remaining three towns. The reasons for not functioning of modems were connectivity problem between DTRs and meters, fault in cables, interruption in three phase supply, non-functioning of antenna of modems and network problems. Consequently, the Company was compelled to fill gaps in energy data through manual entries which defeated the basic objective of eliminating human intervention in energy accounting and auditing.

Modems installed in DTRs and feeders were not successfully communicating energy data defeating the objective of the Scheme for energy accounting and auditing without human intervention.

¹¹ Subscriber identity module.



(Modem installed on Distribution Transformer at Raipur town)

- Under Part-B, 3768 modems were installed (March 2016) on new DTRs at a cost of ₹ 2.76 crore but SIMs were not installed therein as installation of SIMs in modem was not in scope of work. As a result modems installed at a cost of ₹ 2.76 crore were lying idle defeating the purpose of installation of these modems.
- As per SRS, the system was to calculate the AT&C losses, commercial losses, High Tension (HT) losses, bus bar losses, sub-station losses, DTRs losses and feeder losses. However, audit observed that due to low communication of data by modems, un-availability of SIM in modems, incomplete consumer indexing and absence of complete data, the calculated AT&C losses were not found reliable.

The Government stated (November 2016) that the Company is putting sincere efforts to ensure high availability of meter data after timely rectification of problems by mobilising the field units for identification of fault as and when noticed. The Government further stated that the Company has constantly taken up the matter with ITIA for network strengthening and installation of SIMs in the modems is under active consideration of the Company.

The reply is not acceptable as the Company failed to install SIMs in the modems and rectify the problems causing poor communication of energy data from DTRs and feeders thereby defeating the purpose of energy accounting without human intervention.

Implementation of Customer Care Service module

2.1.10.4 As per SRS the objective of CCS module is to improve the customer service by processing and resolving customer request/queries/complaints in minimum possible time¹² by taking up it at appropriate place and level. Following deficiencies were observed in the working of the module:

¹² Time fixed as per Schedule – I of CSERC (Standards of Performance in Distribution of electricity) Regulations, 2006 for resolution of power outages complaints was four hours.

- Audit observed that all the power complaints registered in complaints register of town offices were not entered into CCS module and there was a huge difference of 48312 and 63174 number of power complaints between those entered in complaints register and in CCS module in five and 13 towns during 2014-15 and 2015-16 respectively. This indicates that the implementation of CCS module at field level was not effective.

The Government stated (November 2016) that due to unavailability of computer literate operators at FOCs of towns, all the complaints could not be registered in the CCS module. Hence, difference was there.

The reply confirms that the Company failed to make necessary arrangement for effective implementation of the CCS module.

- As per SRS, the CCS module should include consumers' feedback to know whether the complaint has been attended or not. Audit noticed that in the CCS module, there was no provision for obtaining consumers' feedback on resolution of the complaint. As a result the consumers were frequently registering the same complaint as these were not solved. However, the same was being shown as resolved in the CCS module. In absence of feedback system, the Company was not in a position to ensure that the complaints were actually attended and resolved.

The Government stated (November 2016) that centralised call centre operators obtained feedback of 10 *per cent* complaints from consumers. The Government further stated that all steps will be taken to impart training to field staff.

The reply is not acceptable as the Company should be able to take feedback through CCS module as specifically mentioned in SRS. Moreover, even feedback on 10 *per cent* of complaints is being taken only from centralised call centre and not from FOCs.

- As per Chhattisgarh State Electricity Regulatory Commission (CSERC) norms technical complaints¹³ were to be attended within four hours. However, audit observed that during 2014-15 in four¹⁴ project towns technical complaints ranging between 51 and 100 *per cent* and during 2015-16 in nine¹⁵ towns technical complaints ranging between 56.72 and 98.85 *per cent* were not resolved within CSERC prescribed time limit. Hence, delay in resolving the technical complaints resulted in deficiency in service to consumers which may increase consumer's dissatisfaction.

The Government stated (November, 2016) that technical complaints were resolved at field level within time limit specified by CSERC, however the same could not be entered timely in the CCS module due to unavailability of the computer literate operators at FOCs.

The reply is not acceptable because all the complaints were not resolved within the prescribed time limit of CSERC as reported by the Company to PFC.

¹³ Power supply failure, voltage fluctuation, transformer and line related complaints are included in technical complaints.

¹⁴ Bhatapara, Naila-Janjgir, Dhamtari and Mahasamund.

¹⁵ Bhatapara, Mahasamund, Mungeli, Champa, Dhamtari, Ambikapur, Korba, Naila-Janjgir and Raigarh.

All the power complaints were not entered into CCS module. Further, the module does not have provision for consumers' feedback.

During consumer survey conducted by audit it was noticed that 305 out of 500 surveyed consumers (61 *per cent*) were not using online or telephone facility to register their complaints, query and other billing related problems in the CCS module due to inadequate awareness of the facility (*Annexure - 2.1.3*).

The Government while accepting the audit observation stated (November 2016) that the Company was publicising the available facility among the consumers through various media so that consumers would start using IT enabled facilities gradually.

Further, during discussion (January 2017) with the Special Secretary, Department of Energy on steps taken by the Company for improving consumer experience/satisfaction, he stated that the Company has established FOC in every town for prompt resolution of consumer complaints and also introduced a centralised customer care centre for registering consumers complaints at helpline number 1912.

Recording of feeder trippings in Maintenance Management module

2.1.10.5 The Maintenance Management (MM) module provides a system for better planning and coordination of various maintenance activities, reducing breakdowns by inculcating the culture of preventive and predictive maintenance, recording maintenance history and feedback to management for timely decision making.

Audit observed that during the years 2014-15 and 2015-16 MM module has recorded 996 and 1935 number of feeder trippings as against the actual number of 30999 and 28713 feeder trippings respectively noticed at town offices. This shows that the entries of all trippings were not made in MM module by the field offices. Thus, the objective of MM module was not fulfilled.

The Government while accepting the audit observation stated (November 2016) that necessary instructions as well as training have been given to the field staff to ensure entry of each outage/tripping in the system to avoid mismatch in the data in future.

Commercial complaints under Billing module

2.1.10.6 The main objective of the Billing module is to ensure that the Company efficiently bills their consumers for service rendered and resolves billing queries/complaints of consumer in CSERC prescribed time limit¹⁶ of seven days.

In this connection, Audit observed the following:

- During the period from September 2013 to March 2016, out of 11543 complaints¹⁷ registered in billing module, 5478 complaints were resolved within stipulated time limit of seven days. The remaining 6065 complaints (53 *per cent*) were resolved with delay ranging between eight and 562 days. However, the delay in resolution of complaints beyond the prescribed time

¹⁶ Time fixed as per schedule-I of CSERC (Standards of Performance in distribution of electricity) Regulation 2006 for billing related queries i.e. seven days.

¹⁷ Like bill not received, reading not taken, payment not updated, wrong tariff bill generated, stop defective/burnt meter, high consumption etc.

The billing related complaints were not resolved within CSERC prescribed timeframe resulting in deficiency in service to consumers.

limit showed decreasing trend which came down from 93 *per cent* in 2013-14 to 40 *per cent* in 2015-16. Thus, though the delay in resolution of complaints has reduced, it was still significant. The delay in resolving the complaints can lead to consumers' dissatisfaction. Audit noticed that despite delays, the Government and CSERC have not issued any instruction to the Company for prompt resolution of complaints.

The Government while accepting the audit observation stated (November 2016) that training has been given to staff to resolve and close the complaint. The Government further stated that the field officials are regularly advised to adhere to the time limit prescribed by CSERC.

- During the consumer survey (May 2016) 82 out of 500 surveyed consumers (16 *per cent*) complained that their meter reading is not being taken regularly and received energy charges on average consumption basis. Further, 47 consumers (9 *per cent*) complained that they were not receiving energy bill in time (*Annexure - 2.1.3*).

During discussion (January 2017) on the matter, the Special Secretary, Department of Energy stated that the Company has started (March 2016) spot billing with photo of meter in phased manner to overcome meter reading problem in all towns (except Ambikapur and Jagdalpur).

The fact remains that spot billing with photo was yet to be fully implemented in all the towns as of January 2017 and meter reading billing problems were reported by 16 *per cent* of consumers surveyed by audit. Thus, the Company needs to ensure regular meter reading and accurate billing to improve the consumer satisfaction.

Completion of Consumer Indexing

2.1.10.7 SRS stipulated indexing of consumers through door to door survey to develop the consumer database for energy accounting without manual intervention. The DPR of Part-A provided that the Company along with ITIA should formulate a system/ process so that future addition/ upgradation of consumer database can be made on regular basis.

Audit noticed that as on 31 March 2016 the Company had completed consumer indexing of 7.52 lakh (79.07 *per cent*) out of 9.51 lakh consumers resulting in a shortfall in indexing of 1.99 lakh (20.93 *per cent*) consumers. This was due to not developing a proper system/process for updation of database of consumers on regular basis. As a result the very purpose of the Scheme for energy accounting without manual intervention was defeated.

The Government while accepting the audit observation stated (November 2016) that the indexing of remaining consumers would be completed by December 2016. Further, during discussion (January 2017) on the matter, the Special Secretary, Department of Energy stated that the Company is making efforts to achieve near 100 *per cent* consumer indexing.

The fact remains that in the absence of developing a system for regular updation of data of new consumers in the database, 100 *per cent* indexing of consumer would not be achieved.

Utilisation of New Service Connection module

2.1.10.8 The objective of New Service Connection (NSC) module is to enhance the convenience of the consumers. It would enable the consumers to collect and submit applications through online channels, allow application status tracking etc. The system would help to reduce the time taken for the new connection process through online system.

Audit observed the following deficiencies in working of the module:

- In the NSC module, the process¹⁸ of obtaining new connection was to be done through online system. The Company issued 72589 new service connections during 2015-16. Out of these 55895 connections were served through NSC module and 16694 (23 *per cent*) connections were served manually even after implementation of NSC module, which indicates that the objective of NSC module was not fulfilled.
- The module has a provision for online application by a consumer for a new service connection. Audit noticed that during June 2013 to March 2016 only 49 out of 117204 new consumers applied online for new service connection. The fact of not using the online system for applying for new connection was also confirmed during the consumer survey conducted by Audit (*Annexure - 2.1.3*). This indicates that there is a need to create awareness among the consumers about online application facility for new service connection.

The Government while accepting the audit observation stated (November 2016) that instructions have been issued to field offices to serve new service connection through NSC module and create awareness among public about NSC module.

Synchronisation of Part-A and Part-B works

2.1.10.9 Audit noticed that four towns namely Manendragarh, Mungeli, Jagdalpur and Naila-Janjgir were declared go-live (Part-A) with delay of 56, 80, 100 and 336 days respectively after completion of Part-B works¹⁹ of these towns. The Part-A works should have been completed before the completion of Part-B, so as to receive the meter data from substations, feeders and DTRs installed under Part-B of the Scheme and to map the assets in GIS. Due to not synchronising of Part-A and Part-B in the above mentioned towns the Company was deprived of the benefits of the Part-A for the period of delay.

The Government stated (November 2016) that the works were executed as per field conditions and assured to take special care to avoid delay in future.

¹⁸ like accepting application form, accepting customers details, checking system capability for issuing connection, generation of inspection report, estimate preparation and generation of service order.

¹⁹ Part-B works in Manendragarh, Mungeli, Jagdalpur and Naila-Janjgir was completed in 31 December 2013, 25 October 2013, 30 April 2014 and 30 April 2014 respectively.

Award of work of Zone office buildings

2.1.10.10 The Company decided (September 2011 and March 2012) to construct 19 numbers of zone office buildings under the Scheme. As per the tender conditions, class A-III²⁰ or above category contractor or experienced in same nature work in Government Department or Undertaking was eligible to participate in tender.



(Incomplete zone office building at Raigarh town)

Audit noticed that five works²¹ were awarded to ineligible contractors who did not fulfill the above eligibility criteria of tender resulting in extension

of undue benefit to the contractors. Audit further noticed that two zone office buildings were completed with delay ranging between five and 17 months and two zone office buildings were not completed as on 31 March 2016 due to poor performance of the contractors.

The Government stated (November 2016) that in respect of zone office building, Raigarh, the lowest bidder was registered in category A-II and contractor registered in the A-IV class before entering into contract. In respect of remaining zone office buildings based on the experience of the contractors work was awarded to them.

The reply is not acceptable because in case of zone office building, Raigarh contractor was not eligible at the time of tendering and in the case of other zone office buildings contractors did not have required experience of similar nature works in Government Department/undertakings as per tender conditions.

Establishment of Supervisory Control And Data Acquisition System

2.1.11 SCADA envisaged improvement in system reliability through remote operation by centrally controlling the Distribution Management System (DMS) in big towns. SCADA was to be implemented in two towns²² within three years from sanction (January 2012) of the project i.e. January 2015 which was subsequently extended upto March 2017. The SCADA consultant (SDC) was to be appointed by the Company for preparation of DPRs, monitoring of projects and assisting the Company in appointment of SIA for implementation of the projects. Part-A of SCADA covers IT part of SCADA and DMS. Part-B of SCADA covers SCADA/DMS enabling infrastructure and other equipment. The sanctioned cost of projects of two towns was ₹ 41.06 crore, out of which ₹ 12.32 crore was received (September 2012) from GoI and ₹ 2.59 crore was spent on payment to consultant and mobilisation advance to SIA.

