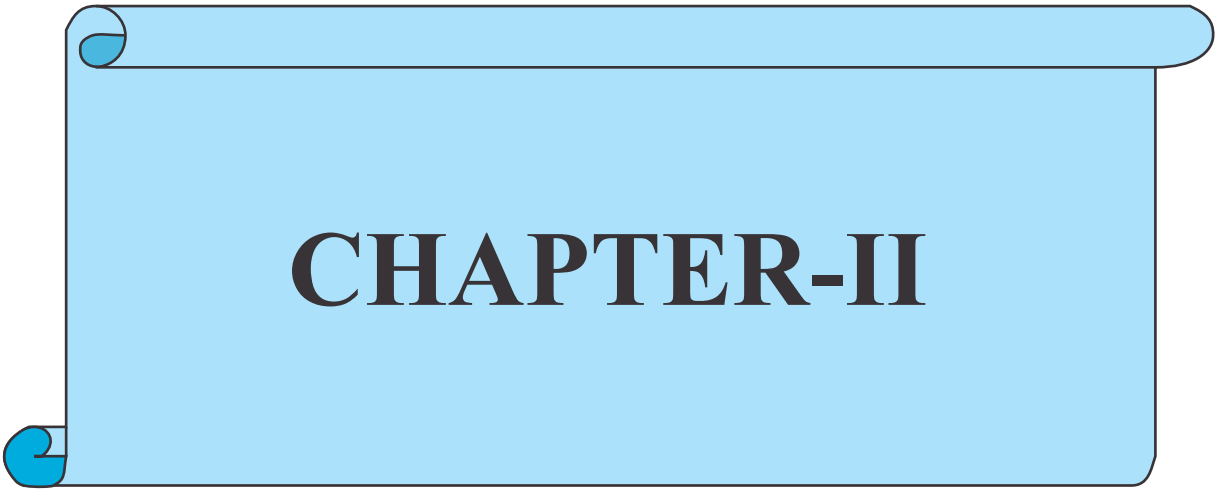

CHAPTER-II

CHAPTER-II

2. Review relating to Government Companies

2.1 Performance Audit on allotment and infrastructure development activities in Madhya Pradesh Audyogik Kendra Vikas Nigam Limited, Bhopal, Indore and Jabalpur

Executive Summary

Introduction

With the main objectives to promote, encourage and develop industries and industrialisation in the state by developing Industrial Areas (IAs)/ Growth Centres (GCs)/ Special Economic Zones (SEZs) by allotting land to needy entrepreneurs, the Government of Madhya Pradesh (GoMP) had incorporated Audyogik Kendra Vikas Nigam Limited (AKVN), Bhopal, Indore and Jabalpur during November, 1987, November, 1981 and November, 1981 respectively as subsidiary companies of Madhya Pradesh State Industrial Development Corporation Limited/ Madhya Pradesh Trade and Investment Facilitation Corporation Limited.

Since inception and upto 31 March 2014, the Commerce, Industries and Employment Department, GoMP acquired and allotted an extent of 19032.60 acres of land free of cost to three AKVNs (Bhopal-6472.59 acres, Indore-10230.49 acres and Jabalpur-2329.52 acres). During 2009-14, these AKVNs incurred ₹ 242.33 crore for creation of infrastructure facilities and allotted land to an extent of 1750.31 acres to 876 allottees and realized ₹ 414.82 crore.

For promotion of industries, the GoMP from time to time has been announcing Industrial Promotion Policy and also framed Allotment Rules/ guidelines to be followed by AKVNs for allotment of land and implementation of projects by allottees.

Performance Audit was conducted by covering three out of seven AKVNs i.e., Bhopal, Indore and Jabalpur.

AKVN, Bhopal

Due to non development of acquired land, the process of allotment slowed down in AKVN.

AKVN did not prepare perspective/ corporate/ annual plans for acquiring, developing and allotment of land/ plots.

AKVN handed over the possession of 18.50 acres of land valued ₹ 9.74 crore and also issued No Objection Certificate to a Concessionaire in violation of terms of agreement for development of Logistic Hub at Mandideep.

AKVN did not recover rebate along with interest of ₹ 1.22 crore from four allottees for failure to invest minimum fixed capital and establishment of mega projects in time.

AKVN did not recover transfer fee and development charges of ₹ 4.56 crore from an allottee inspite of change in shareholding pattern/constitution of the allottee unit.

AKVN charged lesser rate than the prescribed rate as per Collector's guidelines for allotment of land to an allottee resulting in loss of revenue of ₹ 20.91 crore.

AKVN also incurred loss of revenue of ₹ 1.40 crore on account of non-charging of prevailing land rates and non-levy of additional premium.

AKVN, Indore

As against completion of civil works in respect of Crystal IT Park, Indore in December 2004 at an estimated expenditure of ₹ 55.57 crore, the work was completed in March, 2014 at a cost of ₹ 118.47 crore.

AKVN incorrectly allowed rebate of ₹ 2.92 crore on additional land premium collected from 21 allottees of prime location plots in deviation of Rebate Policy for allowing rebate on lease premium for establishing Mega Projects.

AKVNs did not recover rebate along with interest of ₹ 10.39 crore from 11 allottees for failure to invest minimum fixed capital and establishment of mega projects in time.

AKVN do not have any mechanism for monitoring utilisation of land allotted and enforcement of environmental protection clause

Delayed implementation of Allotment Rules/ decision for levying development charges resulted in loss ₹ 6.92 crore.

Due to fixation of maintenance charges below the prescribed norm of two per cent resulted in loss of ₹ 48.85 lakh from 134 allottees.

AKVN, Jabalpur

AKVN incurred ₹ 5.23 crore on development of SEZ, Hargarh against the opinion given by Transaction Advisor and without identifying a Co-developer.

AKVN irregularly allotted land to three allottees outside the industrial premises for residential use in excess of eligible limits.

AKVN incurred loss of revenue of ₹ 45.48 lakh due to non-levy of additional premium on 15 allottees and non collection of development charges from eight transferees.

Introduction

2.1.1 With the main objectives to promote, encourage and develop industries and industrialisation in the state of Madhya Pradesh by developing Industrial Areas (IAs)/ Growth Centres (GCs)/ Special Economic Zones (SEZs) by allotting land to needy entrepreneurs, the Government of Madhya Pradesh (GoMP) under the Administration of Commerce, Industries and Employment (C, I & E) Department had incorporated seven State Public Sector undertakings viz., Audyogik Kendra Vikas Nigam Limited (AKVN), Bhopal, Indore, Jabalpur, Gwalior, Rewa, Ujjain and Sagar as subsidiary companies

of Madhya Pradesh State Industrial Development Corporation Limited (MPSIDC).

On directions from GoMP and due to change in investment pattern, all AKVNs have become subsidiary companies of Madhya Pradesh Trade and Investment Facilitation Corporation Limited (TRIFAC) from 2011-12 to 2013-14.

The C, I & E Department acquires and allots the required land for industrialisation to AKVNs free of cost. Up to March, 2014, land measuring 28419.51 acres was acquired and allotted to seven AKVNs (Bhopal-6472.59 acres; Indore-10230.49 acres; Jabalpur- 2329.52 acres; Rewa-1842 acres; Ujjain-643.11 acres; Sagar-887.60 acres and Gwalior-6014.20 acres). The lease premium (cost of land) collected from allottees are payable to GoMP.

For promotion of industries, the GoMP has been announcing Industrial Promotion Policy (IPP) from time to time (2004 as amended in 2007, 2010 and 2012), which provided for an overall approach towards development and up gradation of infrastructure to enable optimum utilisation of State's resources. Under the above policy, GoMP extended fiscal benefits to small, medium & large industries, Mega Projects and Women and Scheduled Caste/Scheduled Tribe entrepreneurs. The GoMP had also framed Allotment Rules (1974 amended in 2008) containing rules/ guidelines and procedures to be followed by AKVNs for allotment of land and implementation of projects by allottees.

As there was a risk of non-adherence from laid down allotments rules/guidelines and procedures resulting in loss of revenue to AKVNs and state exchequer, there was a need to conduct a Performance Audit on allotments and infrastructure development activities undertaken by three (Bhopal, Indore and Jabalpur) out of seven AKVNs.

AKVNs were incorporated during November, 1987 (AKVN, Bhopal) and November, 1981 (AKVN, Indore and Jabalpur). The details of land acquired, allotted, expenditure incurred on development, lease premium etc., realised and net profit earned during 2009-14 are tabulated below:

Name of AKVN	Land acquired (in acres)	Development Expenditure (₹ in crore)	Land allotted		Lease Premium etc. (₹ in crore)	Net Profit (₹ in crore)
			No. of allotments	Area (in acres)		
Bhopal	3137.50	77.20	205	607.11	99.20	9.03
Indore	1847.36	115.61	437	769.60	289.76	100.26
Jabalpur	736.00	49.52	234	373.60	25.86	4.22
Total	**5720.86**	**242.33**	**876**	**1750.31**	**414.82**	**113.51**

The Management of AKVNs is vested in the Board of Directors (BoD) headed by the Chairman appointed by GoMP and the Managing Director (MD). MD is the Chief Executive of AKVN and is assisted by Chief General Managers/ General Managers, Executive Engineers and Accounts Officer in the development, technical and accounts wing respectively.

Audit objectives

2.1.2 The objectives of Performance Audit were to assess whether:

- The targets for acquisition, development and allotment of land were made in line with objective of infrastructure creation and industrial development;
- The land allotment process was transparent, uniformly applied in accordance with Allotment Rules and Regulations, Guidelines etc., and
- The pricing of land/ lease premium/development charges are fixed in accordance with pricing policy and maintenance charges/lease rentals were realised in time.

Audit Criteria

2.1.3 We adopted the following sources of audit criteria:

- The Madhya Pradesh Industrial (Shed, Plot and Land Allotment) Rules, 1974 (Allotment Rules, 1974) and Madhya Pradesh Industrial Land and Industrial Building Management Rules, 2008 (Allotment Rules, 2008).
- Decisions, orders and policy guidelines of GoMP/ MPSIDC and AKVNs for acquisition, allotment and fixation of lease premium, lease rentals, development charges etc.
- Terms and conditions of agreements/ Memorandum of Understandings (MOUs) with developers/ GoMP and terms and conditions for land allotment; and
- Industrial Policy and Scheme guidelines issued by GoMP/ Government of India (GoI) and decisions of BoD, instructions and circulars issued from time to time.

Scope and Methodology of Audit

2.1.4 A Performance Audit on Creation and Development of Infrastructure Facilities by MPAKVNs was last conducted and included in Audit Report (Commercial) for the year ended 31 March 2005 which was discussed during October, 2007 by Committee on Public Undertakings (COPU) and no recommendations were received so far (October, 2014). Performance Audit on allotment and infrastructure development activities was conducted by covering three out of seven AKVNs. Our audited sample of 341 allotments (Bhopal-91, Indore-152 and Jabalpur-98 i.e., 38 *per cent*) out of 876 allotments involved 1173 acres of land out of total 1750.31 acres allotted during 2009-14.

The scope and objectives of Audit were explained to Government/ AKVNs in an entry conference held in May, 2014. The Performance Audit was conducted between April and July, 2014 by scrutinising records at Corporate Offices of AKVN's, including notifications and orders issued by GoMP/ Commerce, Industries & Employment Department and Revenue authorities, records relating to development and implementation of individual projects/ schemes, minutes of meetings of AKVN's BoD and other related documents.

Audit findings arising out of audit were reported (September, 2014) to GoMP and AKVNs and the replies of AKVN Indore and Government in respect of AKVN Bhopal and Jabalpur were received during November, 2014. The draft Performance Audit Report was discussed with the Principal Secretary (Commerce, Industries & Employment Department) and MDs of AKVNs in the Exit Conference held on 22 November 2014 and the views of the Government/ AKVNs have been incorporated appropriately.

Audit Findings

2.1.5 AKVN-wise audit findings/ deficiencies and deviations noticed in allotment of land and implementation of projects by allottees are discussed in the succeeding paragraphs.

Audyogik Kendra Vikas Nigam Limited, Bhopal

2.1.6 The AKVN is not directly involved in the process of land acquisition for development of industrial areas (IAs)/ growth centres (GCs) or any other industrial parks/ industrial clusters/ complexes etc. and draw their entire land bank from C, I & E Department, GoMP free of cost. After acquisition of land, the works on infrastructure development and creation of facilities like construction of roads, provision for water supply, electrification, common utility buildings etc. are undertaken by the civil wing of AKVN and plots demarcated accordingly.

AKVN adopted land allotment procedures as laid down in Allotment Rules, 1974 up to June 2009 and with effect from July, 2009 onwards the Allotment Rules, 2008 was adopted. The Co-ordination and Review Committee of AKVNs comprising of Chairman (MD,TRIFAC) and MDs from AKVNs (members) also issues guidelines on price fixation, development charges etc. and other clarifications as sought by AKVNs from time to time.

Land development and allotments by AKVN, Bhopal

2.1.7 As of March, 2014, AKVN acquired 6472.59 acres of land since inception. During 2009-14, AKVN acquired 3137.50 acres of land from GoMP and entire land acquired was under development. AKVN incurred ₹77.20 crore during 2009-14 for creation of infrastructure facilities in IAs/ GCs. AKVN allotted both developed and undeveloped land to an extent of 607.11 acres to 205 allottees and realised ₹ 99.20 crore. A year-wise profile of acquisition and allotment during 2009-14 is given in ***Annexure 2.1.1***.

Non-availability of sufficient developed land slowed down the pace of allotments

It can be seen from ***Annexure 2.1.1*** that there was drastic fall in number of allotments and area allotted in AKVN after 2009-10 and 2010-11. The number of allotments decreased from 72 to 29 and area allotted also decreased from 248.60 acres to 147.62 acres during 2010-11 to 2013-14 in AKVN Bhopal. We observed that the pace of allotments had slowed down due to non-development of acquired land by AKVNs.