²⁰ Class A-III category contractor is eligible for work upto ₹ 50 lakh.

²¹ Construction of double storied Zone office building at Raigarh I, Raigarh II, Durg, Mungeli and Bilaspur.

²² Raipur and Durg-Bhilai-Charoda towns.

Audit observed that as of March 2016, there was no physical progress in the project. The town wise breakup of sanctioned cost, receipt of funds and total expenditure on SCADA projects is given in *Annexure - 2.1.2*.

Execution of SCADA work

2.1.11.1 As per the Scheme guidelines, Part-A of SCADA/DMS was to be carried out by SIA. The Company appointed (26 April 2013) M/s Alstom T & D India Limited as SIA. The agreement was executed on 11 July 2014 with the scheduled completion period upto January 2016. As per the DPR, the Company shall provide SCADA enabling infrastructure and other equipment to SIA to carry out the work. In this connection, Audit observed the following:

- The Company appointed SIA with a delay of one year from the stipulated date due to delay in processing the tender by EITC Wing of the Company. Further, as per the work order, agreement was to be executed within 14 days of award of work i.e. by 9 May 2013. But the agreement was executed on 11 July 2014, after lapse of more than 14 months of award of the work due to delay in submission of performance guarantee by SIA. As a result, the scheduled date of completion of SCADA was postponed by 14 months.
- As per the DPR, the Company shall provide SCADA enabling infrastructure and other equipment to the SIA to carry out the work. For execution of these works, the Company floated NIT on 19 March 2013. It was extended eight times upto 15 November 2013 due to lack of response from bidders. Subsequently, the Company decided (December 2013) to bifurcate the work in two parts as per the nature of work and to allocate the strengthening of distribution network²³ to STRE Wing of the Company owing to technical experience and expertise. The other works²⁴ related to supply and installation of equipment was to be carried out by EITC Wing of the Company. Had the Company bifurcated the works in the initial stage itself, it could have saved seven months²⁵ time which was wasted in processing the combined tender. After bifurcation of works, the works were awarded (during May 2015 to May 2016) to contractors. These works were under progress.
- As per DPR, the Company had to provide building of SCADA control centre to SIA at its own cost. The Company completed the SCADA control centre building at Bhilai in December 2013 but SCADA control centre building at Raipur was yet to be completed as of March 2016. As per work order, the SIA was to install SCADA hardware in control centres. However, the installation of SCADA hardware in Control Centre building at Bhilai was not started by SIA as of 31 March 2016 despite lapse of more than two years citing not providing of SCADA enabling infrastructure by the Company. Further, on the request of SIA, the Company granted (February 2016) extension of time for completion of work upto August 2017.

²³ Installation of transformers, digital relay panel and construction of DP structure with AB cable.

²⁴ Survey, design and engineering, supply, installation, testing and commissioning of ring main unit and fault passage indicator.

²⁵ April 2013 to October 2013.



(SCADA Control Centre Building Bhilai without SCADA installations)

There was no progress in implementation of SCADA projects even after lapse of more than four years.

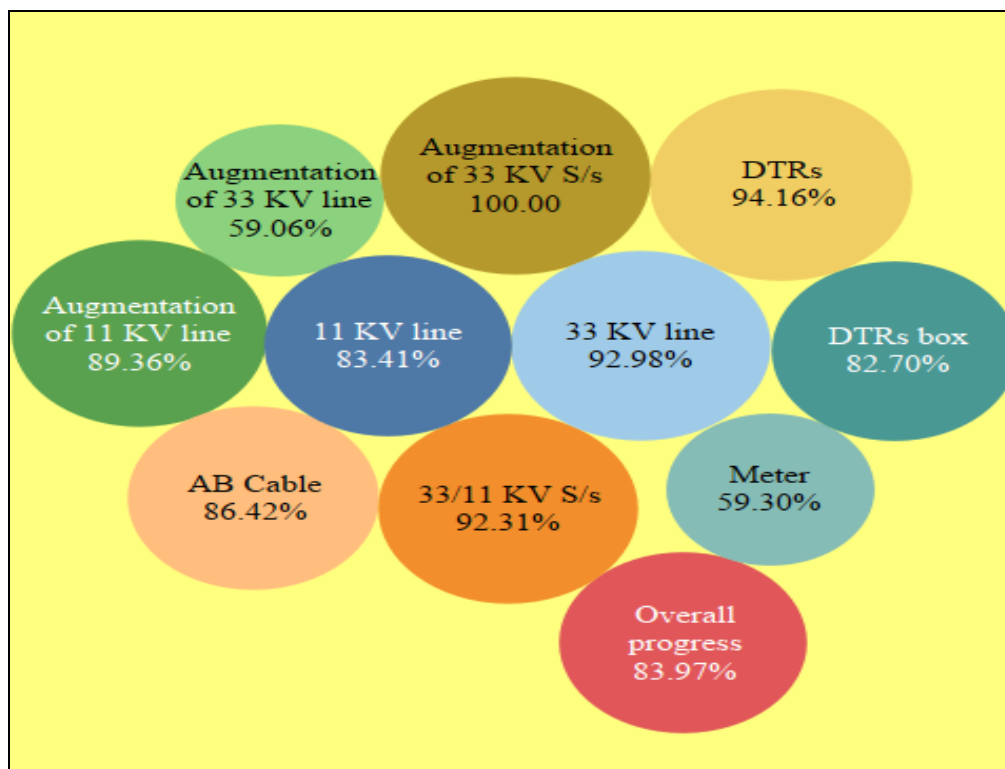
Thus, even after lapse of more than four years from sanction (January 2012) of SCADA Project, the Company failed to achieve any progress in the Project thereby defeating the envisaged objective to improve system reliability through remote operation of distribution management system due to delay in appointment of SIA, inaction on the part of SIA and not providing SCADA enabling infrastructure and other equipments by the Company.

The Government while accepting the observation stated (November 2016) that the Company would take all earnest measures to complete the work within extended time upto March 2017 granted by GoI.

Part-B: Distribution system strengthening works

2.1.12 Part-B of the Scheme envisaged regular distribution system strengthening projects *viz.* Renovation, modernisation and strengthening of sub-stations, Transformers, Re-conductoring of lines, Aerial Bunched Conductoring in dense areas, replacement of electromagnetic energy meters with tamper proof electronic meters, installation of capacitor banks *etc.* The Part-B of the Scheme was implemented in 19 towns with a sanctioned cost of ₹ 710.24 crore with the scheduled date of completion as January 2015 which was subsequently extended by GoI upto January 2017. As of March 2016 funds of ₹ 551.97 crore were received, out of which ₹ 540.46 crore were spent and physical progress of work was 83.97 *per cent* as shown in **Chart - 2.1.1**.

Chart- 2.1.1
Physical progress of major items of all towns



(Source: Information furnished by the Company)

The town-wise breakup of sanctioned cost, receipt and expenditure of funds is given in [Annexure - 2.1.2](#).

Execution of works

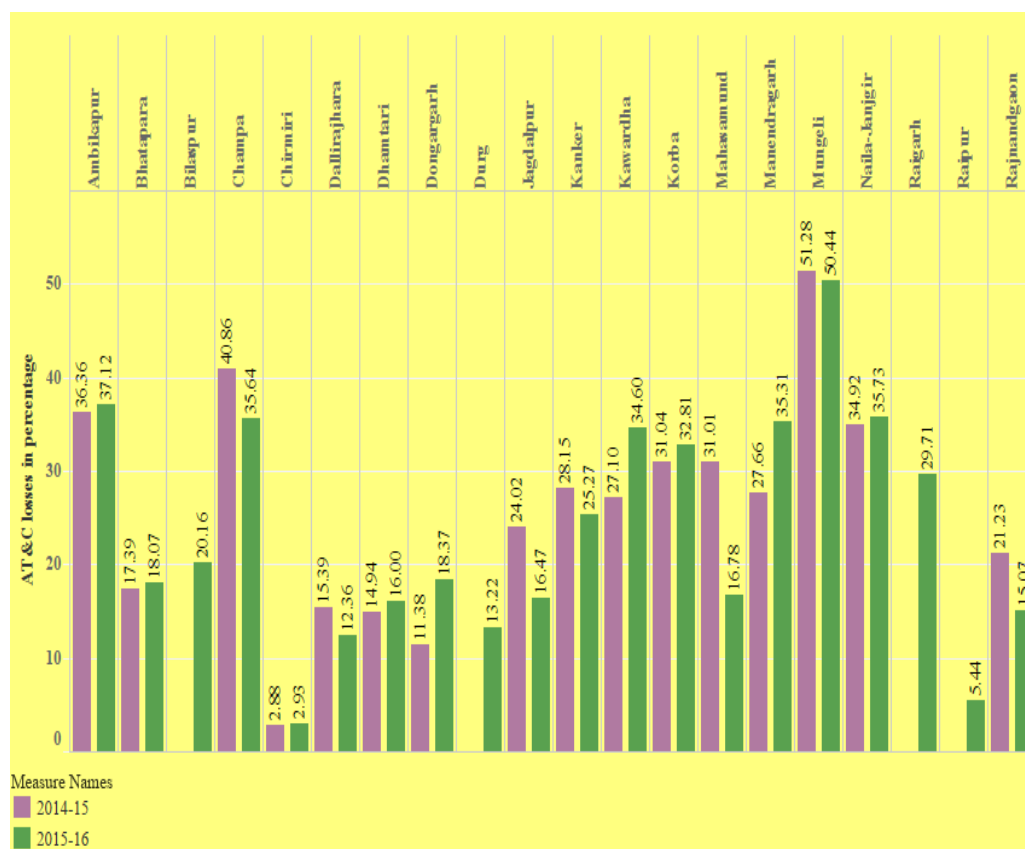
2.1.13 The works related to strengthening of distribution network (projects) were awarded to different Turnkey Contractors (TKCs) selected through town wise open tenders by ED-ST:RE of the Company. The Superintending Engineers of respective Circle of the Company, being Project Incharge, were responsible to get the works executed as per Scheme guidelines and monitor the execution of works under their respective jurisdiction. The Company awarded (May 2012 to March 2013) works of strengthening of distribution network in 19 towns, on turnkey basis. By the end of March 2016 only 15 towns were completed²⁶. The deficiencies noticed in execution of projects are discussed below:

AT&C losses in 'go-live' towns

2.1.13.1 The primary objective of R-APDRP was reduction in AT&C losses to 15 per cent level on sustainable basis. In the beginning of Scheme in 2009-10, the AT&C losses of 20 project towns ranged between 8.57 per cent and 63.52 per cent. Audit noticed that in the towns covered under the Scheme, the AT&C losses ranged between 2.88 and 51.28 per cent during the period 2014- 15 and 2015-16 as depicted in [Chart - 2.1.2](#).

²⁶ Closure reports are not yet submitted.

Chart 2.1.2
Town wise AT&C losses during the years 2014-15 and 2015-16



From the above Audit observed the following:

- During the years 2014-15 and 2015-16 only three²⁷ (19 per cent) and four²⁸ (20 per cent) towns out of 16 and 20 go-live towns respectively could achieve the target of 15 per cent AT&C losses owing to effective implementation of system strengthening work, better revenue collection efficiency and monitoring. The disappointing performance in other towns was due to poor execution of work, high rate of theft of electricity and inaction against the defaulting consumers.
- The achievement in five²⁹ towns was far below the target and their percentage of AT&C losses has ranged between 32.81 and 51.28 during the years 2014-15 and 2015-16.
- The Company failed to sustain the achieved AT&C losses in Kawardha, Dongargarh, Manendragarh, Bhatapara and Ambikapur towns which was 27.10, 11.38, 27.66, 17.39 and 36.36 per cent respectively in 2014-15, however, the same increased to 34.60, 18.37, 35.31, 18.07 and 37.12 per cent in 2015-16.

The Company failed to achieve primary objective of R-APDRP to contain AT&C losses in the go-live towns upto targeted level of 15 per cent.

²⁷ Dongargarh, Dhamtari and Chirmiri.

²⁸ Dallirajhara, Durg-Bhilai-Charoda, Raipur and Chirmiri.

²⁹ Champa, Ambikapur, Naila-Janjgir, Korba and Mungeli.

- AT&C losses in 16 towns³⁰ in excess of the benchmark level of 15 per cent worked out to 213.78 MUs, which led to a potential loss of revenue of ₹ 66.06 crore during the year 2015-16.

This indicates that the Company failed to achieve primary objective of R-APDRP to contain AT&C losses in the go-live towns upto targeted level of 15 per cent.

During the Exit Conference (October 2016) the Government stated that trajectory of AT&C losses in the State is showing reducing trend.

The reply is not acceptable as five towns showed increasing trend in AT&C losses in 2015-16 as compared to 2014-15. Further out of 20 go-live towns, AT&C losses of 16 towns were in excess from the bench mark level of 15 per cent.

Further, during discussion (January 2017) on future course of action required to be taken by the Company for reduction in AT&C losses, the Special Secretary, Department of Energy stated that all the towns will achieve the targeted AT&C losses to 15 per cent till 2018-19. He also stated that the Aerial Bunch cable is being laid in all towns to avoid theft.

Issue of completion certificate

2.1.13.2 The Company appointed ED-ST:RE, Superintending Engineer and Executive Engineer as nodal officer, project incharge and assistant project incharge respectively to carry out the Part-B works of the Scheme. Their primary responsibility was to ensure that the work was completed as per the terms and conditions of work order.

Audit noticed that the contractor has not completed³¹ the Part-B work of Ambikapur town so far (March 2016), however, the



(Service cable not installed as per the provision of work order at Ambikapur town)

Superintending Engineer of the Company had issued (31 March 2014) completion certificate and ED-STRE informed the same to PFC. Thus completion certificate was issued without completion of the work and incorrect status was intimated to PFC. By issuing completion certification for incomplete work, the contractor was also absolved from the responsibility to complete the

balance work.

The Government stated (November 2016) that due to certain practical issues, some DTRs and lines could not be energised and the Company has rectified the discrepancies.

³⁰ Declared go-live upto March 2015.

³¹ DTRs boxes and service cable was not installed, DTRs and AB cable were not energised.

The reply is not acceptable because DTRs and line were not energised in the absence of completion of the work. In many places AB Cable, distribution boxes and service cable were not installed.

Execution of works above the limit approved by the Steering Committee

2.1.13.3 As per decision (August 2012) of Steering Committee, the value variation in cost due to revision in the BOQ was limited to 10 *per cent* of the sanctioned DPR cost.

Audit observed that in Manendragarh and Mungeli towns actual cost of work was ₹ 5.84 crore and ₹ 5.98 crore as against the sanctioned DPR cost of ₹ 5.38 crore and ₹ 5.15 crore respectively. The increase in cost of 19.34 *per cent* for Mungeli town and 23.97 *per cent* for Manendragarh town was mainly due to increase the scope of work during execution which indicated that DPRs were not prepared on realistic basis. The increase in cost beyond the variation limit of 10 *per cent* approved by the Steering Committee has to be financed by the Company from its own funds as the same cannot be claimed under the Scheme. Thus, due to preparation of DPRs on unrealistic basis the Company has to bear the additional cost of ₹ 1.13 crore.

The Government stated (November 2016) that DPRs were prepared on the basis of field conditions and works available at that time i.e. 2010-11 and work was carried out as per actual site conditions. The Government further, stated that proposal for the same is put up (September 2015) to Steering Committee through PFC.

The reply is not acceptable as the cost variation was permissible only to the extent of 10 *per cent* above the DPR cost.

Finalisation of the tenders

2.1.13.4 After the approval of DPRs by Steering Committee, the Company initiated the tendering process for execution of Part-B works.

Audit noticed that the Scheme guidelines and the approved DPRs of Part-B did not prescribe any time schedule for finalisation of turnkey contracts whereas approved DPRs of Part-A and SCADA provided three months for finalisation of the implementing agency. In the absence of any time frame, the Company should have adopted the time frame of three months similar to Part-A of the Scheme for finalisation of tender of Part-B. However, the tenders were finalised with delay ranging between 21 and 164 days (considering three months timeframe for finalisation of tender) which led to delay in completion of the whole project.

The Government while accepting the observation stated (November 2016) that for future tendering the Company will consider the recommendations of audit and will follow or develop the time schedule to minimise the delay in finalisation of tender.

Completion of works

2.1.13.5 As per the work orders, Part-B works were to be completed within 12/18 months from the date of work order. Details of progress of work as on 31 March 2016 are given in the ***Annexure - 2.1.4.***

Audit noticed that out of 19 project towns, only in two towns works were completed in time and in 13 towns works were completed with delay ranging from two to 13 months. In remaining four towns works were not completed even after a delay of 28 months as at the end of March 2016. This was due to delay in completion of ring fencing, frequent revision of scope of work, delay in handing over of land for substations, delay in survey of 33/11 KV lines, public intervention, power shut down for execution works not provided in time, heavy rain and poor performance of the contractors. This indicates that the Company could neither plan the works properly nor provide the basic infrastructure to the contractors.

The Government while justifying the reasons for delay stated (November 2016) that the problems narrated above were being faced all over India and accordingly, MoP, GoI extended completion period from January 2015 to January 2017.

The reply is not acceptable because the Company took abnormal time to complete the works and failed to control the avoidable delays. Consequently, the delay in completion of the projects, postponed the envisaged benefits to be derived under the Scheme.

Award of work at Raigarh town

2.1.13.6 As per the terms and conditions of the tender the successful bidder was to furnish performance security within 30 days from date of Letter of Acceptance (LOA). Further, in case of failure of successful bidder to do so the Company might award the contract to the next lowest bidder. The Company invited tender (20 July 2011) for the system strengthening works of Raigarh town. The tender was finalised and LOA was issued (23 March 2012) to L-1 tenderer M/s Aravali Infrastructure Power Ltd., New Delhi (contractor) at a price ₹ 30.64 crore. However, the contractor did not furnish the performance security in stipulated time and the Company floated (27 August 2012) new tender for the same. The work was awarded (7 March 2013) to with new contractor for ₹ 34.86 crore.

Audit noticed that the Company took abnormally long time of eight months in finalisation of original tender. Consequently, on not furnishing of performance security by the selected bidder, the counter offer to the L-2 bidder was not accepted by him as validity of the offer had already expired by that time. Had the Company finalised the tender well before the validity period, on defaulting of the L-1 bidder the Company could have awarded the work to L-2 bidder at his quoted rate of ₹ 33.68 crore and saved ₹ 1.18 crore. This has resulted in avoidable financial burden of ₹ 1.18 crore on Scheme.

The Government stated (November 2016) that delay occurred due to financial scrutiny of huge number of bids and audit suggestion for timely finalisation of tender will be complied in future tender. The Government further, stated that L-2 bidder M/s SMS Infrastructure Limited had denied to accept the counter offer.

The reply is not acceptable as the Company was well aware of the expiry date of the price bids on 26 March 2012. Therefore, the Company should have finalised the tender in a time bound manner so as to avoid refusal of bidder to accept the tender due to expiry of price bid validity. However, the Company

Delay in finalising the tender resulted in expiry of validity period of offer and consequent avoidable financial burden of ₹ 1.18 crore due to award of work on higher rate in new tender.

did not fix any time frame for finalisation of the tender and delayed the finalisation of tender which led to expiry of validity period of price bid and consequent refusal of L-2 bidder to accept the counter offer.

Execution of Part-B works

2.1.13.7 During scrutiny of records following deficiencies in execution of works were noticed:

- As per the terms and conditions of tender, if during the defect liability period any defect is found in the items supplied/work executed, the contractor shall carry out appropriate repairs or replacement of defective items/work promptly. In Korba town, the quality of Miniature Circuit Breakers (MCBs) was poor and most of the installed MCBs at DTRs had failed or burnt. However, the contractor installed grip instead of its replacement. Thus, instead of replacing (as per the terms of contract) the failed MCBs, the contractor has managed to run the MCBs by using grip, which was violation of terms of contract and also compromised with safety.
- In Naila-Janjgir, Champa, Mahasamund, Ambikapur and Rajnandgaon towns permission from Electrical Inspector was not obtained for charging of sub-station or line, which was in violation of Central Electricity Authority (Measures relating to Safety & Electric Supply) Regulations 2010.

Internal Control, Monitoring and Training

2.1.14 Monitoring is a key component of the quality assurance system. The Scheme provides mechanism of monitoring by SLDRC, submission of monthly progress reports to PFC in prescribed form and monitoring by State Level Task Force. Further Third Party Independent Evaluating Agency (TPIEA) is in place for evaluation of the Scheme. A review of monitoring mechanism revealed the following:

Monitoring of milestones/ targets and evaluation of projects by SLDRC

2.1.14.1 As per the Scheme guidelines, SLDRC³² was to be constituted by the State for recommendation of the project proposals, monitoring the compliance of conditions of the Scheme and achievement of milestones. Accordingly, Department of Energy, GoCG, constituted (August 2009) SLDRC and instructed that SLDRC should meet once in every two months.

The SLDRC had conducted only eight meetings during September 2009 to March 2016 against the 39 meetings due and no meeting has been conducted since 6 January 2012. In the absence of regular meetings the SLDRC did not monitor milestones and targets under the Scheme and also compliance to the conditionalities. Further, there was no follow up on the lapses in execution, unsatisfactory performance of contractors and delay in completion of work due to lack of monitoring by SLDRC.

The Government stated (November 2016) that looking at the frequency of review meetings arranged at various high levels, need to review the progress separately by SLDRC was not felt. However, the Company will consider the recommendation of audit in future.

SLDRC failed to monitor the compliance of conditions of the Scheme and achievement of milestones/targets under the Scheme.

³² Under the Chairmanship of the Chief Secretary/Principal Secretary/Secretary Power/Energy.

The reply is not acceptable because as per guidelines SLDRC meetings were required to be conducted once in every two months to monitor the compliance of conditions of the Scheme and achievement of the milestones. However, the Company failed to ensure the same.

Monitoring mechanism

2.1.14.2 The short comings noticed in monitoring of the Scheme are as under:

- The officials of the Company were required to monitor the projects on weekly/routine basis at different levels. However, no report/records were maintained by the Company in this regard. In absence of the same, audit could not ensure that the responsible officials effectively monitored the projects and made efforts to complete the projects within the stipulated time.
- Ministry of Power constituted (14 August 2013) State Level Task Force for special monitoring of the Scheme. The task force was to visit the respective State at least once in a month. However, Audit noticed that the Company had not maintained any records of visits of task force, suggestions made by them and action taken thereon. Hence, it could not be ascertained if the envisaged purpose of the constitution of the State task force was achieved.
- The Company did not have any mechanism by way of periodical returns and performance reports through which the important activities such as status of progress, compliance to conditionalities, progress on achievement of targets and evaluation of the Scheme were periodically brought to the notice of Board of Directors. Absence of such mechanism, especially for a project of this significance, is a serious deficiency on the part of the Company.

The Government stated (November 2016) that the Company monitored the progress of work and assured that all efforts would be made in future to improve monitoring mechanism.

The fact remains that the Company needs to improve its monitoring mechanism of the Scheme.

Internal Audit

Internal audit is an essential component of the internal control. It ensures compliance with the directives, rules and regulations laid down by the Company/ Government. In this connection, Audit observed that during the review period no internal audit of ED-ST:RE and CE-EITC, Nodal offices for implementation of R-APDRP was conducted.

Physical verification of Part-B assets

Physical verification of assets confirms the physical existence of the assets and ensures that they are accounted properly. Audit observed that physical verification of Part-A was conducted whereas no physical verification of assets was conducted in respect of assets created under the Part-B of the Scheme during the period 2012-13 to 2015-16.

The Government stated (November 2016) that physical verification was done by the concerned field officers at the time of passing the contractor's bills.

The reply is not acceptable as physical verification of completed assets was not conducted at regular intervals after passing of contractor's bills to ensure their physical existence and proper accounting.

Training to technicians and linemen

2.1.14.3 As per the 12th meeting of Steering Committee of GoI, six months Certificate Programme in Power Distribution was to be imparted to technicians and linemen under the Scheme. It is the Company responsibility to take the registration and paid course fee.

Audit noticed that no such training was provided to the staff of the Company so far (March 2016) as envisaged in the Scheme. As a result the Scheme was deprived of the envisaged benefits of training to the technicians/lineman.