While accepting the audit observation, AKVN stated (November, 2014) that due to non availability of developed land, the land allotments had slowed down and new IAs are now being developed for future allotments.

We also observed that an extent of 42.63 acres of land valued ₹ 18.29 crore was under illegal occupation by hutments/ locals for more than twelve years and no action was taken for eviction.

Non-preparation of Perspective/ Corporate Plans

There was no system in AKVN to prepare corporate plans for acquisition, development and allotment of land

2.1.8 AKVN does not prepare any Perspective/ Corporate or Annual Plans defining both short term and long term plans for acquiring lands for development of IAs and there was also no policy and practice in AKVN to fix targets for allotments of already acquired and developed/ under developed industrial plots and hence audit could not ascertain the achievements with reference to targets.

The GoMP decided (January, 2012) to develop 27 new Industrial Parks (IPs) in the State through AKVNs in three phases (2011-12 to 2016-17). Three IPs viz., SEZ, Acharpura, IA Bagroda and IA Govindpura proposed to be completed by AKVN Bhopal during first phase (2011-12 and 2012-13) were yet to be completed in spite of huge demand as AKVN had received an advance amount of ₹1.12 crore from 58 applicants (Acharpura-141 plots) and ₹7.15 crore from 244 applicants (Bagroda-347 plots) and one project (IA, Govindpura) was pending development in view of Court Stay order.

The Government agreed (November, 2014) to prepare perspective/ corporate plans in future.

Recommendation: AKVN/ Government shall prepare Perspective/ Corporate plans for development of industrial infrastructure.

Non implementation of Logistic Hub at Mandideep

2.1.9 In order to provide parking and other amenities to needy entrepreneurs, AKVN Bhopal proposed (2008) to develop a Logistic Hub at Mandideep on "Build, own, operate and transfer" basis and entered into a Concession Agreement (July, 2009) with a highest bidder/ Concessionaire (₹ 3.06 crore payable in three annual instalments) on receipt of first instalment of ₹ 1.02 crore. The physical possession of land (12.25 acres and 6.25 acres) was handed over to the Concessionaire on 29 January 2010 in violation of terms of agreement and a lease deed for 6.25 acres was registered (October 2010). As per agreement, the Concessionaire should achieve financial closure within 30 days from the date of agreement and complete the Project within two years. We observed that:

Possession of 18.50 acres of land and NOC was issued to a Concessionaire in violation of terms of agreement

- The Concessionaire had not achieved financial closure and also defaulted in payment of bid premium, lease rentals etc., after execution of agreement and also failed to implement the project till date (October, 2014). AKVN had also issued No Objection Certificates (NOCs) (August/October, 2010) to financial institutions for mortgaging the land even before registering lease deeds, which tantamount to extension of undue favour to Concessionaire.

AKVN failed to invoke Bank Guarantee of ₹ 50 lakh in time

- AKVN failed to invoke Bank Guarantee (BG) (₹ 50 lakh) in July, 2010 itself as the Concessionaire failed to honour payment of second instalment (₹ 1.02 crore) towards land premium.

- In spite of defaults committed by the Concessionaire, AKVN failed to initiate action in time to terminate the agreement and take back the

possession of land. This had not only led to non- development of the Logistic Hub as envisaged but also resulted in doubtful recovery of ₹ 6.72 crore (land premium ₹ 2.04 crore; lease rental ₹ 36.72 lakh; consultancy fee ₹ 15 lakh; damages/interest ₹ 4.16 crore), besides the property rights of 18.50 acres (present value ₹ 9.74 crore) remained under the possession of the Concessionaire.

While accepting the audit observations, the MD during Exit Conference stated (November, 2014) that allotment has since been cancelled and BG forfeited. In this regard, the Principal Secretary directed (November, 2014) AKVN to start tendering process for identifying a new developer.

Non-recovery of rebate for failure to invest minimum fixed capital in Mega Projects

2.1.10 As per IPP, 2004 and terms of lease agreement, in the event of non-investment of minimum fixed capital in the mega projects within three years from the date of allotment of land, the amount of rebate shall be recovered along with 12 *per cent* annual simple interest. However, Apex Level Investment Promotion Committee comprising of Chief Minister of Madhya Pradesh, Minister of Commerce Industry and Employment, Minister of Finance, Chief Secretary and Principal Secretary from concerned department can grant additional time period for completion of project.

Rebate along with interest of ₹ 1.22 crore was not recovered despite allottees failure to establish Mega Projects in time

We observed in respect of four cases that the allottees failed to invest minimum fixed capital investment in their projects within the stipulated period. However, AKVN failed to recover or initiate action for recovery of the rebate along with interest till date (November, 2014). This had resulted in loss of revenue of ₹ 1.22 crore and extension of undue benefit to the allottees ***(Annexure 2.1.2)***. We also observed that AKVN/ Apex Level Committee neither extended the time for implementation of the projects nor the lease deed was cancelled. The possession of the land was also not taken back for further allotment.

While accepting the audit observation, the MD during Exit Conference stated (November, 2014) that the cases were under review and action as per Allotment Rules/ Industrial Promotion Policy would be taken.

Loss of revenue due to non-levy of Transfer fee and Development charges

Transfer fee and development charges of ₹ 4.56 crore was not collected from allottee

2.1.11 As per Allotment Rules, 2008, AKVNs shall collect 20 *per cent* of prevailing lease premium towards transfer fee along with one time development charges. Further, as per Section-19(A) (i) of said rules, in the event of any change in the share holding pattern of the original allottee and if majority shareholder becomes minority shareholder, it shall be treated as transfer.

We observed that even though 100 *per cent* shareholding of an allottee was transferred (April, 2013) to another Company and name of the Company was

also changed, AKVN had not treated the same as transfer which had resulted in loss of ₹ 4.56 crore[1] towards transfer fee and development charges.

During Exit Conference, the Principal Secretary accepted (November, 2014) that there was lack of clarity and agreed to address such anomalies in the proposed new guidelines.

Non- regularisation of land/ plot under possession of allottee

AKVN failed to collect transfer fee of ₹ 1.08 crore and regularization of plot remained pending

2.1.12 The Commercial Tax (CT) Department, GoMP had auctioned (February, 2007) entire assets of an allottee (old allottee) located at IA, Mandideep which were acquired by another allottee (buyer), including plots measuring 134785 sft. The buyer requested (November, 2008 and July, 2009) AKVN Bhopal to transfer and execute lease deed in its favour. Instead, AKVN informed (April, 2009) the buyer to submit a fresh application along with requisite documents and further stated (March, 2014) that after approval of Chairman, the buyer was liable to deposit ₹ 1.08 crore as transfer fee and in case of non submission of required documents and non-payment of Transfer fee within 15 days, the possession of plot would be treated as illegal and got evicted. However, regularisation of allotment and execution of lease deed in their favour was pending (November, 2014) even after lapse of five years.

The inaction and delayed process on the part of AKVN had resulted in non receipt of transfer fee of ₹ 1.08 crore besides loss of revenue of ₹21.59 lakh[2] from 2009-14. We further observed that land measuring 144209 sft was under possession of old allottee, against which land measuring 134785 sft was recorded as allotted, there by land to an extent of 9425 sft remained under illegal possession and no action was taken to resurvey and repossess excess land in question.

Government stated (November, 2014) that necessary action would be taken to regularise the land and also to take back the possession of additional land in the illegal occupation of the allottee.

Non-compliance of Chairman's order for collection of re-establishment fees

2.1.13 AKVN allotted (May, 2010) 10050 sqm of land at IA, Mandideep to an allottee for setting up a food processing unit. As the allottee failed to implement the unit within two years, AKVN issued (April, 2012) 60 days notice to the allottee for non commencement of production and default in payment of arrears. Later, the allottee's request (January, 2013) for transfer of lease deed in favour of another allottee was accepted by Managing Director, AKVN Bhopal subject to payment of transfer fee.

We observed that the Chairman of AKVN had issued (August, 2012) instructions that such cancelled plots where production has not commenced

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1 Transfer fee- 1300*60000*20 *per cent*=15600000 and development charges ₹ 60000*500= 30000000

2 Lease rentals (₹ 1.88 lakh), transfer fee (₹ 2.50 lakh), re-establishment fee (₹ 0.63 lakh), development charges (₹ 15.03 lakh) and maintenance charges (₹ 1.55 lakh) = ₹ 21.59 lakh

but the allottee had invested 50 *per cent* or more of proposed project cost, 75 *per cent* of prevailing lease premium shall be recovered towards re-establishment fee for transfer cases. However, AKVN failed to cancel the previous allotment/ lease deed as per Allotment Rules, as a result lost an opportunity to levy and collect re-establishment fee amounting to ₹ 30.15 lakh (10050 sqm X ₹ 400 X 75 *per cent*) as per Chairman's instructions.

Government stated (November, 2014) that the allotment was not cancelled as the allottee had invested almost 25 *per cent* of capital investment in the project and accepted their application for transfer of plot. The reply is not acceptable as AKVN failed to comply with Chairman's order, which was issued prior to acceptance of transfer request.

Absence of monitoring system in AKVN

2.1.14 AKVN does not have any mechanism or monitoring system in place to regularly inspect and report on the implementation of projects, as such the progressive achievements on the status of implementation and employment generated by the units could not be ascertained. Further, an attempt to review No Objection Certificates (NOC) issued by AKVN to various banks/ financial institutions for obtaining loans by allottees by mortgaging AKVN's land for implementation of projects was made. As AKVN did not maintain such information, the audit was unable to ascertain whether the loans obtained through NOCs were utilised for the intended purpose of implementation of projects.

Government stated (November, 2014) that the data/ information was under compilation.

Recommendation: AKVN should strengthen monitoring system to watch attainment of objectives of industrialisation and employment generation.

Incorrect adoption of cost of land

2.1.15 The GoMP directed (February, 2014) AKVN Bhopal to allot 150 acres of undeveloped land to an allottee at Collector's Guidelines rates as applicable during 2013-14 (plus 10 *per cent*) for manufacturing of commercial vehicles. AKVN issued (March, 2014) LoI for allotment of 607287 sqm of land at IA, Bagroda and realised (May, 2014) total cost of ₹ 16.70 crore. The allotment order, possession of land and execution/ registration of lease deed was pending.

AKVN failed to charge one and half time of Collectors guidelines rate for allotment of land to an allottee resulting in loss of ₹ 20.91 crore

We observed that while issuing LoI, AKVN failed to charge prevailing Collector's Guidelines rates of ₹ 563 per sqm as applicable for diverted land (land acquired and utilised for other than agriculture purpose) which was one and a half times of cost of land (₹ 375 per sqm) instead it had charged and collected a concessional rate of ₹ 275 per sqm. This resulted in short collection of ₹ 20.91 crore[3]. Further, due to under valuation of cost of land, AKVN shall also be incurring a loss of ₹ 20.91 lakh per annum towards lease rentals.

[3] 607287 sqm x ₹ 563= ₹ 34.19 crore plus 10 *per cent*= ₹ 37.61 crore less ₹ 16.70 crore= ₹ 20.91 crore

During Exit Conference, the Principal Secretary stated (November, 2014) that to attract large scale/ blue chip industries into the State and for rapid industrialisation, the land at concessional rates were given and the land rates applied to the allottee was as per prevailing Government Rates. The reply is not acceptable as GoMP specifically directed to allot undeveloped land at Collector's guidelines rates which worked out to ₹ 563 per sqm.

Non adoption of prevailing land rates for restoration of cancelled plot

2.1.16 AKVN adopts land rates prevailing as on the date of issue of LoI for calculating lease premium and other charges. As per para IV (iii) of Allotment Rules, the allottee was required to execute lease deed within 30 days from date of issue of LAO and in case of non-execution of lease deed LAO can be cancelled by issuing 30 days notice.

We observed that in respect of one allottee, in spite of cancellation of allotment (July, 2012) for non-compliance of terms of LoI (December, 2008) and interim order (February, 2013) of Chairman of AKVN, allotment was restored (January, 2014), without levying prevailing land rates and AKVN lost an opportunity to levy prevailing land rates resulting in loss of ₹ 1.35 crore.

MD during Exit Conference stated (November, 2014) that allotments cannot be cancelled/ lease deeds cannot be terminated as the cost of land was already recovered and LoIs issued.

The reply is not acceptable as AKVN acceded to the request of the allottees without calculating lease premium and other charges as per requirement of Allotment Rules and thus failed to protect its financial interest.

Loss of revenue due to non levy of Additional Premium

2.1.17 According to para-9(ii) (4) of Allotment Rules, 2008, 10 *per cent* of additional premium shall be charged for corner plots and plots/ buildings located at 80 feet (24 metre) wide road. Further, in case of transfer of plots, if additional premium is not charged from the original allottees, then it shall be levied and collected from the transferees.

Additional premium on corner plots/ 80 feet wide road was not levied resulting in loss of revenue

We observed that AKVN had not charged additional premium of ₹ 4.05 lakh from three allottees on corner plots/ 80 feet wide road. This had resulted in loss of revenue of ₹ 4.54 lakh (Additional Premium - ₹ 4.05 lakh and Lease Rentals- ₹ 0.49 lakh) and AKVN shall continue to incur loss of ₹ 0.12 lakh per annum during the remaining period of lease (***Annexure 2.1.3.***).

Government stated (November, 2014) that demands were raised on two allottees and in respect of one allottee, at the time of first allotment of plot, the rule for collection of additional premium did not exist and the allotted plot was not facing 24 metre wide road.

The reply is not acceptable as the allotted plot linked to 24 meter wide road through the previously allotted plot.

Recommendation: AKVN should ensure charging of additional premium on allotment of road facing/ corner plots.

Audyogik Kendra Vikas Nigam Limited, Indore

Land development and allotments by AKVN, Indore

2.1.18 AKVN acquired 10230.49 acres of land since inception. During 2009-14, AKVN acquired 1847.36 acres from GoMP and entire land was under development. AKVN incurred ₹ 115.61 crore during 2009-14 for creation of infrastructure facilities in IAs/ GCs. AKVN allotted both developed and undeveloped land to an extent of 769.60 acre to 437 allottees and realised ₹ 289.76 crore. A year-wise profile of acquisition and allotment during 2009-14 is given in ***Annexure 2.1.1***.

It can be seen from ***Annexure 2.1.1*** that there was drastic fall in number of allotments and area allotted in AKVN after 2009-10 and 2010-11. The number of allotments decreased from 191 to 58 and area allotted also decreased from 214.86 acres to 161.85 acres during 2010-11 to 2013-14. We observed that the pace of allotments had slowed down due to non-development of acquired land.

While accepting the audit observation, AKVN stated (November, 2014) that due to non availability of developed land and due to less demand, the land allotments had slowed down upto December, 2012 and further land was acquired during 2013 for development of IAs.

We also observed that an extent of 452.75 acres of land valued ₹ 16.50 crore was under illegal occupation by hutments/ locals since 1995 and no action was taken for eviction.

Development of Crystal IT Park, Indore

2.1.19 The GoMP through its IT Policy (1999 and 2006) emphasized development of Information Technology (IT) sector in the State of Madhya Pradesh. The construction of IT Park was originally envisaged to be undertaken by private sector infrastructure development agencies, but could not take off as no positive response for participation/development was received.

As per Detailed Project Report (DPR), the estimated cost (May, 2003) of project was ₹ 85.57 crore[4]. For this purpose, AKVN Indore established (September, 2004) a subsidiary Company titled "Crystal IT Park Indore Limited" and developer status was obtained (September, 2005). However, no activity on development of IT Park as envisaged was undertaken by the subsidiary company and all its business was transacted through books of AKVN Indore. Meanwhile, the civil works awarded (August, 2003) to a contractor was terminated (March, 2007) due to slow progress of work and was later awarded (June/July, 2011) to a State PSU. Up to the end of March, 2014, AKVN had incurred ₹ 118.47 crore towards creation of civil and other infrastructural facilities in Crystal IT Park and constructed 46637.466 sqm of built up space in two IT buildings.

[4] Land in form of equity - ₹ 30 crore; Construction cost - ₹ 49.57 crore and Other Expenses - ₹ 6 crore

In this connection we observed that:

- Between June, 2012 and June, 2014, out of 46637.466 sqm of super built up area only 13610.206 sqm (30 *per cent*) was allotted to five IT Companies and balance 70 *per cent* of allocable area remained vacant due to lack of demand.

As against an estimated cost of ₹ 55.57 crore on civil works, AKVN incurred ₹ 118.47 crore

- As against completion of civil works in December, 2004 at an estimated expenditure of ₹ 55.57 crore, the work was completed in March, 2014 at a cost of ₹ 118.47 crore. Due to time and cost overrun, AKVN incurred additional expenditure of ₹ 62.90 crore. AKVN realised lease rentals of ₹ 2.74 crore during June, 2012 to June, 2014.

- After obtaining (September, 2005) developer status AKVN failed to rework out cost benefit analysis and feasibility of the project.

AKVN stated (November, 2014) that due to unwarranted and unexpected situations, the planning was disturbed and the costs increased due to provision of high quality works. During Exit Conference, MD further stated (November, 2014) that available open plots/ area would also be sold to recover the costs.

The reply is not acceptable as after obtaining developer status, AKVN failed to re-work out the feasibility of project. Further due to lack of demand and time and cost overrun, it is not clear as to how the benefits of IT will accrue to State and costs recovered thereon.

Recommendation: AKVN should work out the feasibility of the projects, whenever projects with huge investment are undertaken.

Rebate under Mega Projects Scheme

2.1.20 As per GoMP guidelines (July, 2006) and IPP, 2010, a rebate of 75 *per cent* on land premium shall be allowed upto five acres of land where fixed capital investment in the project ranges between ₹ 25 and ₹ 50 crore and upto 10 acres where investment ranges between ₹ 50 and ₹ 100 crore.

AKVN allotted (December, 2012) 10 acres of land to an allottee in IA, Meghnagar and allowed land rebate on five acres as its proposed fixed capital investment was ₹ 37.10 crore. The allottee further proposed to enhance the production capacity and increase fixed capital investment up to ₹ 54.09 crore and requested (March, 2013) for additional land and AKVN allotted (October, 2013) additional 8.1 acres of land. We observed that as per the total fixed capital investment, the allottee was eligible for rebate on 10 acres of land, whereas, AKVN allowed rebate on 13.1 acres[5], resulting in extension of excess rebate on 3.1 acres amounting to ₹ 60.19 lakh[6].

AKVN stated (November, 2014) that the rebate was extended because the claim was under two separate projects. Even if the reply of AKVN is accepted on two separate projects, the allottee was entitled for a rebate on first project only.

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5 5 acres (initial allotment)+ 8.1 acres (additional allotment)

6 [12,160 sqm (32,400 – 20240) * ₹ 660 (600 + 60) * 75 *per cent*].

Ineligible rebate allowed on prime location plots

2.1.21 As per the Clause-9(ii) (4) of Allotment Rules, 2008, 10 *per cent* additional premium on cost of land shall be levied for prime location plots abutting 80 feet main road and corner plots in the IAs.

Extension of land rebate on additional premium resulted in loss of revenue of ₹ 2.92 crore

We observed that AKVN Indore extended rebate to allottees of mega projects not only on lease premium but also on additional premium, whereas AKVN Bhopal and Jabalpur extended rebate on lease premium only. Thus, extension of rebate on additional premium by AKVN Indore had resulted in loss of ₹ 2.92 crore on 21 allotments of mega projects (***Annexure 2.1.4***).

While accepting the audit observation, the Principal Secretary during Exit Conference stated (November, 2014) that uniform procedure by all AKVNs shall be followed and further instructed AKVN Indore to review such cases.

Non-recovery of rebate for failure to invest minimum fixed capital in Mega Projects

AKVN did not recover rebate along with interest amounting to ₹ 10.39 crore despite allottees failure to establish Mega Projects in time

2.1.22 We observed that in respect of 11 cases, the allottees failed to invest minimum fixed capital investment in their projects within the stipulated period and AKVN failed to recover rebate along with interest of ₹ 10.39 crore till date (November, 2014)***(Annexure 2.1.2)***.

While accepting the audit observation, the MD of AKVN during Exit Conference stated (November, 2014) that the cases were under review and action as per Allotment Rules/ Industrial Promotion Policy would be taken.

Non-extension of rebate to Women/ Scheduled Caste/ Scheduled Tribe entrepreneurs

2.1.23 As per para 9(ii) 5 of Allotment Rules, 2008 rebate at 25 *per cent* on land premium cost is allowed to women entrepreneurs, scheduled caste/ scheduled tribe entrepreneurs, ex-servicemen etc., whose shareholding in industry is 100 *per cent*.

We observed that AKVN did not extend rebate on land premium of ₹ 26.48 lakh to 25 allottees (24 Women entrepreneurs- and one Scheduled Caste).

During Exit Conference, the Principal Secretary directed (November, 2014) AKVNs to comply with the Allotment Rules while allowing rebate.

Irregularities in leasing out of Common facilities at Food Park

2.1.24 In order to safeguard the produce/ crop of farmers and to encourage establishment of food processing industries in the State of Madhya Pradesh, AKVN between 2001 and 2011 established food park at Nimrani with common facilities like Cold Storage (CS), Milk Chilling Plant (MCP) at a cost of ₹ 13.10 crore and was leased out to a private party for a period of five years.

In this connection, we observed that:

- Due to absence of penal clause for delay in depositing lease rents in the lease agreements, the lessee delayed remittance of lease rentals ranging from 107 to 538 days in respect of CS and MCP. This had led to accumulation of dues by ₹ 19.65 lakh upto the end of March, 2014.

- AKVN collects three times of Annual lease rentals towards Security Deposit (SD) from lessees for other allotments. However, while leasing out common facilities, the AKVN did not adopt uniform procedure and collected SD either on adhoc basis or at one time of Annual lease rentals. This had resulted in short collection of SD by ₹ 7.50 lakh.

- The common facilities at Nimrani were under insured by lessee and were not in the joint name of AKVN.

While accepting the audit observations, the MD during Exit Conference agreed (November, 2014) to rectify the shortcomings/ lacunae in future lease agreements.

Recommendation: AKVN shall incorporate penal clause in the lease agreements and obtain adequate insurance cover to protect its financial interest and assets.

Non-monitoring of utilisation of land and non enforcement of Environmental Protection Clause

2.1.25 As per lease agreement, the allottees shall utilise complete land leased out to them for implementation of the project within a period of three years in case of Small Scale Industries and five years in case of Medium & Large Scale Industry from the date of taking over possession of the land and shall surrender the surplus/ unutilised land to AKVN. In case of failure to surrender the surplus land, the allottees shall pay fifteen times of the lease rentals annually from the date of expiry of implementation period.

We observed that there was no system in place in AKVN to obtain field reports to ascertain that the 100 *per cent* land allotted was utilised for stated purpose. In the absence of this information, audit could not vouchsafe compliance of the stated clause.

Further, as per Allotment Rules, 2008, the allottees shall plant and maintain trees in at least 10 *per cent* of the land allotted (50 trees per ha as per Allotment Rules 1974) to them and shall not do anything adversely affecting the environment. In case of default, the allottees were liable to pay a penalty at 10 *per cent* of the premium amount to AKVN.

We observed that AKVN neither obtained field inspection reports to watch the implementation of environmental protection clause nor levied penalty for non-plantation by any allottee.

During Exit Conference, the Principal Secretary directed (November, 2014) AKVN to look into such deviations and also stated that revised guidelines in this regard would be issued.

Short collection of Development Charges

2.1.26 As per Annexure-A of Allotment Rules, 2008 which came into effect from July, 2009, AKVN shall collect 25 *per cent* of lease premium as one time development charges. Further, as per clarifications (October, 2009) received from Commissioner of Industries, the rate fixed for allotment of land including development charges by the BoD of AKVN shall not be lower than the rate recommended in the Allotment Rules, 2008. The Co-ordination and Review Committee of AKVNs also resolved (June 2011) to recover

capital costs incurred on development and decided to charge a minimum of ₹ 300 per sqm from allottees of AKVN Indore and Bhopal w.e.f. 1 July 2011.

We observed that:

Delayed implementation of Allotment Rules/ decision for levying development charges resulted in loss of ₹ 6.92 crore from 175 allottees

- Unlike other AKVNs under review who had implemented these rules promptly in July 2009, AKVN, Indore commenced levy of development charges from the allottees after one year with effect from 29 July 2010 onwards which had resulted in non levy of development charges of ₹ 4.34 crore from 143 allottees.

- AKVN had implemented the decision of the Co-ordination and Review Committee to charge ₹ 300 per sqm belatedly (26 July 2012) due to which an amount of ₹ 2.58 crore was short recovered from 32 allottees during the period from 1 July, 2011 to 25 July, 2012.

During Exit Conference, the Principal Secretary directed (November, 2014) AKVN to recover development charges.

Recommendation: AKVN shall implement Allotment Rules/ Government decisions/ orders promptly to avoid loss of revenue.

Lower fixation of Maintenance Charges

2.1.27 As per Annexure A (I) of Allotment Rules, 2008 maintenance charges (MC) should be levied at two *per cent* of lease premium. Further, as per the clarifications received (October, 2009) from the Commissioner of Industries, rate fixed by the BoD of AKVN should not be less than the rate fixed by the GoMP.

Fixation of MC lower than the prescribed norm resulted in loss of ₹ 48.85 lakh

We observed that AKVN had under recovered maintenance charges of ₹ 48.85 lakh from 134 allottees.

Government stated (November, 2014) that MC were already higher than the rates charged by District Trade and Industry Centre and concerned BoD was empowered to fix such charges.

The reply is not acceptable as MC was not fixed in accordance with Allotment Rules, 2008 and were lower than the recommended norm of two *per cent.* During Exit Conference, the Principal Secretary directed (November, 2014) AKVN to review such cases.

Non-recovery of outstanding dues from allottees of IAs/ GCs

2.1.28 As per the lease agreements entered into with the allottees/ units of IAs/ GCs, the annual lease rentals along with other charges such as water, maintenance etc., are recoverable subject to revisions. In case of delay in payments, penal interest at 12 *per cent* per annum is leviable.

An amount of ₹ 26.92 crore remained outstanding from 1024 allottees

We observed that dues recoverable as at the end of March, 2014 stood at ₹ 26.92 crore from 1024 allottees, out of which ₹ 7.89 crore (29 *per cent*) was outstanding from 40 allottees for more than three years. And in respect of 126 cases outstanding dues even exceeded the security deposit held. We further observed that AKVN was recognising recovery of dues on cash basis and the true and fair picture of accumulation of dues was not reported to BoD.

AKVN stated (November, 2014) that action is being initiated for recovery of dues by issuing notices. During Exit Conference, the Principal Secretary directed (November, 2014) AKVN to accelerate recovery process and minimise outstanding dues before they become bad/ doubtful.

Audyogik Kendra Vikas Nigam Limited, Jabalpur

Land development and allotments by AKVN, Jabalpur

2.1.29 AKVN acquired 2329.52 acres of land since inception. During 2009-14, AKVN acquired 736 acres from GoMP and entire land was under development. AKVN incurred ₹ 49.52 crore during 2009-14 for creation of infrastructure facilities in IAs/ GCs. AKVN allotted land to an extent of 373.60 acre to 234 allottees and realised ₹ 25.86 crore. A year-wise profile of acquisition and allotment during 2009-14 is given in ***Annexure-2.1.1***.