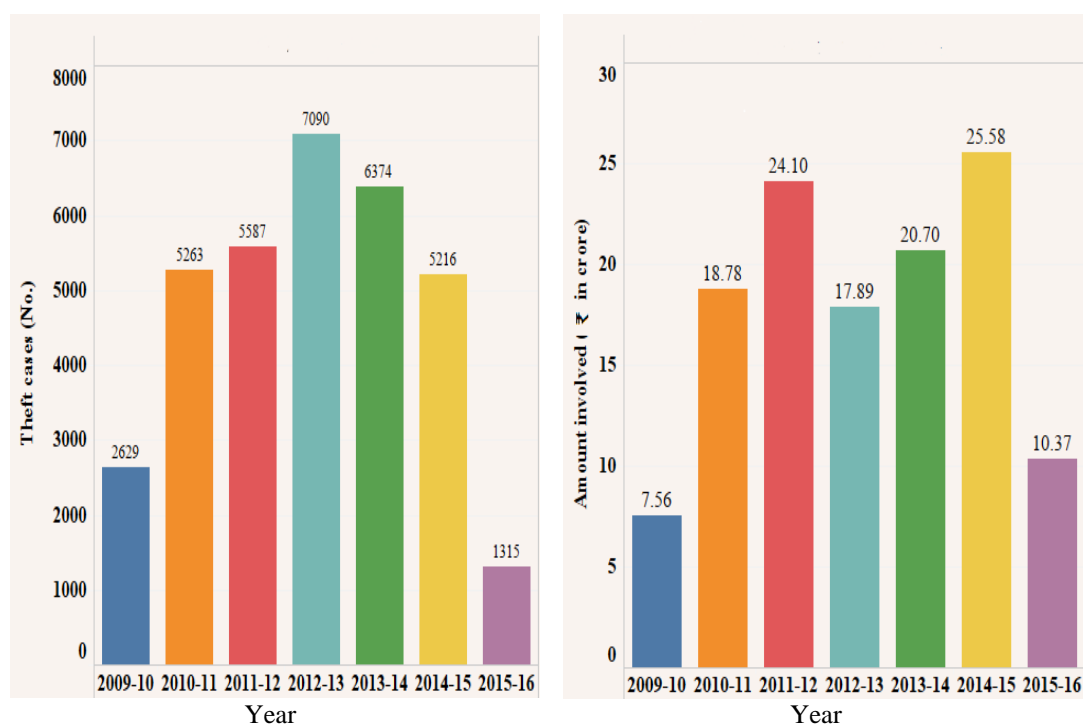
The Government stated (November 2016) that six months certificate programme training to technicians/lineman was not given as the staff was required to be spared for six months and fee was to be paid by staff which was refundable only in case of passing of said course.

The reply is not acceptable because above training was to be imparted for effective implementation of the Scheme and not imparting of the training to the staff resulted in violation of Scheme guidelines.

Vigilance and legal measures to prevent theft of electricity

2.1.14.4 Vigilance and legal measures are some of the important steps to prevent theft of electricity and thereby reducing commercial losses. Audit noticed that the amount involved in theft cases has shown an increasing trend i.e. from ₹ 7.56 crore (2009-10) to ₹ 25.58 crore (2014-15) i.e. increase of 338 per cent as may be seen in **Chart 2.1.3**.

Chart-2.1.3
No. of theft detected and amount involved therein



This indicates that the existing mechanism was not effective to prevent theft of electricity. Further, only 2149 First Information Reports (FIRs) were lodged in 33474 cases of theft/pilferage during the period 2009-10 to 2015-16. Against these 2149 FIRs conviction has been made only in 393 cases³³ (18.29 per cent).

The Government stated (November 2016) that to reduce theft of electricity the Company has taken various measures. The Government further stated that detected cases are intimated to police in writing and during 2009-16 total 21235 number of FIRs were registered by the Company.

The reply is not acceptable because theft cases have shown an increasing trends during 2009-10 to 2014-15. Further, in respect of FIRs reply is factually incorrect as FIRs were lodged only in 2149 cases during the years 2009-10 to 2015-16.

Setting of targets for Vigilance Wing

2.1.14.5 On review of targets of inspection by Vigilance Wing and achievements there against, audit observed the following:

- During the years 2009-10 to 2015-16 achievement against target for inspection ranged between 76.36 per cent and 116.24 per cent. Audit noticed that the Vigilance Wing failed to achieve targets during the years 2009-10 to 2013-14. However, targets were achieved in 2014-15 and 2015-16 due to lower fixation of targets than the targets achieved in the immediately preceding year³⁴.
- Achievement of targets of revenue collection by the Vigilance Wing in 2009-10 to 2015-16 ranged between 114.24 and 452.48 per cent. Audit observed that during 2014-15 and 2015-16 targets were fixed lower than the revenue collection achieved in the preceding year³⁵. It indicates that targets for vigilance wing were fixed on lower side even though there was increasing trend in theft cases as discussed in *paragraph 2.1.14.4*.

The Government stated (November 2016) that the annual target was fixed based on available resources and manpower. The Government also stated that the Company has already increased the target for 2016-17.

Reply is not acceptable as the Company failed to consider the actual achievement in preceding year at the time of fixation of targets for the current year. Further, increased targets for 2016-17 also substantiated the fact that the targets for previous years were reduced without any proper justification.

³³ 1.17 per cent of total 33474 theft/malpractices detected.

³⁴ In 2013-14 and 2014-15, 50398 and 54610 inspections were conducted respectively. However, in 2014-15 and 2015-16, targets of 49000 and 36100 inspections respectively were fixed.

³⁵ Revenue collection achieved in 2013-14 and 2014-15 were ₹ 132.80 crore and ₹ 55.45 crore respectively. However, in 2014-15 and 2015-16, targets for revenue collection of ₹ 30.05 crore and ₹ 25.89 crore respectively were fixed.

Conclusion

Audit concluded that:

- Despite an expenditure of ₹ 540.46 crore (as on March 2016), only four out of 20 towns could achieve the targeted 15 per cent power distribution losses (AT&C losses) during 2015-16. In respect of five project towns, instead of decrease, the towns witnessed increased AT&C losses in 2015-16 as compared to 2014-15. In the remaining 11 towns, though the losses were reduced, the target of 15 per cent could not be achieved. The reasons for failure to bring down the AT&C losses were mainly, poor execution of works, higher rate of theft of electricity, lack of action against the defaulting consumers etc. Thus, the Company failed to achieve the primary objective of the Scheme.
- Under IT enabled system (Part-A of the Scheme), the Company declared all the towns as go-live by August 2015. However, in respect of 17 modules provided under the Scheme, there were deficiencies in three modules. Customer Care Services module does not have a provision for customer's feedback, Maintenance Management module was not recording all the feeder trippings and New Service Connection module was not being fully utilised for new service connections. Only 31 per cent of Modems installed in distribution transformers and feeders were successfully communicating energy data defeating the objective of the Scheme for energy accounting and auditing without human intervention.
- The Company failed to develop a system for updating the consumer database on regular basis.
- There was no progress in implementation of SCADA projects even after lapse of more than four years due to delay in appointment of SCADA Implementing Agency (SIA), inaction on the part of SIA and not providing of SCADA enabling infrastructure by the Company. Thus, the Company failed to improve system reliability through remote operation.
- The Company deposited Scheme funds of ₹ 317.33 crore in its overdraft account instead of Scheme account in violation of the Scheme guidelines resulting in loss of interest income of ₹ 1.70 crore to the Scheme. The funds were drawn without immediate requirement resulting in an avoidable interest burden of ₹ 6.23 crore on the Scheme.
- SLDRRC and the Company failed to monitor the compliance of conditions of the Scheme and achievement of milestones/targets under the Scheme. Further, the nodal officers of the Company failed to monitor the progress of the projects as no reports/records of such monitoring were available.

Recommendations

Audit recommends that:

- **The Company should make all out efforts to achieve the target of 15 per cent AT&C losses on sustainable basis by removing the deficiencies in infrastructure and by taking effective action against theft of electricity/defaulting consumers.**
- **The Company should rectify the deficiencies in the system to obtain real time data without human intervention for energy accounting and auditing as envisaged in the Scheme. The Company should develop a system for updating the consumers' data in the system on regular basis.**
- **The Company may ensure execution of the SCADA works without any further delay so as to complete the project within the extended time period of the Scheme.**
- **The Company should follow the Scheme guidelines for better financial management of the funds received under the Scheme. The Scheme funds should be deposited in the Scheme bank account only and loan funds may be drawn on need basis.**
- **SLDRC needs to convene regular meetings to monitor the milestones/targets under the Scheme. The nodal officers of the Company also need to regularly monitor the progress of projects and maintain the records of the same to ensure that remedial action on the shortcomings noticed is taken.**

2.2 Audit on Mining and Marketing of Minerals by Chhattisgarh Mineral Development Corporation Limited

Introduction

2.2.1 Chhattisgarh Mineral Development Corporation Limited (Company) was incorporated on 7 June 2001 for exploration and exploitation of mineral resources, enhancement of production of minerals, establishment and promotion of mineral based industries, exploration of new areas of mining in the State. In Chhattisgarh, 18 minerals are found and of these, Company's activities were mainly confined to four minerals i.e. Bauxite, Coal, Iron-ore and Tin-ore. The Company does not do business of minor minerals³⁶ as per decision of Government of Chhattisgarh (GoCG).

The audit of mining activities of the Company was conducted (May 2016 and June 2016) covering the period from 2011-12 to 2015-16 to assess whether development of mines and mining activities were carried out economically, efficiently and effectively; the contracts for operation of mines were awarded and implemented in an economic and efficient manner and the environmental and other regulations were complied with.

During the course of audit, records at the Company's Corporate office at Raipur, Regional office at Ambikapur and in sub-office at Dantewada were test checked. Joint inspection³⁷ of the Daldali Bauxite mine at Kabirdham District was also conducted.

An entry conference was held with the Under Secretary, Department of Mineral Resources, GoCG and Managing Director (MD) of the Company in July 2016 wherein objectives, scope and methodology of audit were discussed. The Audit findings were reported to the Company and GoCG in July 2016 and discussed in an Exit Conference held on 11 November 2016 with the Secretary, Department of Mineral Resources, GoCG. The replies and views expressed by them in Exit Conference have been duly considered while finalising the audit report.

Mining and Marketing of Minerals

2.2.2 For minerals other than Coal, the Company carries out reconnaissance study to identify the mineral bearing areas on a regional scale, worthy of further investigation. After reconnaissance, prospecting is carried out to search the mineral deposits. Thereafter the Company applies to GoCG for mining lease and GoCG recommends the same to Government of India (GoI) for approval. After the approval is accorded by GoI, the mining plan is got approved³⁸ from Indian Bureau of Mines (IBM)³⁹ and environmental clearance is obtained from Ministry of Environment and Forest, GoI (MoEF). Thereafter, the mining lease is executed between GoCG and the Company for varying periods ranging from 20 to 30 years. Mining operations are carried out

³⁶ Minor mineral is defined in section 3 (e) of Mines and Mineral (Development and Regulation) Act, 1957.

³⁷ Joint inspection was conducted by audit team along with Company officials.

³⁸ Mining plan is approved by Ministry of Coal in case of coal block.

³⁹ Indian Bureau of Mines (IBM) is a regulatory body for promotion of systematic and scientific development of mineral resources of the Country through regulatory inspections of the mines and approval of mining plans.

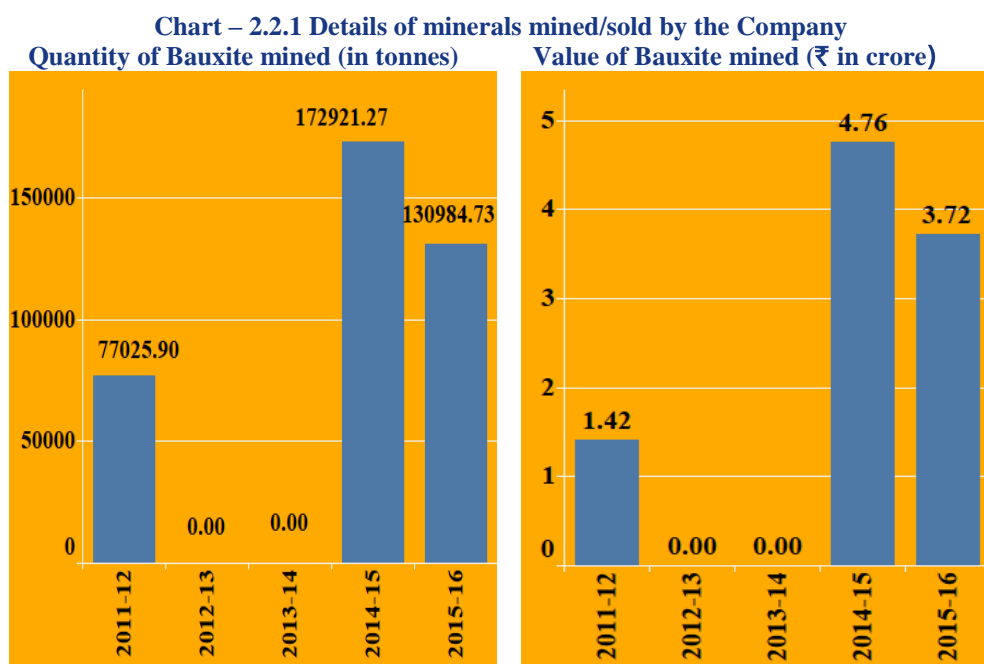
after obtaining working permission from the District Collectorate. In case of Coal, the Coal blocks are allotted to the Company by the Ministry of Coal, GoI (MoC) after which mining lease is executed with GoCG following the above procedure. The Company pays royalty for the minerals extracted and other levies⁴⁰ to GoCG.

Audit observed that the Company did not carry out mining and marketing of minerals on its own and awarded the same to contractors. Further, the pre-mining activities of preparing feasibility reports, prospecting and obtaining of statutory approvals were also outsourced by the Company.