It can be seen from ***Annexure-2.1.1*** that there was drastic fall in number of allotments and area allotted AKVN after 2009-10 and 2010-11. The number of allotments decreased from 57 to 55 and area allotted also decreased from 141.29 acres to 37.71 acres during 2010-11 to 2013-14.

While accepting the audit observation, AKVN replied (June 2014) that all out efforts are being made to allot land/plots to needy entrepreneurs.

Establishment of SEZ, Hargarh without identifying a co-developer under Public Private Partnership (PPP)

2.1.30 AKVN Jabalpur decided (December, 2007) to establish a sector specific SEZ for mineral & mineral based products at Hargarh, District Jabalpur in 101.21 hectare of land under PPP mode at an estimated cost of ₹165.79 crore[7]. After obtaining approval (March, 2008) from GoI, the Project Report was got prepared (December, 2009) from Transaction Advisor (TA). The TA had stressed for development of non-processing areas also within the SEZ to ensure its feasibility and further opined (July, 2010) that due to unfavourable market conditions/ recession, the project had negative implications and thus advised (August, 2010) to shelve SEZ project.

AKVN incurred ₹ 5.23 crore on development of SEZ at Hargarh inspite of adverse opinion of TA and without identifying a co-developer

We observed that AKVN without identifying the co-developer and without preparing its own cost benefit analysis/ viability, continued development of SEZ and incurred ₹ 5.23 crore (Assistance to States for Development of Export Infrastructure and Allied Activities ₹ 4.96 crore) up to March, 2014 on various development works. Thus, development of SEZ project in spite of knowing its adverse sustainability and without identifying Private Promoters had resulted in idling of funds.

While accepting the audit observation, the MD during Exit Conference stated (November, 2014) that de-notification of SEZ was under process and after de-notification land shall be allotted to needy entrepreneurs and costs recovered.

[7] Private Promoters contribution (51 *per cent*- ₹ 84.55 crore), Government land (₹ 12.50 crore), State/Central subsidy (₹ 66.32 crore) and loans/others (₹ 2.42 crore).

Non-recovery of rebate for failure to invest minimum fixed capital in Mega Projects

AKVN did not recover rebate along with interest amounting to ₹ 16.14 lakh despite allottees failure to establish Mega Project in time

2.1.31 We observed that an allottee failed to invest minimum fixed capital investment in the project within the stipulated period and AKVN failed to recover rebate along with interest of ₹ 16.14 lakh till date (November, 2014)***(Annexure 2.1.2)***.

While accepting the audit observation, the MD during Exit Conference stated (November, 2014) that the cases were under review and action as per Allotment Rules/ Industrial Promotion Policy would be taken.

Irregular allotment of land for residential use

Allotment of land for residential use beyond eligible limits outside the industrial premises was irregular

2.1.32 As per Section 6 (V) of Allotment Rules, 2008, an allottee can construct residential building within the allotted industrial plots for labour/ technical staff on three *per cent* of allotted area or 3000 sft (279 sqm) whichever is less. The area to be allotted for residential use was revised (February 2010) to five *per cent* and was limited to five acres.

We observed that AKVN between January and September, 2010 allotted land in excess of eligible limits to three allottees in IA, Borgaon outside the industrial area allotted to them for residential use. As against an eligible area of 279 sqm, 1200 sqm and 1200 sqm to be allotted to these allottees, AKVN allotted 10000 sqm, 2000 sqm and 1500 sqm which were in excess by 9821 sqm, 800 sqm and 300 sqm respectively.

During Exit Conference, the MD agreed (November, 2014) to review such cases as per Allotment Rules.

Loss of revenue due to non levy of Additional Premium

Additional premium on corner plots/ 80 feet wide road was not levied resulting in loss of revenue of ₹ 22.75 lakh

2.1.33 We observed that AKVN had not charged additional premium of ₹ 22.75 lakh from 15 allottees and AKVN shall continue to incur loss of ₹ 0.64 lakh per annum during the remaining period of lease (***Annexure 2.1.3)***.

Government stated (November, 2014) that demands were raised on three allottees and in respect of other allotments plots were not facing main road/ corner plots.

The reply is not acceptable since the plots were either abutting service roads adjoining state highway or 80 feet (24 metre) wide road as per supporting documents.

Short collection of Development Charges

2.1.34 As per clarifications issued (29 April, 2011) by GoMP, the development charges should be recovered from transferees, in case where it was not recovered from transferor i.e., previous allottee. We observed that in respect of eight transferees, AKVN failed to collect development charges of ₹ 22.73 lakh.

During Exit Conference, the Principal Secretary directed (November, 2014) AKVN to review all such cases.

Conclusion

- **Due to non development of acquired land, the process of allotment slowed down in AKVNs.**
- **AKVNs did not prepare perspective/ corporate/ annual plans for acquiring, developing and allotment of land/ plots.**
- **AKVNs deviated from Industrial Promotion Policy and Allotment Rules and allowed rebate on prime location plots. Further, rebate along with interest was not recovered from allottees for failure to invest minimum fixed capital in mega projects.**
- **There was no system in AKVNs to monitor complete utilisation of land and enforcement of environmental protection clause by obtaining field reports. Further, AKVNs did not maintain data on implementation of projects and status of No Objection Certificates issued to bankers for obtaining loans by mortgaging AKVN's land.**
- **AKVNs incurred loss of revenue due to non levy of prevailing land rates, non levy of additional premium on prime location plots, short collection of development charges and lower fixation of maintenance charges.**

2.2 Performance Audit on Implementation of Restructured Accelerated Power Development and Reforms Programme in three Power Distribution companies of Madhya Pradesh.

Executive summary

Introduction

Government of India (GoI), Ministry of Power (MoP), launched Restructured Accelerated Power Development and Reforms Programme (R-APDRP) in July 2008 as a central scheme in Eleventh plan (hereinafter referred as Scheme) to reduce Aggregate Technical and Commercial (AT&C) losses on sustainable basis to 15 per cent and to establish reliable and automated systems, for collection of accurate base line data, and to adopt Information Technology (IT) for energy accounting/auditing.

The scheme was implemented in three power distribution companies i.e. Madhya Pradesh Poorv Kshetra Vidyut Vitaran Company Limited (Eastern discom), Madhya Pradesh Madhya Kshetra Vidyut Vitaran Company Limited (Central discom), and Madhya Pradesh Paschim Kshetra Vidyut Vitaran Company Limited (Western discom) of Madhya Pradesh state. The important discom wise audit findings noticed are detailed as below.

Eastern discom

Discom did not complete the Part A project of the scheme within specified period due to poor implementation by Information Technology Implementing Agency (ITIA). This made GoI to extend the scheme by absorbing the additional burden of ₹ 49.61 crore by converting the interest of extended period into grant.

The poor implementation of project by ITIA led to non elimination of human intervention in energy accounting and auditing as envisaged.

The completed feeders worth ₹ 77 crore were not tested and Operational Acceptance certificate (OAC) was not issued due to non generation of reliable AT&C losses at feeder level by Information Technology(IT) application.

The envisaged objective of centrally controlling the Distribution Management System (DMS) at Jabalpur town was not achieved due to award of contract to a previously defaulted Turnkey Contractor (TKC) and its non completion of works in time.

Discom did not complete Part B works awarded under turnkey basis resulting in non achievement of reduction in AT&C losses as envisaged.

Discom did not observe financial prudence in utilization of funds received under the scheme and extended an undue benefit of ₹ 11.89 crore to TKCs towards mobilisation/material advance, not charging of interest on mobilisation advance and excess release of Price Variation amount.

Discom deviated from procurement policy and awarded the contract at higher price to the defaulted TKC by extending an undue benefit of ₹ 6.08 crore

Central discom

The failure to complete Part A project in time, made GoI to extend the scheme by absorbing the additional burden of ₹ 24.10 crore by converting the interest of extended period into grant.

The completed feeders worth ₹ 14.29 crore were not tested and OAC was not issued due to non generation of reliable AT&C losses at feeder level by IT application.

The envisaged objective of centrally controlling the DMS at Bhopal and Gwalior towns was not achieved due to poor execution of works by Turnkey Contractor (TKC) and its non completion of works within time.

Discom executed works worth ₹ 48.10 crore departmentally before approval of DPRs by Power Finance Corporation contrary to scheme guidelines.

Discom did not observe financial prudence in utilisation of funds received under the scheme and extended undue benefit of ₹ 16.16 crore to TKCs.

Discom did not recover the risk and cost amount of ₹ 10.55 crore from defaulted TKC.

Western discom

The failure to complete Part A project in time, made GoI to extend the scheme by absorbing the additional burden of ₹ 9.94 crore by converting the interest of extended period into grant.

The completed feeders worth ₹ 55.36 crore were not tested and OAC was not issued due to non generation of reliable AT&C losses at feeder level by IT application.

The envisaged objective of centrally controlling the DMS at Indore and Ujjain was not achieved due to poor execution of works by TKC and its non completion of works within time.

Discom did not observe financial prudence in utilization of funds received under the scheme and extended an undue benefit of ₹ 6.54 crore to TKCs.

Discom procured excess material of ₹ 8.93 crore than required out of scheme funds at departmentally executed towns.

Introduction

2.2.1 Government of India (GoI), Ministry of Power (MoP), launched Restructured Accelerated Power Development and Reforms Programme (R-APDRP) in July 2008 as a central scheme in Eleventh plan (hereinafter referred as Scheme) (i) to reduce Aggregate Technical and Commercial (AT&C) losses to 15 *per cent* in distribution companies on sustainable basis. The Technical losses are incurred due to ill maintained equipment, sub-stations and inadequate investment in infrastructure while commercial losses are incurred due to low metering efficiency, faulty meter reading, theft and

pilferages and (ii) to establish reliable and automated systems, for collection of accurate base line data, and to adopt Information Technology (IT) for energy accounting/auditing and for billing.

The scheme covers urban areas with a population of more than 30,000 as per census 2001. The scheme was to be implemented in Two Parts.

Part-A consists of development of an IT system for energy accounting/auditing and to capture AT&C losses in a precise manner without manual intervention and collection system for Power Distribution companies (discoms).

The scheme also includes Supervisory Control and Data Acquisition (SCADA)/Distribution Management System (DMS) for big towns with population of more than four lakh as per census 2001 for centrally controlling the DMS. The details of Detailed Project Reports (DPRs) submitted by discoms and approved by Power Finance Corporation (PFC) in respect of Part A and SCADA are detailed as below.

Table no 2.2.1

Name of the discom	DPRs submitted by discom				DPRs sanctioned by discom			
	Part A		SCADA		Part A		SCADA	
	No of towns	Cost (₹ in crore)	No of towns	Cost (₹ in crore)	No of towns	Cost (₹ in crore)	No of towns	Cost (₹ in crore)
Eastern	27	173.52	01	20.35	27	115.69	01	16.56
Central	32	107.92	02	52.27	32	107.89	02	52.27
Western	24	53.21	02	118.40	24	52.05	02	92.90
Total	**83**	**334.65**	**05**	**191.02**	**83**	**275.63**	**05**	**161.73**

(Note: Separate DPRs in respect of SCADA Part B works were not submitted by Eastern and Central discoms)

Part-B consists of strengthening, improvement and augmentation of regular distribution network which covers the construction of substations, laying of Arial Bunched cable, replacement of defective electro mechanical meters with tamper proof electronic meters and erection of 11 KV and Low Tension line works. The details of Detailed Project Reports (DPRs) submitted by discoms and approved by PFC in respect of Part B of the scheme are given in the table no. 2.2.2 :

Table 2.2.2

Name of the discom	Part B Projects submitted by discoms		Part B Projects sanctioned by PFC	
	No of towns	DPRs submitted (₹ in crore)	No of towns	DPRs sanctioned (₹ in crore)
Eastern	27	662.45	27	662.45
Central	32	840.53	31	833.39
Western	24	501.38	23	479.97
Total	**83**	**2004.36**	**81**	**1975.81**

(Note: DPRse of Eastern and Central discoms include the Part B cost of SCADA)

The scheme provided for 100 *per cent* Loan for part A and 25 *per cent* Loan for Part B by GoI through PFC. The balance funds (75 *per cent* for Part B) were to be raised by the discoms from Financial Institutions (FIs) namely

PFC/Rural Electrification Corporation (REC). The entire loan of part A shall be converted into grant on its completion within the scheduled time period of three years and duly verified by Third Party Independent Evaluating Agency (TPIEA) whereas up to 50 *per cent* of Part B of GoI loan shall be converted into grant in five equal tranches on achieving 15 *per cent* AT&C loss in at towns and duly verified by TPIEA on a sustainable basis for a period of five years.

In Madhya Pradesh, the scheme was implemented in three Power distribution companies (discoms) namely Madhya Pradesh Poorv Kshetra Vidyut Vitaran Company Limited (Eastern discom), Madhya Pradesh Madhya Kshetra Vidyut Vitaran Company Limited (Central discom), and Madhya Pradesh Paschim Kshetra Vidyut Vitaran Company Limited (Western discom).

The Performance Audit on Implementation of the scheme was conducted to examine, whether the scheme was implemented in the discoms as per the laid down guidelines and whether the envisaged objective of the scheme was achieved in the discoms.

Organisational setup of Power distribution companies

2.2.2 The Management of each discom is vested in Board of Directors and the Managing Director of each discom acting as Chief Executive Officer (CEO) is empowered to carry out the day to day transactions. The CEO is assisted by the officers in-charge of the departments of Works & Planning, Procurement, Urban & Rural Projects and Finance. In order to oversee the implementation of the scheme, the CEO of each discom is assisted by Chief General Managers (Urban Projects) to exclusively monitor the scheme works.

Audit Objectives

2.2.3 The Performance Audit was conducted to assess whether

- The formulation of Detailed Project Reports (DPRs) was in line with the scheme to derive the 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 guidelines to achieve the envisaged objectives; and
- The effective monitoring mechanism was put in place to monitor the scheme works efficiently.

Audit criteria

2.2.4 The audit criteria adopted to assess the achievement of audit objectives were:

- Targets specified in the Memorandum of Understanding (MoU) signed among PFC, State Government and discoms and guidelines issued by MoP and PFC;
- The targets set out in the DPRs for achieving the desired AT&C loss levels;

- Terms and conditions stipulated in Memorandum of Agreement (MoA) signed between PFC and discoms;
- Terms and conditions stipulated in the turnkey contracts, purchase orders and labour contracts etc; and
- Tariff Orders finalized by the Madhya Pradesh Electricity Regulatory Commission (MPERC) during the audit period.

Scope and Methodology of Audit

2.2.5 The Performance Audit commenced with Entry Conference held on 16 May, 2014 and was conducted up to July 2014 in three discoms covering the period from the commencement of the scheme (2008-09) to its implementation up to 2013-14 with reference to the objectives set forth and benefits envisaged from the scheme. The records maintained at Headquarters of each discom and at selected towns were examined.

Government replies to the draft Performance Audit (PA) covering three discoms were received during October, 2014 and Exit Conference was held on 07 November, 2014 with Principal Secretary (Energy) and Managing Directors of three discoms. The replies of the Government/Management of discoms to PA and in Exit Conference were appropriately incorporated. In Exit Conference Government accepted all the audit recommendations.

Audit Findings

During test check of records at respective discoms the following were observed.

Eastern Discom

2.2.6 Eastern discom caters the electricity distribution requirement of 23 revenue districts with a consumer base of 39.53 lakh. It is spread across five divisions viz Jabalpur, Narmadapuram, Rewa, Sagar and Shadol covering the eastern part of the state. The total number of towns under the jurisdiction of eastern discom were 159 against this the scheme was implemented in 27 towns having population more than 30,000 as per census 2001. The table below indicates the details of towns selected, DPRs submitted, DPRs sanctioned and funds position in Eastern discom.

Table 2.2.3

Name of the project	DPRs submitted		DPRs sanctioned		Funds position	
	No of towns	Cost (₹ in crore	No of towns	Cost (₹ in crore	Received (₹ in crore)	Utilised (₹ in crore)
Part A	27	173.52	27	115.69	74.04	60.87
SCADA	01	52.01	01	48.22		
Part B	27	662.45	27	662.45	99.63	99.36

(Source: Information furnished by management during audit)

We selected seven towns namely Jabalpur, Mandla, Narisinghpur, Sehora, Katni, Maihor and Satna for detailed examination of records. The selected towns covered the sanctioned cost of ₹ 90.48 crore for Part A and sanctioned cost of ₹ 343.16 crore for Part B.

Part A: Establishment of an Information Technology enabled system

2.2.7 Part A of the scheme was meant to establish an IT enabled system for achieving reliable & verifiable Baseline data for energy accounting/auditing, billing and IT based consumer service centers. It was aimed to capture AT&C losses in a precise manner without manual intervention. The scheme provided for creation of single Data Center (DC) and Data Recovery Center (DRC) in a state and accordingly the DC was established at Eastern discom.

The shortcoming noticed in test checked cases in implementation of Part A of the Scheme are as under. -

Inordinate delay in completion of Part A project of the scheme

2.2.8 Under the scheme M/s. Tata Consultancy Services (M/s.TCS) was appointed as Information Technology Implementing Agency (ITIA). As per contract, ITIA was required to complete the project within 18 months (August, 2011), which in turn provided for completion of pilot town Sihora within 12 months (February, 2011) and balance 26 towns in the remaining six months period (August, 2011). However, ITIA completed the pilot town Sihora in December, 2012 with a delay of 21 months and remaining towns in February, 2014 with a delay of 29 months as ***detailed in Annexure 2.2.1(a)***. But the overall system was yet to be tested and handed over to discoms as required under the contract up to July, 2014.

The main reasons for the delay were, (i) the contract with ITIA was finalized five months belatedly (February, 2010) against time allowed by PFC (September, 2009). (ii) the Part A field activities at towns commenced 18 months (June, 2010) after the scheme was sanctioned and (iii) Failure on the part of ITIA to implement various stages of project as per schedule. Discoms in its correspondence held ITIA responsible for the delay in execution of the project stating that, *ITIA failed to understand the requirements and to develop a comprehensive IT system, deployment of poor resources for project execution.* However, it had not taken any stringent action against ITIA for inordinate delay in executing the project.

The delay in completion of part A project made GoI to extend the scheme by overburdening it by ₹ 49.61 crore.

The inordinate delay of Part A project execution, made GoI to extend the scheme completion period by 37 months (up to March, 2015) by absorbing an additional burden of ₹ 49.61 crore in the form of interest *(11.50 per cent)* for the extended period. As entire loan of Part A project, along with interest thereon was to be converted into grant by GoI under the scheme.

Government replied (October, 2014) that, the delay in execution of project was mainly due to its complex nature and none of the states had completed the project within the stipulated period of three years. In Exit Conference Government stated (November, 2014) that, GoI was aware of additional burden on the scheme while extending the scheme up to March, 2015.

The reply is not tenable since GoI/PFC in the System Requirement Specifications (SRS) specified in detail the requirements of the scheme and it was made clear to the bidders through Request For Proposal (RFP) document. Further, had the discoms/ITIA commenced the Part A field works without delay and completed in time, the additional burden on the scheme could have been avoided.

Audit observation in this regard pertaining to Central and Western discoms discussed at paragraphs 2.2.26 and 2.2.44.

Non-achievement of envisaged objective due to Poor implementation of project by ITIA

2.2.9 Under the scheme, ITIA was required to develop a comprehensive Information Technology (IT) system capable of conducting energy accounting/auditing and for billing by an automated system without human intervention. On review of the IT system developed by ITIA we noticed the following.

Non development of comprehensive billing application under the project

2.2.10 As per SRS a comprehensive billing application capable of generating energy bills in line with provisions specified under Madhya Pradesh Electricity Regulatory Commission (MPERC) tariff order had to be developed by ITIA and entire consumers of discom should be brought into its purview. However, only 60.10 *per cent* of the consumers (20.99 *per cent* Low Tension and 99.22 *per cent* High Tension) were brought into the purview of new billing application, leaving behind the remaining 40 *per cent* consumers.

High Tension billing module in the discom was managed by ITIA from the back end instead of discom personnel operating the same on their own. Vigilance module was not implemented up to July, 2014 by ITIA despite a commitment was made in Steering Committee meetings held during April, 2012 and April, 2013. Now there exist different applications (Sybase, Revenue Management System and RAPDRP) in discoms for billing.

Government while accepting the audit observation replied (October, 2014) that, ITIA was responsible for the migration of non-RAPDRP towns into new application and the matter was pursued with ITIA. It was further stated that, vigilance module was developed and would be implemented in coming three months period.

Ineffective implementation of IT system under the scheme

2.2.11 As per terms of contract entered with ITIA the User Acceptance Test (UAT) of entire system should be conducted once the project was completed. Further, SRS specified that, (i) IT system developed should ensure the operational guarantee in terms of time limit specified for performing various operations (ii) ITIA should provide hardware and software (HW/SW) at Data Center and Data Recovery Center with an expandability to cover all discoms database with 7.5 *per cent* annual growth for next five years.

ITIA was not successful in implementing an effective IT system as envisaged under the scheme

We noticed that ITIA declared 80[1] out of total 83[2] towns go-live, but the UAT of the system was not conducted and handed over to discoms. Further, discoms migrated just 25 *per cent* of overall database into IT system up to July, 2014. But the performance of the system was very slow during peak and non-peak hours with 75 *per cent* of database yet to be migrated. Discoms did not carry out a comprehensive analysis of HW/SW supplied under the scheme to fix the reasons for not meeting the operational guarantee specified in SRS.

Discoms did not make ITIA responsible for the deficiencies crept in HW/SW supplied under the project. By this discoms were foregoing an opportunity to get the additional supplies required, to rectify the deficiencies in HW/SW at free of cost by ITIA as stated in SRS.

Even after more than 20 months the pilot town Sihora declared go-live (December, 2012), problems like inconsistent and inaccurate billing, non updation of assets in Geographic Information System at Narsinghpur, Mandla, Satna twons and non-generation of accurate MIS reports still persist.

In exit conference, Government agreed (November, 2014) with above mentioned audit observations and stated that, ITIA had not succeeded in fully accomplishing the project objectives as envisaged.

Audit observation in this regard pertaining to Central and Western discoms discussed at paragraphs 2.2.27 and 2.2.46.

Recommendation: Discom should ensure that, ITIA implements an effective IT system as per SRS to achieve the envisaged objective.

Discrepancies noticed in the performance of IT application developed under the scheme

2.2.12 A test check on the functioning of application developed under the project for conducting energy accounting/auditing and billing revealed the following discrepancies

Excess fixation of fixed charges against Low Voltage (L.V) consumers

2.2.13 As per Madhya Pradesh Electricity Regulatory Commission (MPERC) tariff order, the fixed charges for L.V 1.2 category consumers were to be fixed based on the 0.5 KW of authorized load. For this purpose, each 75 units consumption was taken as equivalent to 0.5 KW.

Fixed charges were derived in variance with MPERC Tariff Order adversely affecting 78516 consumers by excess billing of ₹ 49.81 lakh in a month

We noticed from the bills processed by the application for this category of consumers that, the authorised load for deriving the fixed charges was rounded off to next integer even though the fractional load factor was below 0.5. This was against to the general terms and conditions specified in tariff order and note given for this category of consumers in the tariff order. This, resulted in excess billing of fixed charges by ₹ 49.81 lakh adversely affecting 78516 consumers in discom in a month.

[1] 27 towns in Eastern, 31 towns in Central and 22 in Western discoms
[2] 27 towns in Eastern, 32 towns in Central and 24 in Western discoms

Government replied (October, 2014) that, as per tariff order (2013-14) each 75 units or part thereof was considered as 0.5 KW and accordingly each single unit after 75 units was taken as 0.5 KW to arrive the fixed charges.

The reply is not tenable since the general terms and conditions under LV category in tariff order stated that if authorised load fraction was less than 0.5 it should be ignored and rounding off to next integer should not be done. Further the example given in the tariff order also reiterated the same.

Audit observation in this regard pertaining to Western discom discussed at paragraph 2.2.48.

Poor communication of energy data under Information Technology system

2.2.14 The scheme provided for installation of meters modems and GPRS sims at each DTR to capture the energy data on continuous basis. The continuous transmission of meter – modem data was essential to generate accurate energy accounting/auditing reports in an automated way without human intervention.

Human intervention in energy accounting/ auditing was not eliminated due to the poor communication by IT system

We noticed that in the discom 633 modems were yet to be installed on DTRs and out of 6393 modems installed only 3702 modems were communicating. The modems successfully communicating the data during a month was ranging between 10.91 *per cent* and 81.74 *per cent* by the end of May, 2014. By this the discom was compelled to fill gaps in energy data through manual entries thus defeating the objective of eliminating human intervention in energy accounting/auditing. Further, 409 activated sims handed over to ITIA for installation were lying idle.

Government while accepting the audit observation replied (October, 2014) that, the communication *per cent* of meter-modems was very low as many of the modems were burnt/defective and this issue was taken up with ITIA but was not resolved by ITIA citing resource issue.

Audit observation in this regard pertaining to Central and Western discoms discussed at paragraphs 2.2.30 and 2.2.47.

Non generation of reliable AT&C losses at feeder level by the application

2.2.15 Under the scheme as per contracts entered with TKCs the discom had to get the AT&C losses of completed feeders demonstrated at nine *per cent* level by TKCs, once a feeder was completed and Completion Certificate (CC) was issued.

The Operational Acceptance certificate against Completed feeders worth ₹ 77 crore was not issued due to non generation of reliable AT&C losses

We noticed that the feeders worth ₹ 77 crore despite their being completed, the AT&C losses against them were not got demonstrated by the discom and Operational Acceptance (OA) certificate against them was not issued. The delay between CC issued and OA pending was ranging from six and 24 months. This denied discom to judge performance level of completed feeders. This was mainly because of the non generation of reliable AT&C losses at feeder and town level by Part A application.

Government in its reply (October, 2014) while accepting the audit observation stated that, the Part A application was unable to generate correct AT&C losses at feeder and town levels hence the OA was not issued.

Audit observation in this regard pertaining to Central and Western discoms discussed at paragraphs 2.2.31 and 2.2.49.

Recommendation: Discom should insist upon ITIA to rectify the application to facilitate the performance evaluation of completed feeders.

Avoidable expenditure due to delay in purchase of additional materials and due to extension of consultancy contract

2.2.16 Contract with ITIA provided for supply of additional quantity of materials (20 *per cent* above original quantity) at quoted price up to a period of 18 months. Further, the contract stipulated for passing of additional expenditure if any incurred by the discoms to ITIA, if the same was incurred due to the delay by ITIA in executing the project.

An avoidable expenditure of ₹ 43.35 lakh was incurred by not adhering to contractual terms

We noticed that the discom did not purchase the additional quantity of materials within 18 months period but were purchased subsequently with price variation and incurred an avoidable expenditure of ₹ 20 lakh. Further, the discom extended the consultancy contract and incurred additional expenditure of ₹ 23.35 lakh due to the delay committed by ITIA in executing the project. But the same was not passed on to ITIA as per contract terms.

Government replied (October, 2014) that, PFC instructed discoms to submit the revised DPRs only once at the end of the project. Thus there was delay in placing order for additional quantities and they were purchased with price variation.

The reply is not tenable since PFC only instructed discoms to submit the revised DPRs once at the end of the project but had not restrained them from procuring the additional quantity of material required under the project during execution. Thus discoms lost an opportunity to purchase the additional quantity of materials at original quoted price.

Audit observation in this regard in respect of Central and Western discoms discussed at paragraphs 2.2.29 and 2.2.45.