During the period from 2011-12 to 2015-16 the Company had a total manpower ranging from 180 to 196 and the percentage of technical manpower dealing with core activities of mining and marketing of minerals ranged between 50 and 52. The administrative and employee benefit cost of the Company during the period from 2011-12 to 2015-16 was ₹ 5.67 crore, ₹ 6.39 crore, ₹ 8.56 crore, ₹ 6.24 crore and ₹ 6.65 crore which was 38, 50, 76, 38 and 70 per cent of the Company's revenue in the respective years.

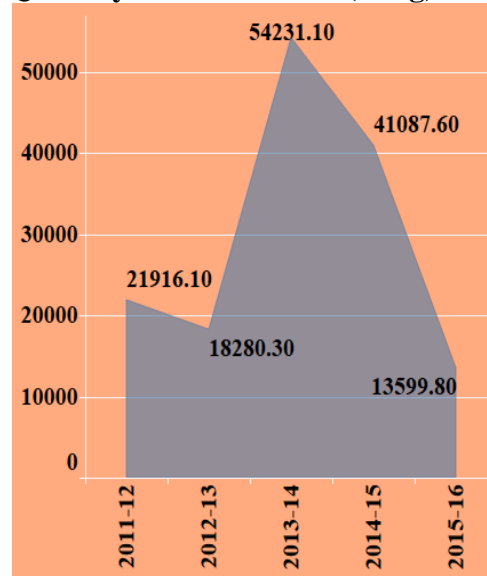
Thus, despite spending substantial portion of its revenue on administrative and employee benefit costs, the core activity of mining and marketing of minerals was being carried out through outsourced agencies by the Company. The Government/Company also did not carry out any cost benefit analysis of mining and marketing activities through outsourcing and by the Company.

During 2011-12 to 2015-16, the Company carried out mining and marketing of Bauxite through private contractors and trading (purchase and sale) of Tin-ore, whereas no mining was carried out in case of Coal, iron-ore and Tin-ore due to reasons discussed in subsequent paragraphs. The quantity and value of the Bauxite mined and Tin-ore sold by the Company during the five years from 2011-12 to 2015-16 are depicted in **Chart- 2.2.1**.

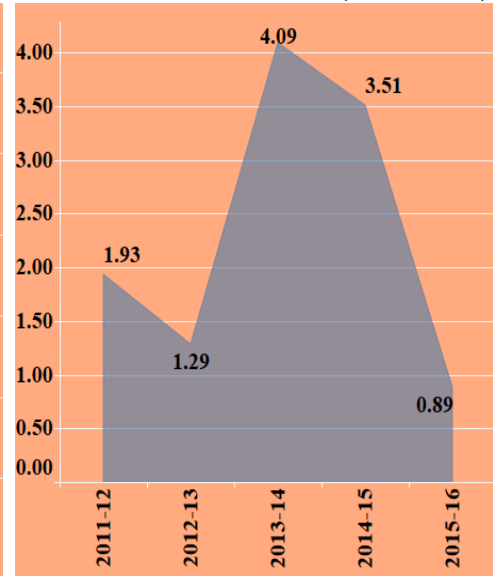


⁴⁰ Adhosanrachna Vikas Upkar, Vikas Evam Paryavaran Upkar, Panchayat kar, contribution towards District Mineral Foundation and National Mineral Exploration Trust Fund etc.

Quantity of Tin-ore sold (in kg)



Value of Tin-ore sold (₹ in crore)



(Source: Information furnished by the Company)

During the period 2012-13 and 2013-14, mining of Bauxite was not carried out in any of the 15 mines in possession of the Company. This was due to not approval of mining schemes by IBM⁴¹, not obtaining of working rights⁴², currency of pre-mining activity period⁴³, not obtaining of environmental clearance⁴⁴, not inviting of tenders⁴⁵ and bidders did not participate⁴⁶ in tendering for operation of mines.

Financial Performance

2.2.3 The financial performance of the Company for the last five years ending 2015-16 is detailed in *Annexure- 2.2.1*. The Company's revenue declined from ₹ 14.79 crore in 2011-12 to ₹ 12.84 crore in 2012-13 and ₹ 11.33 crore in 2013-14 primarily because the mines of Bauxite were not operational during the period 2012-13 and 2013-14. Though the revenue increased to ₹ 16.58 crore in 2014-15 due to recommencement of operations of Bauxite mines, it again declined to ₹ 9.56 crore in 2015-16 due to decline in revenue from operations and interest income. The Company had profit of ₹ 3.74 crore, ₹ 2.93 crore and ₹ 2.26 crore during the years 2011-12, 2012-13 and 2014-15 respectively. The Company suffered a loss of ₹ 1.19 crore in the year 2013-14 and provisional⁴⁷ loss of ₹ 1.51 crore in the year 2015-16. Loss in 2013-14 was mainly due to increase in employee benefit expenses and in 2015-16 due to decline in revenue from operations and interest income. The revenue from various sources of the Company during 2011-12 to 2015-16 is depicted in **Chart - 2.2.2**.

⁴¹ The mining schemes of Barima I and Barima II mines were not approved due to deficiencies in the mining schemes submitted to IBM for approval.

⁴² Pandrapat I, Pandrapat II, Kesra II, Kesra III, Kesra IV and Nagadand.

⁴³ Daldali.

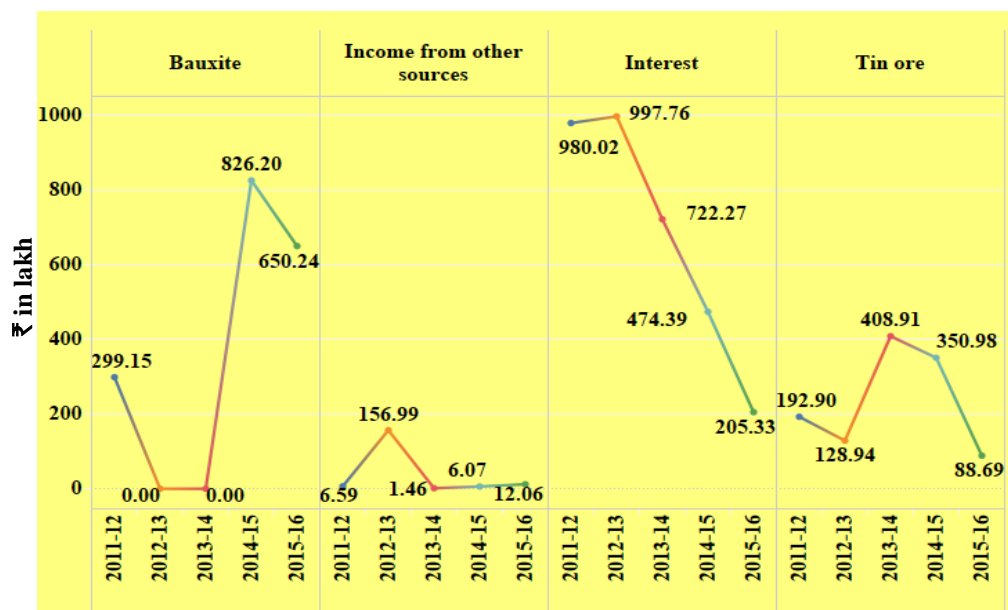
⁴⁴ Barima VI.

⁴⁵ Barima III, Barima IV, Barima V and Kesra I.

⁴⁶ Narmdapur.

⁴⁷ The Annual Accounts of the Company for the year 2015-16 were not finalised as of November 2016.

Chart – 2.2.2
Income from various sources (₹ in lakh)



(Source: Information furnished by the Company)

Audit findings

Mining of Coal

2.2.4 Coal is the most widely used energy source for electricity generation and an essential input for steel production. In India, about 76 per cent Coal output is consumed in power sector. As per the data of IBM year book 2014 published in July 2016, as on 1 April 2014 the Chhattisgarh State alone accounted for over 17.42 per cent of the Coal reserves (52532.92 million tonnes) out of total reserves (301564.45 million tonnes) available in the Country.

Mining operations in Coal blocks

2.2.4.1 During the period from August 2003 to November 2013, the Company was allocated six Coal blocks⁴⁸ by the Ministry of Coal, GoI (MoC). Detailed exploration and mining was to be carried out by the Company or by a separate Government Company eligible to do Coal mining to be created with participation of the Company.

As per terms and conditions of allocation, for explored Coal blocks, the Company was to obtain the available geological data on payment of necessary exploration cost to the Coal India Limited/Central Mine Planning and Design Institute Limited/Geological Survey of India within one and half months of allocation. In respect of unexplored blocks, the Company should apply for a prospecting license within three months of allocation and exploration should be completed and Geological Report (GR) should be prepared within two years from the date of issue of the prospecting licence.

⁴⁸ Tara (14 August 2003), Gare Pelma sector I (2 August 2006), Sondiha (25 July 2007), Shankarpur-Bhatgaon (25 July 2007), Chendipada (25 July 2007) and Kerwa (7 November 2013).

The Company failed to develop the coal blocks and commence mining in these blocks though the Company missed the milestones for commencement of production by nearly two years to over seven years and expenditure of ₹ 339.24 crore was incurred on these coal blocks.

Further, as per the milestones prescribed by MoC the Company had to submit mining plan within six months of allocation and get it approved from MoC, obtain forest and environmental clearances from MoEF within 12 months from the date of allocation and production from the Coal blocks was to be commenced within 54 months from allocation. Allocation of Coal blocks was liable to be cancelled in case of failure in achieving the milestones.

Audit observed that the Company failed to develop the Coal blocks allocated to it and commence mining in these blocks mainly due to inordinate delay in purchase/preparation of GR and applying for various requirements like mining lease, forest clearance, environmental clearance and land acquisition etc. Audit further observed that, the Hon'ble Supreme Court of India vide its judgment dated 24 September 2014 held that the allotment of Coal blocks were arbitrary and illegal and cancelled the allotment of five Coal blocks (except Kerwa Coal block) allocated to the Company. However, the Company had already incurred an expenditure of ₹ 339.24 crore for development of these five⁴⁹ Coal blocks.

The Company failed to develop the Coal blocks and commence mining in these blocks as per the milestone fixed for commencement of production and the delay ranged from nearly two years (Shankarpur-Bhatgaon Coal block) to over seven years (Tara Coal block) as given in **Table - 2.2.1**.

Table 2.2.1: Slippage from scheduled date of production

Name of Coal block	Date of allocation	Scheduled date of commencement of production	Slippage as on date of de-allocation
Tara	14 August 2003	14 February 2007	7 years 6 months
Gare-Pelma	2 August 2006	2 February 2011	3 years 6 months
Chendipada	25 July 2007	25 January 2011	3 years 7 months
Shankarpur-Bhatgaon	25 July 2007	25 January 2011	1 year 10 months
Sondiha	25 July 2007	25 January 2011	3 years 7 months

(Source: Data compiled from information furnished by the Company)

Had the production from these Coal blocks commenced as per prescribed milestones, the Company would have recovered the cost incurred on these Coal blocks from the revenue generated from operation of the Coal blocks. The entire expenditure of ₹ 339.24 crore incurred by the Company on these Coal blocks became infructuous on cancellation of allocation of these Coal blocks. However, the milestone for commencement of production from Kerwa Coal block allocated in 2013 has not yet reached.

The Government stated (November 2016) that development of Coal blocks was continuously monitored by the MoC. The reasons for delay occurred in development of these Coal blocks were either procedural or beyond the control of Company. Further, the expenditure incurred on Gare Pelma Sector-I Coal block has already been realised from the new allottee. Similarly, the balance amount would be recovered in due course as and when the Coal blocks are allocated.

The reply is not acceptable as the MoC issued show cause notices to the Company (allocattee) for slow progress of development of Coal blocks in respect of Tara (3 January 2014), Shankarpur-Bhatgaon (30 April 2012),

⁴⁹ Tara, Shankarpur-Bhatgaon, Gare Pelma Sector-I, Sondiha and Chendipada coal blocks.

Sondiha (14 June 2013) and Chendipada (4 May 2012) Coal blocks and directed to forfeit the BG in case of Shankarpur-Bhatgaon, Sondiha and Chendipada Coal blocks due to failure to achieve the prescribed milestones. Further, the contention of Government on recovery of expenditure from new allocatees is also not acceptable because even if the expenditure is recovered from them, there is loss of revenue due to failure to commence mining as per prescribed milestones.

Mining of Bauxite

2.2.5 Bauxite is an essential ore of Aluminium which is one of the most important other than ferrous metals used in the modern industry. As per the IBM year book 2014 published in July 2016, as on April 2010, Chhattisgarh State alone accounted for 74.499 million tonnes of Bauxite reserves which was over 12.56 *per cent* of the total reserves of 592.938 million tonnes in the Country.

Mining and marketing of Bauxite at Kesra-II, III, IV, Barima VI and Nagadand mines

2.2.5.1 The Company executed (18 January 2008) an agreement for mining and marketing of Bauxite at Barima-VI, Kesra- II, III, IV and Nagadand Bauxite mines with RK Transport Company (contractor) for a period of five years⁵⁰ i.e. from January 2009 to December 2013. In this connection, the following was observed.