Supervisory Control And Data Acquisition system

2.2.17 The scheme provided for implementation of SCADA/Distribution Management System (DMS) project for big towns for centrally controlling DMS. In Eastern discom SCADA was implemented with a sanctioned of ₹48.22 crore. Under SCADA, TKCs had to perform work on lines and at sub-stations and to integrate them with control room to exercise centralised control over DMS.

Poor execution of Supervisory Control and Data Acquisition Project

2.2.18 Jabalpur town covering 29 sub-stations with a sanctioned cost of ₹48.22 crore was selected for SCADA project. The centralised tendering process for SCADA, Part B works was done by Eastern discom under two bid system. Out of Eight parties responded to the tender issued, the contract was awarded to L1 party during April, 2012 who quoted 7.20 *per cent* below the estimated cost.

The award of contract to a previously defaulted party resulted in poor execution and non-completion of SCADA project

We noticed from the records that, the selected L1 party (TKC of Part B works) had not performed satisfactorily in the contracts awarded by discoms in the past and Legal and Termination notices were issued by discoms. This TKC being a poor performer in previous contracts, the discom should not have considered it for awarding SCADA, Part B works.

As per terms of contract entered with TKCs of Part A and Part B works of SCADA, the entire work was to be completed within 18 months from the date of contracts (i.e. by the end of June, 2013 and October, 2013 respectively). However the project was not completed by TKCs up to November, 2014 causing a delay of 17 months and 13 months respectively.

On review of SCADA implementation we noticed the following short comings.

- TKCs had not completed the project within time schedule mainly because of poor performance by TKC of Part B works. Only five out of 29 substations were completed up to July, 2014 in the discom.
- Under SCADA, Part A works TKC could not link up the sub-stations with control room as the work of integrating sub-stations commence only after the Part B TKC complete the work at sub-stations in all respects.
- TKCs did not maintain the sufficient quantity of important materials required under the project as detailed in ***Annexure-2.2.3(a)*** and the progress of line related works was at initial stages.
- The poor execution of SCADA project by TKCs had defeated the objective of exercising centralised control over DMS in big towns.

Government in its reply confirmed the fact and stated (October, 2014) that, only legal and termination notices were issued in the past to Part B works TKC. But TKC was not blacklisted by any of the discoms. Hence their bids were considered and contract was awarded.

The reply confirms that, the discoms considered the offer of TKC of SCADA, Part B works despite its poor track record which resulted in delay in execution of the project.

Audit observation in this regard pertaining to Central and Western discoms was discussed at paragraphs 2.2.33 and 2.2.51.

Recommendation: Discom should not award contracts to parties who had poor track record in their previous contracts, to avoid the delays in project execution.

Part-B:- Strengthening, Improvement and Augmentation of distribution system

2.2.19 Part B of the scheme was meant for strengthening distribution network by constructing sub-stations, laying Arial Bunched cable (AB cables) in place of bare conductor, replacement of defective meters with tamper proof electronic meters and erection of 11kv and Low Tension (LT) lines. As per scheme guidelines, the sanction formalities for execution of Part A and Part B were to be taken up simultaneously except that, Part B related field activities were to be taken up subsequently.

Execution of works departmentally before approval of DPRs

2.2.20 Works under the scheme should be taken up only after obtaining approval from PFC to avail financial assistance under the scheme**.** We noticed that, discom had taken up works departmentally at eight towns and incurred ₹ 2.65 crore respectively before the DPRs were sanctioned. Hence this amount could not be claimed from PFC under the scheme.

Government replied (October, 2014) that, the discoms had taken up the works during the period between approval of DPRs and award of contracts, to complete the works within time specified under the scheme and discom was proposing to claim this amount from PFC.

The reply is not tenable since the expenditure was incurred without formal approval from PFC further no claim was lodged by discom with PFC till date (November, 2014) .

Audit observation in this regard pertaining to Central discom discussed at paragraph 2.2.39.

Recommendation: Discoms should lodge the claim immediately with PFC/GoI and consistently pursue for early reimbursement of the expenditure incurred.

Inordinate delay in completion of Part B works of the scheme

2.2.21 As per terms of contracts awarded for Part B projects, works were to be completed within 18 months period from award of contract and as per PFC guidelines, the entire project was to be completed within three years period from the date of sanction of project.

Discom did not complete the Part B works even after a delay of 21 months

In the discom out of 27 towns sanctioned, 26 towns were awarded (March to December 2011) under turnkey basis to eight TKCs in 16 lots and one town was taken up departmentally as detailed in ***Annexure 2.2.2(a)***. The discom completed total 12 towns (one departmental and 11 turnkey towns) within stipulated 18 months period and the balance 15 towns were not completed even after a delay of 21 months by the end of July, 2014.

The main reasons for non completion of these towns were (a) delay in submission of DPRs by 12 to 16 months since the approval of Part A DPRs (February, 2009) and belated finalisation of contracts by 7 to 16 months from the date of approval of Part B DPRs, (June to August, 2010), (b) non assessment of financial strength of TKCs at bid evaluation stage while awarding works of more towns to a single TKC (c) non deployment of adequate men and material by TKCs to execute works (d) non furnishing of work plan by discoms for erection of new lines (e) non furnishing of information pertaining to defective meters to be replaced and (f) improper assessment of quantities in DPRs.

Government replied (October, 2014) that, the delay in award of contract was duo the fact that, the pre bid arrangement and other evaluation procedure of bids received took four to five months time up to October, 2010 in the discom. Since the rates received for some lots were found high discom decided to go for retendering. It was further stated that, TKCs were directed to mobilise adequate men and material to complete the works at the earliest.

The reply is not tenable since the discom took abnormal time at each stage of the project viz, submission of DPRs, award of works and in execution leading to non-completion of works in stipulated period and prolonged the benefits to be derived under the scheme.

Audit observation in this regard pertaining to Central and Western discoms discussed at paragraphs 2.2.35 and 2.2.53.

Non compliance with terms and conditions of contract

2.2.22 As per terms of contract the discom was to (a) pay 10 *per cent* of the Ex-works cost[3] of material and erection as mobilisation advance (b) charge interest on unadjusted mobilisation advance after completion of original contract period of 18 months and (c) restrict the payment of bills to 70 *per cent* by adjusting 10 *per cent* towards mobilisation advance and 20 *per cent* towards retention money which would be paid to TKCs after the issue of operational acceptance (OA) certificate.

Discom did not comply with payment terms resulting in extension of undue benefit of ₹ 11.89 crore to TKCs

We noticed that the discom did not comply with the terms and conditions of contracts and had (a) paid excess mobilisation advance of ₹ 54 lakh by not excluding entry tax element from the quoted price, (b) not charged interest of ₹ 6.51 crore[4] at 11.50 *per cent* on the unadjusted mobilisation advance and (c) paid excess Price Variation (PV) amount of ₹ 4.84 crore without deducting retention money. Thus extended an undue benefit of ₹ 11.89 crore to TKCs.

In the Exit Conference (November, 2014), Government stated that excess paid mobilisation advance would be recovered, the contracts provided for charge of interest against the unadjusted mobilisation advance and the PV amount was paid as per contract terms.

The reply is not tenable since, the discom had failed to comply with the terms and conditions of contract with regard payment of mobilisation advance, charging of interest on unadjusted advance. Further PV amount was released in the absence of OA issued to TKCs.

Audit observation in this regard pertaining to Central and Western discoms discussed at paragraphs 2.2.37 and 2.2.54.

Recommendation: Discom should exercise financial prudence and recover the excess/ineligible payments made to TKCs.

Award of contract to a defaulted bidder in the same town

2.2.23 The discom awarded (July 2011) Lot XII works to a TKC for ₹ 33.65 crore, due to non commencement of works within the extended period (October, 2011) the contract was terminated by forfeiting the Earnest Money Deposit (EMD) of ₹ 33 lakh and by treating TKC as defaulter as per conditions of bid document.

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3 Excluding all taxes and levies like Excise duty, Central Sales Tax, Value Added Tax and Entry tax

4 This include interest on mobilization advance against SCADA Part B TKC of ₹ 67.35 lakh

As per procurement policy of discom, a defaulter should be black listed by removing from the list of registered contractors for a period of not exceeding three years, but this was not done in the instance case. By this, defaulted TKC participated in the subsequent bid for the same work against notification issued on 2 November 2011 with 16 days time given to respond against the norm of 45 days to be given.

Discom extended undue benefit of ₹ 6.08 crore to a defaulted TKC by not blacklisting and allowing him to participate in the subsequent bidding for same works

We noticed that discom did not get adequate response to this bid as time given was short against accepted norm. Only two bids including one from the defaulted TKC who had knowledge about work rates in the previous bid were received and emerged as L1. The rate quoted by L1 was higher by ₹ 6.41 crore over its previous quote. By this an undue benefit of ₹ 6.08 crore was extended to defaulted TKC.

In Exit Conference Government stated (November, 2014) that, the party was not blacklisted as the bid conditions did not provide for the same.

The reply is not tenable since; discom deviated from procurement policy and allowed the defaulted TKC to take undue advantage by participating in subsequent bid for same town. It is pertinent to mention that, in Western discom, one TKC, was black listed for three years, as per discom's procurement policy for not taking up scheme works after awarded.

Recommendation: Discoms should follow its procurement policy strictly and should not allow defaulted bidders to participate in the subsequent tenders.

Central Discom

2.2.24 Central discom caters the electricity distribution requirement of 13 revenue districts with a consumer base of 27.81 lakh spread across three divisions viz, Bhopal, Gwalior and Chambal covering the central part of the state. The total number of towns under the jurisdiction of central discom were 90 against this the scheme was implemented in 32 towns having population more than 30,000 as per census 2001.

In Central discom the scheme was implemented in 32 towns and Part B of the scheme was implemented in 31 towns by excluding one town (Mandideep) as the existing AT&C losses of this town was below 15 *per cent*. The table below indicates the details of towns selected, DPRs submitted, DPRs sanctioned and funds position in Central discom.

Table 2.2.4

Name of the project	DPRs submitted		DPRs sanctioned		Funds position	
	No of towns	Cost (₹ in crore	No of towns	Cost (₹ in crore	Received (₹ in crore)	Utilised (₹ in crore)
Part A	32	107.92	32	107.89	80.40	64.10
SCADA	02	101.32	02	101.32		
Part B	32	840.53	31	833.39	389.93	396.01

(Source: Information furnished by management during audit)

(Note: Funds utilised include the interest received on FD's and Bank Guarantees en-cashed against defaulted TKCs)

We selected eight towns namely Bhopal, Gwalior, Vidisha, Sihore, Raisen, Bhind, Morena and Datia for detailed examination of records. The selected

towns covered the sanctioned cost of ₹ 79.95 crore of Part A and ₹ 614.87 crore of Part B respectively.

Part A: Establishment of an Information Technology enabled system

2.2.25 Part A of the scheme was meant to establish an IT enabled system to capture AT&C losses in a precise manner without manual intervention. The scheme provided for creation of single Data Recovery Center (DRC) for all the discoms and accordingly the DRC was created at Central discom. The shortcoming noticed in test checked cases in implementation of Part A of the Scheme are as under.

Inordinate delay in completion of Part A project of the scheme

2.2.26 As discussed in paragraph 2.2.8, ITIA completed the pilot Vidisha during December, 2012 with a delay of 21 months and completed 31 towns by the end of July, 2014. One major town Bhopal was yet to be completed as detailed in ***Annexure 2.2.1(b)***. The inordinate delay in execution of project by ITIA, made GoI to extend the scheme by 37 months (up to March, 2015) by absorbing additional burden of ₹ 24.10 crore.

In Exit Conference Government stated (November, 2014) that, GoI was aware of additional burden on the scheme while extending the scheme up to March, 2015.

The reply is not tenable since ITIA and discoms failed to complete the scheme within prescribed time, GoI was made to extend the scheme period by imposing an additional burden on the scheme. Further had the discoms/ITIA commenced the Part A field works without delay and completed in time, the additional burden on the scheme could have been avoided.

Ineffective implementation of IT system under the scheme

2.2.27 As discussed in paragraph 2.2.11, just 22.90 *per cent* of the consumer base (23.19 *per cent* Low Tension and 22 per cent *High Tension*) was brought into the purview of the new system leaving behind the remaining 77.10 *per cent* consumers. Only two out of seven Regional Accounts Offices were migrated into new application for High Tension (HT) billing up to July, 2014 and ITIA managing HT billing from back end thus making the discom fully dependant.

Even after more than 20 months the pilot town Vidisha declared go-live (December, 2012) the problems like gaps in Geographic Information System (GIS) data base such as 7000 consumers not mapped in Gwalior region, poor communication of energy data for energy accounting/auditing, non display of LT line in GIS where composite line was present, non performance of connection shifting process and non generation of accurate MIS reports still (November, 2014) persist.

In exit conference, Government agreed (November, 2014) with above mentioned audit observations and stated that, ITIA had not succeeded in fully accomplishing the project objectives as envisaged.

Non recovery of penalty charges from ITIA

2.2.28 As per terms of contract entered by discom for the network bandwidth services at towns, discom undertake liability to pay the link charges for two months delay period. If the delay committed by ITIA in connecting the towns to the links, was more than two months, the same was to be recovered by discom from ITIA.

Penal charges of ₹ 1.31 crore was not recovered from ITIA for the delay in connecting the towns to network links

We noticed on review of the links provided at towns by the bandwidth service provider and their actual connection by ITIA that, there was a delay in connecting the towns by ITIA to the links made available. ITIA committed delay ranging between less than one month and 18 months beyond permissible two months period in connecting the towns. The discom was yet to collect (November, 2014) penal charges of ₹ 1.31 crore from ITIA on this account.

Government while accepting the observation replied (October, 2014) that, the penal charges as pointed out by audit will be collected from future bills of ITIA.