Collection of the value of Bauxite as per agreement

2.2.5.2 As per clause 2.2 and clause 15.6 (a) of the agreement, the contractor was required to complete all the pre-mining activities⁵¹ within one year from the date of agreement i.e. by January 2009, thereafter the contractor was liable to pay the monthly instalment for monthly scheduled quantity of 12500 tonnes. Further, clause 19.4 stipulated that if the contractor failed to execute the work to the satisfaction of the Company, the MD reserved the right to terminate the contract after 60 days notice and get the work executed by other contractor. Besides, loss if any, incurred by Company shall be recovered from the contractor's pending bills and Bank Guarantee (BG).

Audit observed that the contractor could not complete the pre-mining activities within one year. However, the Company extended (19 June 2009) the period for completion of pre-mining activities firstly upto 31 July 2009 and later till the date of obtaining environmental clearance. Though, the environmental clearance for Nagadand and Kesra (Kesra-II, III and IV) mines was obtained⁵² on 3 August 2011 and 13 December 2011 respectively by the contractor, the working permission from the District Collectorate could not be obtained.

The Company issued (2 January 2015) a show cause notice to the contractor

The Company unduly extended the period for completion of pre-mining activities which resulted in revenue loss of ₹ 9.30 crore.

⁵⁰ Excluding one year for completion of pre-mining activities.

⁵¹ Preparation and approval of revised mining plan, environmental clearance, acquisition of private land and any other work to start and operate the mining operations.

⁵² Environmental clearance for Barima VI mine was obtained in January 2016.

for not complying with terms and conditions⁵³ of the agreement. In response, the contractor stated (17 January 2015) that as the delay in obtaining environmental clearance and working permission from District Collectorate was caused due to delay on the part of Government, therefore force majeure clause (clause 19) of the agreement would be applicable in the present case. The Company sought legal opinion on the matter from a law intern who opined that the agreement can be cancelled as the contractor had failed to start production or pay the instalment for monthly scheduled quantity in accordance with clause 2.2 of the agreement.

The Company terminated (23 January 2016) the contract and stated that loss incurred by the Company will be recovered through encashment of BG. However, the BG submitted by the contractor had already expired on 12 April 2015.

The contractor filed (2 February 2016) a writ petition at High Court, Bilaspur against the termination order in which the Hon'ble High Court ordered (4 April 2016) the Company to pass a fresh reasoned and speaking order for termination of the contract. Accordingly, the Company passed (4 June 2016) a speaking order stating that the period for completion of pre-mining activities was extended without relaxing the condition of payment for monthly scheduled quantity of Bauxite and accordingly the contractor was liable to make payment of scheduled quantity. However, no payment was made by contractor.

Thus, due to failure of the Company to monitor and take timely action as per contractual provisions, mining operations could not be commenced till March 2016. This also resulted in loss of revenue ₹ 9.30 crore⁵⁴ to the Company from January 2009 to December 2013.

The Government stated (November 2016) that consequent upon failure of the contractor to obtain requisite clearances; the contract was terminated on 23 January 2016. Efforts were made to extend the validity period of BG but the contractor did not extend the same.

The reply is not acceptable because had the Company terminated the contract timely and got the work executed by other contractor, it would have earned significant revenue. Instead the Company unduly extended the period for completion of pre-mining activities as a result of which the Company could not get any revenue so far (November 2016). Moreover, the BG amounting to ₹ one crore was allowed to expire which otherwise could have been encashed in order to minimise the loss.

Payment of crop compensation by Company on behalf of the contractor

2.2.5.3 Clause 1.1 of the agreement (18 January 2008) provided that the contractor would pay the amount of compensation to land owners through Company and will assist Company in acquisition of land and getting environmental clearance. Clause 13.1 of the agreement also provided that cost of acquisition of private land shall be borne by the contractor.

⁵³ Clause 1- obtain environment clearance within one year , Clause 2- make payment as per monthly scheduled quantity, Clause 15.4- make payment of monthly installment in advance, Clause 15.6- complete all the mining activities as stated in clause 1 and clause 16- period of contract.

⁵⁴ 150000 tonnes per year x ₹ 124 per tonne (excluding royalty and taxes) x 5 years (from January 2009 to December 2013).

The Company deposited ₹ 6.76 crore towards crop compensation without collecting the same from the contractor in violation of the contractual provisions.

The Land Acquisition Officer, District Sarguja passed order (25 March 2015) for crop compensation of 52 land oustees and directed the Company to deposit an amount of ₹ 6.76 crore⁵⁵. The same was payable by the contractor as per clause 1.1 and 13.1 of the agreement. However, the Company deposited⁵⁶ the amount with the Collector and Land Acquisition Officer, District Sarguja without collecting the same from the contractor. This resulted in avoidable expenditure of ₹ 6.76 crore and extension of undue benefit to the contractor to that extent. It is pertinent to mention here that crop compensation in case of Daldali mine was paid (15 May 2014) by the contractor as per clause 2.10 of the agreement.

The Government stated (November 2016) that in view of lack of interest on the part of contractor and in order to save the mining lease from being lapsed, the amount of crop compensation was deposited by the Company. The agreement was terminated on 23 January 2016 and thus no benefit was extended to the contractor.

The reply is not acceptable because terms of agreement of the contract clearly stated that compensation for land acquisition shall be borne by the contractor. The Company terminated (23 January 2016) the contract and stated that loss incurred to the Company would be recovered through encashment of BG and other available options. However, BG has already expired in April 2015.

Mining and marketing of Bauxite at Barima-I to V and Kesra-I mines.

2.2.5.4 The Company invited (November 2006) open tender for mining and marketing of Bauxite at Barima-I to V and Kesra-I mines. An agreement was executed (January 2007) with the highest tenderer i.e. BALCO for mining and marketing of 1.20 lakh tonnes *per annum*⁵⁷ of Bauxite at the rate of ₹ 160 per tonne. The agreement was valid for three years from 16 February 2007 to 15 February 2010 which was further extended till 15 February 2012.

In this connection following irregularities were noticed:

Encashment of Bank Guarantee

2.2.5.5 Clause 17.6 of the agreement stipulated that the contractor is required to pay the value of monthly contracted quantity in advance irrespective of actual production in the month. In the event value of Bauxite is not paid, the work may be stopped by the Company and if contractor fails to pay the value of the Bauxite within seven days of stoppage of work then the Company shall forfeit the security deposit (SD).

Audit observed that during the period from February 2010 to December 2011 BALCO produced a total quantity of 3.03 lakh tonnes Bauxite against the contracted quantity of four lakh tonnes resulting in short production of 0.97 lakh tonnes. Thus as per clause 17.6 the Company was required to realise an amount of ₹ 1.56 crore⁵⁸ for the short production. However, against the outstanding dues of ₹ 1.60 crore (including ₹ 4.03 lakh towards other dues) the Company adjusted (August 2012) ₹ 62.29 lakh from excess paid in previous

⁵⁵ ₹ 6.04 crore for crop compensation and ₹ 0.72 crore for administrative fees.

⁵⁶ ₹ 6.04 crore on 4 December 2015 and ₹ 0.72 crore on 14 March 2016.

⁵⁷ Two lakh tonnes per annum from 16 February 2010 to 15 February 2012.

⁵⁸ ₹ 1,55,61,728 (97260.80 tonnes x ₹ 160 per tonne).

bills and forfeited the SD/earnest money deposit (EMD) of ₹ 75 lakh⁵⁹ and the balance amount of ₹ 22.36 lakh remained outstanding.

Audit further observed that BALCO was defaulting in payments of monthly installments from September 2011 onwards and stopped the work from December 2011. The Company did not encash the BG of ₹ 75 lakh lying with it as per clause 17.6 of the agreement and instead BG was allowed to expire on 15 February 2012. As per Delegation of Powers the Controller (Finance) of the Company was responsible for recovery of outstanding dues. Thus failure of the Controller (Finance) to take action for recovery of outstanding dues by encashment of BG resulted in dues of ₹ 22.36 lakh remaining outstanding.

The Government stated (November 2016) that ₹ 22.36 lakh was outstanding after adjustment from various sources and the contractor filed (7 January 2013) application with the Hon'ble High Court, Bilaspur for appointment of arbitrator. Accordingly, an arbitrator was appointed by the Hon'ble High Court vide its order dated 11 June 2013. Presently the case is pending in arbitration.

The reply is not acceptable because as per the terms of the agreement if contractor fails to pay the value of the Bauxite within seven days of stoppage of work then the Company can forfeit the SD. Accordingly, the Company should have encashed the BG after stoppage of work in December 2011 itself.

Award of new contract to BALCO despite poor performance in previous contract

2.2.5.6 The contractor M/s BALCO did not make payment of monthly instalment from September 2011 to December 2011 in the previous contract (effective from 16 February 2010 to 15 February 2012) and stopped the mining work with effect from 4 December 2011. Despite this the Company again awarded (8 September 2014) the contract of mining and marketing of Barima-I to IV and Kesra-I Bauxite mines to BALCO, which produced 2.37 lakh tonnes of Bauxite during October 2014 to August 2015. Thereafter, BALCO again abandoned the mining work from September 2015 onwards and the contract was terminated in February 2016. Hence, due to the injudicious decision of the Company in selecting the contractor, the mining operations could not be completed.

The Government stated (November 2016) that tender was invited through wide publicity in which only two tenderers participated and BALCO quoted the highest rate. Due to limited demand of Bauxite the Company did not have any other option than accepting the tender.

The reply is not acceptable as the Company should have incorporated suitable clauses in the tender specifications for safeguarding the financial interests of the Company against the defaulting contractors.

⁵⁹ ₹ 25 lakh SD for above contract and ₹ 50 lakh EMD deposited in respect of tender for other contracts in Sarguja and Kabirdham Districts.

Contract for mining and marketing of Bauxite at Barima-I to IV and Kesra I mines

2.2.5.7 The Company executed (8 September 2014) an agreement with BALCO for mining and marketing of Bauxite at Barima-I to IV and Kesra-I mines at the rate of ₹ 275 per tonne. The following irregularities were observed in this regard.

Award of work of mining and marketing of Bauxite

2.2.5.8 The Company before inviting tender for mining and marketing of Bauxite at Barima I to IV and Kesra I mines assessed (March 2014) the minimum rate of Bauxite payable by the tenderer as ₹ 365 per tonne⁶⁰ considering the rate finalised in previous contract, cost inflation index and operational expenses of mines. Besides, the minimum rate of Bauxite was to be revised every year in accordance with the cost inflation index notified by GoI.

In response to the tender (16 June 2014) for the above work only two bids⁶¹ were received which were evaluated (August 2014) by the tender committee and price bid was opened on 8 August 2014. BALCO quoted the highest rate of ₹ 275 per tonne which was accepted and agreement was executed (8 September 2014) for a period of three years. During the period from October 2014 to August 2015, BALCO produced a quantity of 2.37 lakh tonnes of Bauxite.

Audit observed that the rate quoted by BALCO (₹ 275 per tonne) was much lower than the minimum rate of ₹ 365 per tonne assessed by the Company before inviting tender. Thus, accepting a rate much lower than the minimum rate assessed by the Company has resulted in loss of revenue of ₹ 2.13 crore (2.37 lakh tonnes x ₹ 90 i.e. ₹ 365 - ₹ 275). Besides, no price escalation clause was included in the agreement as was done in case of Daldali Bauxite mine at Kabirdham District, which resulted in further loss of ₹ 11.96 lakh to the Company. Moreover, since the Bauxite is also used by the contractor for captive consumption, the question of collusion may not be ruled out.

The Government stated (November 2016) that the terms and conditions of tender were approved by the Board of Directors (BoD) and accordingly, tender was invited without any base price. After evaluation of tender the bidder quoting the highest rate was declared as the successful bidder i.e. BALCO.

The reply is not acceptable because Company itself assessed the minimum rate of Bauxite as ₹ 365 per tonne before inviting the tender; however, the Company did not consider this rate and finalised the tender at lower rate of ₹ 275 per tonne.

Failure to realise ₹66.67 lakh from BALCO

2.2.5.9 As per clause 19.2 of the agreement for mining and marketing of Bauxite dated 8 September 2014, the contractor BALCO was required to pay

Tender was finalised at lower rate of ₹ 275 per tonne as compared to minimum rate of ₹ 365 per tonne assessed by the Company resulting in loss of revenue of ₹ 2.13 crore.

⁶⁰ Rate of Bauxite ₹ 260 per tonne finalised in previous tender x ₹ 939 cost inflation index for the year 2013-14 / ₹ 785 cost inflation index for the year 2011-12 + ₹ 54.42 operational expenses.

⁶¹ IRC Natural Resources Private Limited and BALCO.

the value of monthly contracted quantity in advance irrespective of actual production in the month. Clause 19.3 of the agreement stipulated that in case the monthly instalment is not paid by seventh of the month, the work may be stopped by the Company and if the outstanding amount is not paid within 15 days of stoppage with interest at the rate of 12 *per cent per annum*, the agreement shall be terminated and SD shall be forfeited.