Audit observation in this regard pertaining to Westen discom is discussed at paragraph 2.2.43.

Avoidable expenditure due to delay in purchase of additional materials and due to extension of consultancy contract

2.2.29 As discussed at paragraph 2.2.16, the discom purchased additional materials required with price variation and incurred an avoidable expenditure of ₹ 72.88 lakh. Further, the discom extended the consultancy contract by incurring the additional expenditure of ₹ 28.46 lakh but this was not passed on to ITIA

An avoidable expenditure of ₹ 1.01 crore was incurred by not adhering to contract terms

Government replied (October, 2014) that, PFC instructed to submit the revised DPRs only once at the end of the project. Hence there was delay in placing order for additional material and they were purchased with price variation.

The reply is not tenable since PFC only instructed discoms to submit the revised DPRs once at the end of the project but had not restrained them from procuring the additional material required under the project during execution.

Poor communication of energy data under Information Technology system

2.2.30 As discussed at paragraph 2.2.14, at Central discom 5999 modems were yet to be installed on DTRs and out of 4904 modems installed only 4827 modems were communicating. The modems successfully communicating the data during a month was ranging between 2.04 *per cent* and 84.31 *per cent* by the end of May, 2014. This made discom to fill the gaps in energy data through manual entries and defeating the objective of eliminating human intervention in energy accounting/auditing. Further, 393 activated sims handed over to ITIA for installation were lying idle.

Government while accepting the audit observation replied (October, 2014) that, the communication *per cent* of meter-modems was very low and ITIA had not resolved the issue.

Non generation of reliable AT&C losses at feeder level by the application

2.2.31 As discussed in paragraph 2.2.15, at Central discom the OA against completed feeders worth ₹ 14.29 crore (between November 2012 and April 2014) was not issued as the AT&C losses against these feeders was not got demonstrated by the discom. This was mainly because of the non generation of reliable AT&C losses at feeder and town level by Part A application.

Government in its reply (October, 2014) while accepting the audit observation stated that, the Part A application was unable to generate correct AT&C losses at feeder and town levels hence the OA was not issued.

Supervisory Control And Data Acquisition

2.2.32 The scheme provided for implementation of SCADA/Distribution Management System (DMS) project for big towns for centrally controlling the DMS. In Central discom SCADA was implemented with a sanctioned of ₹ 101.32 crore. Under SCADA, TKCs had to perform work on lines and at sub-stations and to integrate them with control room to exercise centralised control over DMS.

Poor execution of Supervisory Control and Data Acquisition Project

2.2.33 As discussed at paragraph 2.2.18, Bhopal and Gwalior towns covering 109 sub-stations were selected for implementation of SCADA. The review of SCADA implementation in the discom revealed the following short comings.

- As per terms of contract entered with TKCs of Part A and Part B works of SCADA the entire work was to be completed within 18 months from the date of contracts (i.e. by the end of June, 2013 and October, 2013 respectively). However, the project was not completed and a delay of 17 months and 13 months was committed by TKCs of Part A and Part B works of SCADA respectively up to November, 2014. This was mainly due to non performance of work by TKC of Part B works.

- At Central discom by the end of July 2014 the TKCs of Part A and part B works had taken up work at 91 and 56 sub-stations respectively but none of the sub-stations were completed.

- Further, the important materials required for the execution of the project were not maintained in sufficient quantities by TKCs as detailed in ***Annexure-2.2.3(b)*** and the progress of line related work at all the towns was at initial stages only.

- The poor execution of the project by TKCs had defeated the objective of exercising centralised control over the DMS in big towns.

Government in its reply confirmed the fact and stated (October, 2014) that, due to the non execution of works by TKC of Part B works the entire project was affected and not completed as scheduled. It was further stated that, at Gwalior though Part B works TKC completed the works at some of the sub-stations, the Part A works TKC had not taken up the works.

Part-B: Strengthening, Improvement and Augmentation of distribution system

2.2.34 Part B works involving strengthening distribution network by constructing sub-stations, laying Arial Bunched cable (AB cables) in place of bare conductor, replacement of defective meters with tamper proof electronic meters and erection of 11kv and Low Tension (LT) lines were taken up at 31 towns.

Inordinate delay in completion of Part B works of the scheme

2.2.35 As discussed at paragraph 2.2.21, In the discom out of 31 towns sanctioned, 29 towns were awarded (March 2011 to March 2012) under turnkey basis to six TKCs in 13 lots and two towns were taken up departmentally as detailed in ***Annexure 2.2.2(b)***. The discom completed the departmentally taken up towns but 29 towns awarded under turnkey basis were not completed. A delay of 21 months was committed up to July, 2014 after excluding 18 months period permitted under the contract.

The main reasons for non completion of these towns were (a) delay in submission of DPRs by 12 to 16 months since the approval of Part A DPRs (February, 2009) and belated finalisation of contracts by 7 to 19 months from the date of approval of Part B DPRs (March to August, 2010). These are in addition to reasons stated under (b) to (f) of paragraph 2.2.21.

Government replied (October, 2014) that, the delay in award of contract was due the fact that, the pre bid arrangement and other evaluation procedure of bids received took time in discom up to March, 2011 and contracts were accordingly awarded. It was further stated that, TKCs were directed to mobilise adequate men and material to complete the works at the earliest.

The reply is not tenable since the discom took abnormal time at each stage of the project viz, submission of DPRs, award of works (March 2011) and in execution leading to non-completion of works in stipulated period and prolonged the benefits to be derived under the scheme.

Execution of works over and above steering committee approved limit

2.2.36 As per 26th Steering Committee (SC) meeting held by GoI (August 2012) the value variation due to revision in the Bill of Quantities (BoQ) was limited up to 10 *per cent* of sanctioned DPR cost.

We noticed that the discom revised BoQ value beyond 10 *per cent* limit over the sanctioned DPR cost in 11 towns imposing an additional burden of ₹ 5.50 crore.

In the Exit Conference Government stated (November, 2014) that, since DPRs were prepared within short time the correct quantities could not be arrived. It was further assured that, claim will be lodged with PFC for reimbursement of the additional expenditure incurred.

Audit observation in this regard pertaining to Western discom discussed in paragraph 2.2.56.

Recommendation: Discom should take steps for getting the expenditure reimbursed from PFC which was incurred beyond the prescribed limit.

Non compliance with terms and conditions of contract

2.2.37 As discussed in paragraph 2.2.22, discom did not comply with the contract terms and extended an undue benefit of ₹ 13.71 crore to TKCs by way of (a) excess payment of mobilisation advance of ₹ 1.75 crore by including tax elements (b) not charging of interest of ₹ 9.41[5] crore at 11.50 *per cent* on the unadjusted advance and (c) excess payment of ₹ 2.55 crore towards price variation (*100 per cent*) on materials without deducting mobilisation advance and retention money.

Discom did not comply with payment terms resulting in extension of undue benefit of ₹ 16.16 crore to TKCs

Further, as per contract the discom had to pay 70 per cent material advance against four major items viz, Distribution Transformers (DTRs), All Aluminum Alloy (AAA) conductor, Arial Bunched (AB) cable, Poly Vinyl Chloride (PVC) cable and Low Tension (LT) energy meters. However the discom paid material advance of ₹ 2.45 crore to TKC of Lot no XI against two ineligible items (H Beams- ₹ 1.89 crore + ₹ Joists- ₹ 0.56 crore).

In the Exit Conference (November, 2014), in addition to reply furnished to paragraph 2.2.22, Government stated that, the bid documents provided for payment of advance against above category of materials however the same was not inadvertently brought into the contract.

The reply is not tenable since, in the discom the condition to pay advance against the above category of materials was not included in any of the contracts finalised under the scheme except in the instant case.

Non-collection of risk and cost amount from a defaulted contractor

2.2.38 As per contract, if a TKC fails to complete the works within stipulated time in the contract, the discom can terminate the contract at risk and cost of the defaulting contractor.

The discom by enforcing above condition terminated (November 2013) three contracts with two TKCs of Lots IV & V and Lot X and en-cashed Bank Guarantees (BG) of ₹ 8.79 crore and recovered mobilisation advance of ₹ 88 lakh. Discom awarded (May, 2014) works of Lot X and V departmentally for ₹ 32.83 crore and ₹ 10.58 crore against the left over works value of ₹ 26.09 crore and ₹ 7.26 crore respectively. However, LOT IV works were awarded (July 2014) to a new TKC for ₹ 22.64 crore against balance works of ₹ 12.48 crore. The discom was yet to recover an amount of ₹ 10.55 crore[6] from these two TKCs.

Discom did not recover the risk and cost amount of ₹ 10.55 crore from defaulted TKCs.

In Exit Conference Government stated (November, 2014) that, the excess expenditure if any incurred shall be recovered from TKCs.

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5 including interest of ₹ 2.30 crore on mobilization advance paid to SCADA Part B works TKC

6 Additional burden after excluding encashment of BG and LDs (₹ 20.22 crore - (₹ 8.79 crore + ₹ 88 lakh))

Execution of works departmentally before approval of DPRs

Discom executed scheme works of ₹ 48.10 crore without formal approval from PFC

2.2.39 As discussed in paragraph 2.2.20, the discom had taken up works worth ₹ 48.10 crore departmentally at 23 towns before the DPRs of these towns were approved by Power Finance Corporation.

Government replied (October, 2014) that, the discom had taken up the works before approval of DPRs with an intention to complete the works within time specified under the scheme and the discom would claim this amount from PFC.

The reply is not tenable since the expenditure was incurred without formal approval from PFC and no claim was lodged with PFC till date.

Ineffective functioning of Project Management Consultancy

2.2.40 The discom engaged (October 2012) a Project Management Consultancy (PMC) to monitor the scheme works for ₹ 3.69 crore for 13 months period.

During the test check of records at select towns namely Gwalior, Datia, Dabra, Bhind, Morena, Sehore, Vidisha and Raisen towns, we noticed the following shortcoming in the functioning of PMC;

The PMC engaged by discom to monitor scheme the works failed to discharge its duties

- The services rendered by PMC were of poor quality as pointed out by management in its monthly meetings with PMC. The works shown as completed by TKCs were at variance with quantities used in execution.
- No records were maintained by PMC in respect of physical stock position at TKC stores and return of removed materials to discom stores. PMC passed bills without ensuring the return of removed materials to discom stores as per contract terms.
- Lack of co-ordination between PMC and TKC adversely affected the works execution. At Bhind town, the Project Manager of TKC assaulted PMC personnel for non passing the bill for want of rectification of discrepancies noticed and it was compelled to pass the bills for payment.

In Exit Conference Government stated (November 2014) that, PMC was being regularly pursued to improve its performance.

Recommendation: Discom should strengthen its monitoring mechanism to ensure proper co-ordination between TKCs and PMC.

Western Discom

2.2.41 Western discom caters the electricity distribution requirement of 15 revenue districts with a consumer base of 39.96 lakh spread across two divisions viz, Indore and Ujjain covering the western part of the state. The total number of towns under the jurisdiction of western discom were 108 against this the scheme was implemented in 24 towns having population more than 30,000 as per census 2001.

In the discom Part A of the scheme was implemented in 24 towns and Part B of the scheme was implemented in 23 towns by excluding one town (Pithampur) as the existing AT&C losses in this town was below 15 *per cent.*

The table below indicates the details of towns selected, DPRs submitted, DPRs sanctioned and funds position in Western discom.

Table 2.2.5

Name of the project	DPRs submitted		DPRs sanctioned		Funds position	
	No of towns	Cost (₹ in crore	No of towns	Cost (₹ in crore	Received (₹ in crore)	Utilised (₹ in crore)
Part A	24	53.21	32	52.05	37.69	19.39
SCADA	02	118.40	02	92.90		
Part B	24	501.38	31	479.97	215.86	261.82

(Source: Information furnished by management during audit)

(Note: Funds utilised include the interest received on FD's and Bank Guarantees en-cashed against defaulted TKCs)

We selected Six towns namely Indore, Ujjain, Dewas, Barnagar, Barwarh and Nagda for detailed examination of records. The selected towns covered the sanctioned cost of ₹ 28.01 crore of Part A and ₹ 376.57 crore of Part B.

Part A: Establishment of an Information Technology enabled system

2.2.42 Part A of the scheme was meant to establish an IT enabled system for achieving reliable & verifiable Baseline data for energy accounting/auditing, billing. It was aimed to capture AT&C losses in a precise manner without manual intervention. The shortcoming noticed in test checked cases in implementation of Part A of the Scheme are as under.

Non recovery of penalty charges from ITIA

2.2.43 As discussed at paragraph 2.2.28, ITIA committed delay ranging between two months and 21 months in connecting the towns to bandwidth links beyond permissible two months period. The penal charges of ₹ 65 lakh in this regard were yet to be collected (November, 2014) by discom.

Government while accepting the observation replied (October, 2014) that, the penal charges as pointed out by audit would be collected from future bills of ITIA.

Inordinate delay in completion of Part A project of the scheme

2.2.44 As discussed in paragraph 2.2.8, ITIA completed the pilot M'how during December, 2012 with a delay of 21 months and completed 22 towns by the end of July, 2014. Two major towns (Indore and Ujjain) were yet to be completed as detailed in ***Annexure 2.2.1(c)***. The inordinate delay in execution of project by ITIA, made GoI to extend the scheme by 37 months (up to March, 2015) by absorbing additional burden of ₹ 9.94 crore.

In Exit Conference Government stated (November, 2014) that, GoI was aware of additional burden on the scheme while extending the scheme up to March, 2015.

The reply is not tenable since ITIA and discoms failed to complete the scheme within prescribed time, GoI was made to extend the scheme period by imposing an additional burden on the scheme. Further had discoms/ITIA commenced the Part A field works without delay and completed in time, the additional burden on the scheme could have been avoided.