Audit observed that the contractor defaulted in making payment of monthly instalments from September 2015 onwards and the Company stopped the mining work on 11 September 2015. The Company encashed (2 December 2015) the BG of ₹ 50 lakh, however, the outstanding dues had mounted to ₹ 1.17 crore by this time. The contract was terminated on 11 February 2016. Had the Company terminated the contract and encashed the BG after 15 days of stoppage of work i.e. on 26 September 2016 as per clause- 19.3 of the agreement, the entire outstanding dues of ₹ 38.92 lakh as on that date could have been realised. Thus, due to delay in termination of the contract and encashment of BG by the Company, an amount of ₹ 66.67 lakh⁶² remained unrealised (November 2016) from the contractor.

The Government stated (November 2016) that during September 2015 to November 2015 the mines were not operated by the contractor and consequent upon failure of the contractor to start the work, BG of ₹ 50 lakh was encashed. Hence, there was no loss to the Company.

The reply is not acceptable because the Company failed to terminate the contract and forfeit the SD within 15 days of stoppage of work as a result the outstanding dues accumulated to ₹ 1.17 crore. Further, the Company incurred initial expenses of ₹ 39.84 lakh and other overhead expenses of ₹ 50.40 lakh for operating of these mines which remained unrecovered because of failure to realise the payment for schedule quantity of Bauxite as per the agreement.

Collection of value of Bauxite as per mining agreement for Daldali mine

2.2.5.10 As per mining plan (8 December 2008) and the modified mining plan (11 October 2012) Daldali mine was having an estimated mineable Bauxite reserve of 3.44 lakh tonnes and the annual production quantity for a period of five years was as given in ***Annexure - 2.2.2***.

The contract for mining and marketing of Bauxite at Daldali mine was awarded (2 February 2012) to Bagmar Bauxite Industries and A. S. Associates (contractor) at the rate of ₹ 220 *per tonne*. As per agreement (23 March 2012) the contractor was required to pay monthly installment amount in advance as per the monthly scheduled quantity which was determined on the basis of mining plan (clause 6.2.2 and 6.2.5). Further, as per clause 6.2.7 if the contractor fails to produce and market the scheduled quantity, he shall be bound to pay the value for the scheduled quantity.

⁶² ₹ 1.17 crore – ₹ 35.00 lakh BG and – ₹ 15.00 lakh EMD.



(Bauxite mining at Daldali mine in District Kabirdham)

The contractor commenced the mining work from July 2014 and produced a quantity of 0.67 lakh tonnes as against the scheduled quantity of 1.08 lakh tonnes upto March 2016. The contractor made payment of scheduled quantity from July 2014 to September 2014 and sought permission (23 September 2014) for making payment of actual quantity mined instead of scheduled quantity citing less availability of Bauxite. The Company constituted (28 October 2014) a committee to assess the mineral reserves at the mine. Based on the recommendations (6 December 2014) of the committee, the BoD decided (27 January 2015) to modify the mining plan after assessing the actual availability of Bauxite and take payment from the contractor accordingly. Further, till modification of mining plan, payment for a fixed quantity was to be taken from the contractor.

Audit observed that during the period from July 2014 to March 2016 the contractor made payment of ₹ 1.35 crore as against ₹ 3.08 crore payable for the scheduled quantity as per the agreement. Thus, due to allowing the contractor to pay for a lesser quantity than the scheduled quantity as per mining plan and agreement, the Company suffered a loss of ₹ 1.73 crore. Audit further observed that against 21 monthly instalments, the contractor made payments with delay ranging from one to 20 days during the period from July 2014 to March 2016. The Company suffered loss of interest of ₹ 16.11 lakh on short/delayed payment by the contractor. The matter of delayed payment was neither condoned/waived nor was the same brought to the notice of the BoD.

The Government stated (November 2016) that the matter regarding acceptance of contractor's request and modification of mining plan has been referred to the Department of Law and Legislative Affairs, GoCG for legal opinion. Further, in order to maintain the continuity of the mine, the mining operations have been carried out by allowing the contractor to make payment for a fixed monthly quantity. Any further action will be taken after considering the legal opinion.

Reply is not acceptable as the Company did not submit any modified mining plan for approval to IBM till date (November 2016) and the contractor was allowed to pay for a lesser quantity in violation of mining plan and agreement. Further, both the mining plans approved by IBM earlier (December 2008 and

The Company failed to collect the value of Bauxite from the contractor as per agreement resulting in loss of ₹ 1.89 crore to the Company.

October 2012) recognised the Bauxite reserves to be 3.44 lakh tonnes according to which monthly scheduled quantity in the agreement was fixed, but this fact was overlooked by the BoD.

Deposit of statutory dues of ₹ 95.57 lakh towards District Mineral Foundation Fund and National Mineral Exploration Trust

2.2.5.11 The Ministry of Mines, GoI notified (17 September 2015) Mines and Minerals (Contribution to District Mineral Foundation) Rules, 2015 (Rules) which were applicable from 12 January 2015. As per the Rules, every holder of a mining lease shall pay to the District Mineral Foundation Fund (DMF) contribution at the rate of 30 *per cent* of the royalty paid in respect of mining lease granted before 12 January 2015 and 10 *per cent* of the royalty paid in respect of mining lease granted on or after 12 January 2015. Further, as per Mines and Mineral (Development and Regulation) Amendment Act, 2015 notified by GoI in March 2015, two *per cent* of royalty is also payable to National Mineral Exploration Trust Fund⁶³ (NMET) with effect from 12 January 2015. The purpose of DMF was to work for the benefit of the persons and areas affected by mining related operations and NMET Fund was to be used for regional and detailed exploration of minerals.

As per the agreement with BALCO (for operation of Barima-I to IV and Kesra- I mines) and Bagmar Bauxite Industries and A.S Associates (for operation of Daldali mine), it was the responsibility of the Company to deposit statutory levies and taxes and recover the same from the contractor. However, Company failed to deposit statutory dues of DMF and NMET for mining of Bauxite for the period from January 2015 to December 2015 and recover the same from the contractors.

Audit observed that GoCG instructed (December 2015, January 2016, February 2016 and April 2016) the Company to deposit ₹ 94.91 lakh and ₹ 6.32 lakh on the Company towards DMF and NMET respectively in respect of Bauxite mined from Barima I to IV and Kesra I mines (from January 2015 to August 2015) and Daldli mine (between January 2015 and December 2015).

However, the Company deposited DMF ₹ 5.23 lakh and NMET ₹ 0.43 lakh only and recovered the same from the contractor of Daldali mine. The Company neither deposited the remaining statutory dues of ₹ 89.68 lakh towards DMF and ₹ 5.89 lakh towards NMET despite instructions from GoCG to do so, nor recovered the same from the contractors.

The Government stated (November 2016) that the Company made payment towards DMF and NMET from September 2015 and August 2015 respectively in respect of Daldali mine and recovered the same from the contractor. However, no payment was made in respect of Barima I to IV and Kesra I mines as these were not in operation from September 2015 onwards. The payment towards DMF for the period from 12 January 2015 to 15 September 2015 in case of Daldali mine was not made in the view of direction given by Hon'ble High Court, New Delhi. Further action will be initiated after final decision of the Hon'ble High Court.

⁶³ The National Mineral Exploration Trust Fund was established on 14 August 2015.

The fact remains that the Company failed to deposit the statutory dues of DMF and NMET, thereby the purpose of these funds was not served.

Royalty paid on Bauxite

2.2.5.12 As per procedure in vogue, in respect of Barima and Kesra Bauxite mines the Company deposits royalty in advance with mining branch of the Ambikapur Collectorate based on the previous month's production/quantity transported as per the transit passes. The Company was issued transit passes against the advance payment of royalty. The year wise detail of royalty for the last five years ended 31 March 2016 as given in ***Annexure - 2.2.3*** revealed that the advance royalty paid by the Company was always more than the royalty due and though the mining operations were not carried out during the years 2012-13, 2013-14 and 2015-16 (after August 2015) the Company did not claim refund of excess royalty lying with the mining department. This has resulted in blocking up of the Company's funds of ₹ 22.16 lakh.

The Government stated (November 2016) that the excess royalty deposited will be adjusted in due course of time after commencement of Bauxite mines.

The reply confirms that payment of royalty was made without proper assessment of actual royalty payable leading to blocking up of Company's funds.

Mining of Iron-ore

2.2.6 The mining of Iron ore, an essential raw material for Iron & steel industry is arguably of prime importance among all mining activities undertaken in the Country. As per the data of IBM year book 2014 published in July 2016, as on 1 April 2010 the Chhattisgarh State alone accounted over 11.12 *per cent* (900.11 million tonnes) of the total reserves (8093.55 million tonnes) available in the Country.

Memorandum of Understanding with SAIL for development and exploitation of Iron-ore deposit

2.2.6.1 GoCG granted (23 March 2011) prospecting licence for undertaking prospecting for Iron ore over an area of 1909.04 hectare around Sahaspur-Lohara area (Eklama Iron-ore deposit) in Kabirdham District to the Company. As per estimate of Directorate of Geology and Mining, Chhattisgarh, Eklama Iron-ore deposit had an estimated Iron ore reserve of 100 million tonnes. Further, the Company estimated that it could earn minimum of ₹ 900 crore to ₹ 1000 crore per annum if the Iron ore deposit is developed through a Mine Developer cum Operator.

Audit observed that the Steel Authority of India (SAIL) requested (29 September 2011) the Chief Minister, Chhattisgarh for development of the Eklama Iron ore deposit through Joint Venture route with the Company. The Company signed Memorandum of Understanding (MoU) with SAIL on 2 November 2012 for development and exploitation of Iron-ore deposit. As per terms of MoU, SAIL was also to undertake other developmental and welfare activities for the benefit of the local population including laying of railway line, establishment of Engineering College and Medical College etc. The draft Joint Venture Agreement (JVA) was submitted by SAIL (30 November 2012

and 14 September 2013), however, as consensus could not be arrived at, the JVA could not be finalised

In order to expedite the formation of JVC a high level committee was constituted (29 January 2014) comprising of Additional Chief Secretary (Finance) and Chairman of the Company, Director (Finance) SAIL and Secretary, Mineral Resource Department, GoCG. SAIL submitted (26 April 2014) a final draft JVA to the Company after incorporating the suggestions of the high level committee. However, the BoD of the Company did not consider the draft JVA and decided (24 July 2014) to terminate the MoU citing delay in finalisation of JVA on the part of SAIL. No reason was assigned for not considering the final draft submitted by SAIL after incorporating the suggestions of high level committee in which Chairman of the Company was a member. The Company terminated (26 September 2014) the MoU and applied (23 June 2015) to GoCG for grant of mining lease which has not been received so far (November 2016). The Company could not commence the mining of Iron-ore till date as a result of which ₹ 5.45 crore expenditure incurred by the Company between January 2012 and December 2014 on exploration of Eklama Iron-ore deposit remained blocked. As the Company did not implement the MoU with SAIL despite submission of final draft JVA by SAIL after incorporating the suggestions of the high level committee and delayed the submission of application for mining lease of Iron ore, the Company lost the opportunity to exploit the estimated Iron ore reserve of 100 million tonnes.

The Government stated (November 2016) that despite all efforts by the Company, SAIL failed to finalise the terms and conditions of JVA as a result the MoU was terminated. Further, as the expenditure incurred for prospecting work was necessary for obtaining mining lease and performing mining activities, the same is not blocked.

The reply is not acceptable because SAIL submitted (26 April 2014) final draft JVA after incorporating the suggestions given by the high level committee in its meeting held on 16 April 2014. However, BoD of the Company terminated (26 September 2014) the MoU without considering the final draft of JVA. Further, after obtaining prospecting licence on 23 March 2011, the Company applied for mining lease only on 23 June 2015 after lapse of more than four years which is yet to be granted. As a result the expenditure incurred by the Company remained blocked.

Mining lease of Iron ore

2.2.6.2 The Company submitted (20 May 2011) application to GoCG for obtaining mining lease of Iron ore in Aaridongiri area in Kanker District. The GoCG recommended (4 September 2014) the application to Ministry of Mines, GoI for granting of mining lease after 39 months against prescribed time limit of 12 months from the date of receipt of application in terms of Rule 63A of Mineral Concession Rules, 1960. The delay of 27 months occurred mainly due to delay on the part of the Company in submission of pre-feasibility report in accordance with instructions (19 March 2010) of IBM to categorise the mineral reserves as per UNFC⁶⁴ system and delay in

⁶⁴ United Nations Framework Classification for Fossil Energy and Mineral Reserves and Resources.

correspondence with IBM for estimation of mineral reserves as per UNFC system.

The GoI granted (14 October 2015) approval for grant of mining lease and GoCG instructed (10 November 2015) the Company to submit approved mining plan and environmental clearance within six months. The mining plan was approved (12 July 2016) by IBM and the environmental clearance is under process so far (November 2016).

Thus, approval of GoI for grant of mining lease was obtained with abnormal delay due to failure of the Company to comply with the prescribed requirements of IBM. As a result ₹ 75.30 lakh⁶⁵ expenditure incurred on prospecting work, drilling work and preliminary investigation work remained blocked for a period ranging between four and eight years.

The Government stated (November 2016) that the delay was mainly because of naxal problem, delay in obtaining clarification regarding location of applied area and not adhering to UNFC system in estimation and categorisation of mineral reserves in pre-feasibility report. It was further stated that expenditure incurred was not wasteful because the application for mining lease cannot be made without prospecting report.

The fact remains that the Company submitted application (20 May 2011) for obtaining mining lease without preparing pre-feasibility report in contravention to IBM instructions (19 March 2010) regarding the UNFC system. As a result the approval of GoI for grant of mining lease was delayed and mines remained inoperative till date (November 2016).

Mining of Tin-ore

2.2.7 Tin is used mostly for tin plating, soldering special alloys and in making bronze. As per data of IBM year book 2014 published in May 2016, as of April 2010 the total reserves of tin-ore in India was 7132 tonnes and the entire tin-ore reserves are located in Dantewada District of Chhattisgarh.

Commencement of mining operations of tin-ore

2.2.7.1 The Mineral Resource Department, GoCG granted (6 February 2010) mining lease for tin-ore in Dantewada District and mining lease deed was executed (19 July 2010) with GoCG. As per Rule 28 of Mineral Concession Rules, 1960 (MCR), if mining operations are not commenced within a period of two years from the date of execution of the lease or is discontinued for a continuous period of two years after commencement of such operations, the State Government shall by an order, declare the mining lease as lapsed.

The Company applied (10 May 2012 and 31 January 2014) for extension of mining lease as the mining operations were not commenced due to not obtaining the requisite environmental clearance and consent of land owners. The GoCG granted (12 June 2014 and 24 February 2016) extension of mining lease for the period from 18 July 2012 to 17 July 2014 and 18 July 2014 to 17 July 2016 and directed the Company to commence mining operations within six months from the date of extension.

⁶⁵ ₹ 19.70 lakh on 28 November 2007, ₹ 27.80 lakh on 14 December 2009 and ₹ 27.80 lakh on 29 August 2011.

However, no action was taken by the Company for preparing Environment Impact Assessment Report, a pre-requisite for obtaining environmental clearance, even after elapse of more than 81 months⁶⁶ from the date of obtaining of mining lease. As a result environmental clearance could not be obtained and mining operation of tin-ore has not commenced so far (November 2016).

The Government stated (November 2016) that area is naxal affected and action was not taken for obtaining environmental clearance, which involves huge expenditure, in view of security concerns.

The fact remains that the Company could not commence mining even during the extended period of mining lease as directed by GoCG. Further, the Company was well aware of the issue of huge expenditure involved in obtaining environmental clearance and the naxal problem at the time of obtaining the mining lease and its extension.

Trading of Columbite

Renewal of license for trading of Columbite

2.2.8 Columbite a co-product of tin-ore, has a strategic importance for the Department of Atomic Energy (DAE), GoI. The DAE suggested (July 2001) the Company to procure Columbite from the local Tribals and sell it to DAE. Accordingly, the Company started (March 2002) procurement of Columbite from local Tribals which continued upto January 2008 and it sold 383.50 kg (8 February 2005) to DAE. Further, the Company sold 14895 kg (20 August 2008 and 22 November 2008) Columbite to Vimal Stone Associates⁶⁷ at the rate of ₹ 403.00 per kg⁶⁸. Thereafter, no purchase and sale of Columbite has been done by the Company till date (November 2016).

Audit observed that DAE had given (28 February 2007) license to the Company for trading of 120 tonnes Columbite *per annum* and the license was valid up to 31 January 2010. The Company applied (26 December 2009) for extension of validity of license for further three years. In response DAE instructed (29 January 2010 and 28 September 2010) the Company to submit No Objection Certificate (NOC) from Atomic Minerals Directorate for Exploration and Research, GoI (AMD); the names of the parties with whom the Company had dealt and the end use of Columbite so traded.

However, the Company failed to submit the information/documents timely and approached AMD for NOC only in August 2013. Finally the DAE had given (26 March 2014) license to the Company for three years from 26 March 2014 to 25 March 2017.

Had the Company acted in time for compliance of conditions for renewal of license, the Company could have executed the contract for sale of Columbite for a period of three years from October 2010 to September 2013, since the

⁶⁶ From March 2010 to November 2016.

⁶⁷ Under an agreement (September 2007) which provided for selling of maximum 120 tonnes Columbite per year to Vimal Stone Associates for a period of three years upto September 2010.

⁶⁸ The purchase price of Columbite from local Tribals was at ₹ 310 per kg.

firm (Vimal Stone Associates) had already requested (September 2010) the Company to restart the supply of Columbite for a period of three years.

However, the Company could not extend the agreement period as the validity of its license was not renewed due to failure on its part in submitting documents and obtaining NOC from AMD. Thus, failure of the Company to comply with the conditions for renewal of license for trading of Columbite resulted in loss of revenue ₹ 3.35 crore⁶⁹ during the period (from October 2010 to September 2013).

It was further observed that even after getting license from the DAE for the period from 26 March 2014 to 25 March 2017, the Company did not commence the trading of Columbite so far (November 2016) despite elapse of 32 months, the reason for which was stated to be unavailability of qualified and experienced Safety Officer and Radiological Safety Officer.

The Government stated (November 2016) that correspondence was made with DAE regularly for the renewal of licence and after obtaining the licence, procurement was not done because the terms and conditions for appointment of qualified and experienced Safety Officer and Radiological Safety Officer was not relaxed by DAE.

Reply is not acceptable as the Company approached AMD to provide NOC only in August 2013 after elapse of about three years. Further, while applying (26 December 2009) for licence the Company assured DAE for appointment of qualified and experienced Safety Officer and Radiological Safety Officer. However, these officers were not recruited by the Company which is a pre-requisite for obtaining the license for trading of columbite.

Compliance to the Environmental and other Regulations

2.2.9 In order to minimise the adverse impact on the environment, the Government of India (GoI) had enacted various Acts and Statutes. At the State level, Chhattisgarh Environment Conservation Board (CECB) is the regulatory agency to ensure compliance with the provisions of these Acts and Statutes. The Ministry of Environment and Forest (MoEF) and Central Pollution Control Board (CPCB) are also vested with powers under various Statutes.

As per the conditions of consent to operate mines granted by CECB, the Company was required to monitor and record the ambient air quality. Further, as per the agreement for operation of Daldali Bauxite mines (only operational mine of the Company) the contractor was required to take steps to revert/minimise the environmental damage and the consequential effects thereof on property and people by deploying suitable technologies and practices besides plantation of trees and reclamation of mined out area at his cost.

Audit scrutiny revealed that compliance with the provisions of various Acts in operation of mines (such as analysis of ambient air quality, tree plantation in the mined out area etc.) was being made in Barima and Kesra Bauxite mines during their operation. However, during joint inspection (20 May 2016) of

⁶⁹ Total quantity to be sold to the firm for 3 years i.e. 360000 Kg at the rate of ₹ 93.00 per kg (Sale price ₹ 403.00 per Kg – Purchase price ₹ 310.00 per kg) = ₹ 33480000

Daldali Bauxite mine by audit team with the Company officials, the following deficiencies were observed:-

(i) Air Pollution

Due to various activities of mining operations like drilling, blasting, loading and transportation, emission of some amount of noxious gases are likely to be generated. Air pollution caused by mining and associated activities can be classified into the following categories:-

(a) Gaseous pollutants (Nitrogen Oxide, Sulphur Dioxide and Carbon monoxide); and

(b) Suspended Particulate Matter.

As per National Ambient Air Standards notified (18 November 2009) by CPCB, the level of Sulphur Dioxide, Nitrogen Dioxide and Particulate Matter of size less than 2.5 *micro gram per cubic metre* (μm^3) during a year should not exceed 50 μm^3 , 40 μm^3 and 40 μm^3 respectively. However, during joint inspection it was observed that no analysis was being carried out by the contractor to assess the ambient air quality.

(ii) Noise Pollution

Noise Pollution (Regulation and Control) Rules, 2000 aims to regulate and control noise producing and generating sources with the objective of maintaining the ambient air quality standards in respect of noise. Accordingly, the levels of sound was fixed as 75 dB(A) Leq⁷⁰ during day time and 70 dB(A) Leq during night time for industrial area. Further, as per the approved mining plan, in order to protect the workers from exposure to higher noise levels ear plugs and air tight operation cabins were to be provided to the workers. However, during joint inspection it was observed that neither there is system in place for recording /monitoring the noise level nor ear plugs/air tight operation cabins were provided to the workers.

(iii) Tree Plantation

Land degradation is one of the major adverse impacts of open-cast mining and any effort to control adverse impacts would be incomplete without appropriate land reclamation strategy. As per the approved mining plan, after levelling of the mined out land with overburden soil and waste material plantation was to be carried out at the rate of 1000 trees per hectare. However, during joint inspection it was observed that no plantation was done in the mined out area though plantation of 1000 trees per hectare was required to be carried out.

(iv) Safety and security

As per the approved mining plan the lease area was to be properly fenced to prohibit entry of outsiders. However, it was observed that fencing of lease area was not done.

The Government stated (November 2016) that employees were provided with ear plugs and trained about the benefit of the use of ear plugs to encourage

⁷⁰ dB (A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing. Decibel is a unit in which noise is measured. "A", in dB (A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to frequency response characteristics of the human ear. Leq is energy mean of noise level over a specified period.

The Company failed to ensure the compliance of the environmental Regulations in respect of ambient air quality, noise pollution and tree plantation in Daldali Bauxite mine.

them to regularly use the same. It was further stated that 70 per cent survival rate of plantation during 2016-17 will be ensured. Regarding fencing of the lease area, the Government stated that fencing in some area is proposed in order to prohibit the entry of outsiders.

The reply is not acceptable as audit during the joint inspection observed that ear plugs and air tight operation cabins were not provided to workers/staff. Further, no analysis was carried out to assess the ambient air quality. The above deficiencies were also endorsed by the Company officials during the joint inspection. Thus, the Company/contractor failed to comply with the environmental Regulations prescribed under various Acts.

Conclusion

Audit concluded that:

- **The Company did not carry out mining and marketing of minerals on its own and awarded the same to private contractors without any cost benefit analysis of outsourcing of these activities, despite spending substantial portion of its revenue on administrative and employee benefit costs. The pre-mining activities viz preparing feasibility reports, obtaining statutory clearances etc. were also carried out through outsourced agencies.**
- **The Company failed to develop the Coal blocks and commence mining though the milestones for commencement of production were missed by nearly two years to over seven years and substantial expenditure was incurred by the Company on these blocks. The failure was mainly due to inordinate delays in preparation of Geological Reports, delays in applying for various requirements such as mining lease, forest clearance, environmental clearance and land acquisition etc. The directive of the Hon'ble Supreme Court (September 2014) to cancel the allotment of five Coal blocks to the Company rendered the expenditure of ₹ 339.24 crore incurred by the Company for pre-mining works, infructuous.**
- **The Company did not monitor and initiate timely action regarding payments to be made by the contractor under contractual provisions. As a result, the contractor for mining and marketing of Bauxite at Daldali Bauxite mine made payments for the actual quantity mined instead of the monthly scheduled quantity as per agreement and the approved mining plan.**
- **In the contract for mining and marketing of Kesra II, III, IV, Barima VI and Nagadand Bauxite mines, the Company unduly extended the period for completion of pre-mining activities, as a result of which the Company suffered losses.**
- **As the Company did not implement the MoU with SAIL for development of Eklama mine despite submission of final draft JVA by SAIL after incorporating the suggestions of the high level committee and the delayed submission of application for mining lease of Iron ore, the Company lost the opportunity to exploit the estimated Iron ore reserve of 100 million tonnes.**

- **The Company failed to operationalise the Aridongri Iron-ore mine in Kanker District as the mining lease could not be obtained due to failure of the Company to adhere to the standing instructions in preparation of pre-feasibility report.**
- **Failure of the Company to comply with the conditions for renewal of license for trading of Columbite resulted in loss of revenue of ₹ 3.35 crore.**
- **The Company failed to ensure the compliance of the environmental Regulations in respect of ambient air quality, noise pollution and tree plantation in Daldali Bauxite mine.**

Recommendations

Audit recommends that the Company should:

- **Carry out a proper cost benefit analysis regarding execution of various activities related to mining and marketing of minerals departmentally and take appropriate view of the matter.**
- **Initiate timely action for completion of pre-mining activities in mining of ores to expedite revenue earning and avoid loss of revenue on account of inoperative mines.**
- **Explore further options including MoUs with major steel manufacturers to exploit the vast reserves of Iron ore in the State.**
- **Ensure compliance to the terms and conditions of agreement by the contractor regarding payments towards minimum scheduled quantity in respect of Bauxite mining.**
- **Ensure strict compliance to the environmental Regulations prescribed under various Acts.**