Avoidable expenditure due to delay in purchase of additional materials and due to extension of consultancy contract

2.2.45 As discussed at paragraph 2.2.16, discom purchased additional quantity of material with price variation and incurred an avoidable expenditure of ₹ 48.44 lakh. Further, discom extended the consultancy contract by incurring an additional expenditure of ₹ 21.16 lakh but this was not passed on to ITIA.

Government replied (October, 2014) that, PFC instructed discom to submit the revised DPRs once at the end of the project. Thus there was delay in placing order for additional material and they were purchased with price variation.

The reply is not tenable since PFC only instructed discom to submit the revised DPRs once at the end of the project but had not restrained it from procuring the additional material required during execution.

Ineffective implementation of IT system under the scheme

2.2.46 As discussed in paragraph 2.2.11, just 12.61 *per cent* of the consumer base (12.61 *per cent* Low Tension and zero per cent *High Tension*) was brought into the purview of the new system leaving behind the remaining 87.39 *per cent* consumers. None of the Regional Accounts Offices were migrated into new application for High Tension (HT) billing up to July, 2014.

Even after more than 20 months the pilot town M'how declared go-live (December, 2012) the problems like non updation of assets in Geographic Information System (GIS) at Nagda, Barwarah towns, poor communication of energy data for energy accounting/auditing and non generation of accurate MIS reports still (November, 2014) persist in the discom.

Government while accepting the audit observation replied (October, 2014) that, ITIA was responsible for the migration of balance consumer base and the matter was pursued with ITIA. It was further stated that, HT billing would be developed in three months period.

In exit conference, Government agreed (November, 2014) with above audit observations and stated that, ITIA had not succeeded in fully accomplishing the project objectives as envisaged.

Poor communication of energy data under Information Technology system

2.2.47 As discussed at paragraph 2.2.14, in the discom 686 modems were yet to be installed on DTRs and out of 2146 modems installed only 2056 modems were communicating. The modems successfully communicating the data during a month was ranging between three *per cent* and 93 *per cent* by the end of May, 2014. This compelled the discom to fill the gaps in energy data through manual entries thus defeating the objective of eliminating human intervention in energy accounting/auditing. Further, 418 activated sims handed over to ITIA for installation were lying idle.

Government while accepting the audit observation replied (October, 2014) that, the communication *per cent* of meter-modems was very low as many of

the modems were burnt or defective and this issue was taken up with ITIA but was not resolved by ITIA.

Excess fixation of fixed charges against Low Voltage (L.V) consumers

Excess fixed charges were fixed by adversely affecting 42471 consumers by ₹ 29.77 lakh in a month

2.2.48 As discussed at paragraph 2.2.13, the application rounded off the authorised load to next integer for deriving the fixed charges though the fractional load factor was below 0.5. This, resulted in excess billing of fixed charges by ₹ 29.77 lakh and adversely affected 42471 consumers in discom in a month.

Government replied (October, 2014) that, as per tariff order (2013-14) each 75 units or part thereof was considered as 0.5 KW and accordingly each single unit after 75 units was taken as 0.5 KW to arrive the fixed charges.

The reply is not tenable since the general terms and conditions for this category consumer in tariff order stated that rounding off to next integer should not be done if the authorised load fraction was less than 0.5. Further the example given in the tariff order also reiterated the same.

Non generation of reliable AT&C losses at feeder level by the application

2.2.49 As discussed at paragraph 2.2.15, the discom had not got the AT&C losses of completed feeders worth ₹ 55.36 crore demonstrated at nine *per cent* level by TKCs and had not issued the Operation Acceptance (OA) certificate. This was mainly because of the non generation of reliable AT&C losses at feeder and town level by Part A application.

Government in its reply (October, 2014) while accepting the audit observation stated that, the Part A application was unable to generate correct AT&C losses at feeder and town levels hence the OA was not issued.

Supervisory Control And Data Acquisition system

2.2.50 The scheme provided for implementation of SCADA/Distribution Management System (DMS) project for big towns for centrally controlling the DMS. In Western discom SCADA was implemented with a sanctioned cost of ₹ 92.90 crore. Under SCADA the TKCs had to perform work on lines and at sub-stations and to integrate them with control room to exercise centralised control over DMS.

Poor execution of Supervisory Control and Data Acquisition Project

2.2.51 As discussed at paragraph 2.2.18, Indore and Ujjain towns covering 93 sub-stations were selected for SCADA project implementation. As per terms of contract entered with TKCs of Part A and Part B works of SCADA the entire work was to be completed within 18 months from the date of contracts (i.e. by the end of June, 2013 and October, 2013 respectively). However the project was not completed and a delay of 17 months and 13 months was committed by TKCs of Part A and Part B works of SCADA respectively up to November, 2014. This was mainly due to non performance of work by TKC of Part B works.

The review of SCADA implementation at Western discom revealed the following:

- At Indore TKC of Part A works completed the work at 48 out of 72 substations and at Ujjain none of 21 substations were completed. While Part B works TKC completed three substations at Indore and the work completion at remaining 69 substations was very poor. Similarly at Ujjain the Part B works TKC had not commenced the work at eight substations and work completion at remaining 13 substations was ranging between 17 *per cent* and 59 *per cent*.

- The important materials required for the execution of the project were not maintained in sufficient quantities by TKCs as detailed in ***Annexure-2.2.3(c)*** and the progress of line related work at all the towns was at initial stages only.

- The poor execution of the project by TKCs had defeated the objective of exercising centralised control over the DMS in big towns.

Government in its reply confirmed the fact and stated (October, 2014) that, due to the non execution of works by TKC of Part B works the entire project was affected and not completed as scheduled.

Part-B: Strengthening, Improvement and Augmentation of distribution system

2.2.52 Part B works involving strengthening distribution network by constructing sub-stations, laying Arial Bunched cable (AB cables) in place of bare conductor, replacement of defective meters with tamper proof electronic meters and erection of 11kv and Low Tension (LT) lines were taken up at 23 towns.

Inordinate delay in completion of Part B works of the scheme

2.2.53 As discussed at paragraph 2.2.21, In the discom out of 23 towns sanctioned, 20 towns were taken up departmentally and three towns were awarded (June, 2011 to February, 2012) under turnkey basis to two TKCs in three lots as detailed in ***Annexure 2.2.2(c)***. Discom completed 19 towns taken up departmentally and none of three towns awarded under turnkey was completed up to July, 2014 even after a delay of 19 months after excluding 18 months period permitted under the contract.

The main reasons for non completion of these towns were on account of (a) delay in submission of DPRs by 12 to 16 months since the approval of Part A DPRs (February, 2009) and belated finalisation of contracts by 10 to 18 months from the date of approval of Part B DPRs (March to August, 2010). Discom went for retendering of towns due to non award of contract to a TKC as the rate quoted was unreasonable. These are in addition to reasons stated under (b) to (f) of paragraph 2.2.21.

Government in its reply (October, 2014) confirmed the fact of delay in awarding the contracts. It was further stated that, TKCs were directed to mobilise adequate men and material to complete the works at the earliest.

Non compliance with terms and conditions of contract

2.2.54 As discussed in paragraph 2.2.22, discom did not comply with the contract terms and extended an undue benefit of ₹ 6.54 crore to TKCs by way of (a) excess payment of mobilisation advance ₹ 2.48 crore by including tax elements, (b) not charging of interest of ₹ 3.22 crore[7] at 11.50 *per cent* on the unadjusted advance and (c) excess payment of ₹ 0.84 crore towards price variation amount on materials without deducting retention money.

In the Exit Conference (November, 2014), Government stated that excess paid mobilisation advance would be recovered, the contracts provided to charge on the unadjusted mobilisation advance and discom paid the price variation amount as per contract terms.

The reply is not tenable since, the discom had failed to comply with the terms and conditions of contract with regard to payment of mobilisation advance, charging of interest on unadjusted advance. Further PV amount was released in the absence of Operational Acceptance certification issued to TKCs.

Discom incurred avoidable expenditure of ₹ 8.93 crore by procuring excess DTRs than required

Procurement of excess material than requirement

2.2.55 The discom executed the scheme works departmentally in 20 towns by procuring material and by entering into labour contracts. We noticed on test check of purchase orders placed for Distribution Transformers (DTRs) for scheme works with reference to their utilisation as per completion reports that, the discom had procured 1415 DTRs and utilised only 609 DTRs in 20 towns under the scheme works. This resulted in excess procurement of 806 DTRs worth ₹ 8.93 crore out of scheme funds.

In exit conference Government stated (November, 2014) that, discom utilised the balance quantity of DTRs in scheme towns and were not used for other than scheme works.

The reply is not tenable since, the details with regard to utilisation of balance DTRs under the scheme were not furnished by the discom. This confirms the fact that, the balance DTRs procured out of scheme funds were utilised for other than intended purpose.

An amount of ₹ 20.33 crore was incurred by discoms beyond the limit fixed by steering committee

Execution of works over and above steering committee approved limit

2.2.56 As discussed at paragraph 2.2.36, we noticed that the discom revised BOQ of Indore city beyond 10 *per cent* limit prescribed by Steering Committee and imposed an additional burden of ₹ 20.33 crore on the scheme.

In the Exit Conference Government stated (November, 2014) that, since the DPR was prepared within short time the correct quantities could not be arrived. It was further assured that, claim will be lodged with PFC for reimbursement of the additional expenditure incurred.

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[7] Including ₹ 1.59 crore towards interest on moblisation advance paid to SCADA Part B TKC

Conclusion

Eastern Discom

- **The failure on the part of discom and Information Technology Implementing Agency (ITIA) to complete Part A project in time made GoI to extend the scheme by absorbing an additional burden of ₹ 49.61 crore by converting the interest of extended period into grant.**
- **The elimination of human intervention in energy accounting and auditing was not achieved due to poor implementation of project by ITIA.**
- **The completed feeders worth ₹ 77 crore were not tested and Operational Acceptance certificate (OAC) was not issued due to non generation of reliable AT&C losses at feeder level by IT application.**
- **The envisaged objective of centrally controlling the Distribution Management System (DMS) was not achieved due to award of contract to a previously defaulted Turnkey Contractor (TKC) and its non completion of works in time.**
- **Discom did not observe financial prudence in utilization of funds received under the scheme and extended an undue benefit of ₹ 11.89 crore to TKCs.**
- **Discom deviated from procurement policy and awarded the contract at higher price to the defaulted TKC by extending an undue benefit of ₹ 6.08 crore**

Central Discom

- **The failure on the part of discoms and ITIA to complete Part A project in time made GoI to extend the scheme by absorbing an additional burden of ₹ 24.10 crore by converting the interest of extended period into grant.**
- **The completed feeders worth ₹ 14.29 crore were not tested and OAC was not issued due to non generation of reliable AT&C losses at feeder level by IT application.**
- **The envisaged objective of centrally controlling the DMS at Bhopal and Gwalior towns was not achieved due to poor execution of works by TKC and its non completion of works within time.**
- **Discom did not observe financial prudence in utilization of funds received under the scheme and extended undue benefit of ₹ 16.16 crore to TKCs.**
- **Discom did not recover the risk and cost amount of ₹ 10.55 crore from defaulted TKC.**

Western Discom

- **The failure on the part of discom and ITIA to complete Part A project in time made GoI to extend the scheme by absorbing an additional burden of ₹ 9.94 crore by converting the interest of extended period into grant.**
- **The completed feeders worth ₹ 55.36 crore were not tested and OAC was not issued due to non generation of reliable AT&C losses at feeder level by IT application.**
- **The envisaged objective of centrally controlling the DMS at Indore and Ujjain towns was not achieved due to poor execution of works by TKC and its non completion of works within time.**
- **Discom procured excess material of ₹ 8.93 crore than required out of scheme funds at departmentally executed towns.**

2.3 Performance Audit on Adherence to the Environmental Norms in Satpura Thermal Power Station, Sarni of Madhya Pradesh Power Generating Company Limited

Executive Summary

Introduction

The Madhya Pradesh Power Generating Company Limited (Company) was incorporated on 22 November 2001, consequent upon unbundling of Madhya Pradesh Electricity Board (MPEB). The Company has four thermal power generating stations with an installed capacity of 3720 MW as on 31 March 2014 in the State.

Keeping in view the importance of environmental protection a performance audit on adherence to environment norms in Satpura Thermal Power Station (STPS) of the company was undertaken to examine the existence and adequacy of the mechanism to control air and water pollution put in place by the Company as per statutory requirement.

Operational efficiency

Company could not meet the targets of Station Heat Rate fixed by Madhya Pradesh Electricity Regulatory Commission (MPERC) and consequently the coal and oil consumption were higher than the norms, which led to release of more poisonous effluents into the environment, despite incurring huge cost on repair/renovation works.

Air Pollution

Company could not control the Suspended Particulate Matter (SPM) levels in flue gas as required under the Environment (Protection) Rules, 1986, as it neither up-graded its Electro Static Precipitators (ESPs) nor implemented Ammonia Flue Gas Conditioning system on a regular basis and also, failed to comply with the directions of Madhya Pradesh Pollution Control Board (MPPCB). The Company did not effectively repair/operate Real-time Continuous Monitoring System lying idle since 2010, which were installed at a cost of ₹ 1.33 crore to monitor current emission level. It could not Achieve 100 per cent fly ash utilisation, due to non-installation of dry fly ash collection system. The Company failed to utilise ₹ 35.96 crore received from sale of fly ash and fly ash based product for development of infrastructure or facilities.

Water pollution

Company could not recycle 100 per cent ash pond effluent as required by the MPPCB, as it did not construct the Effluent Treatment Plant for unit 6 to 9, which also led to higher quantity of Total Suspended Solids in the effluent. Company neither Constructed the Sewage Treatment Plant.

Hazardous waste

The Company was not disposing the hazardous waste (resin) within the time limit of 90 days stipulated in the Hazardous Wastes (Management, Handling and Trans boundary Movement) Rules 2008. Also, it did not

dispose of the used oil to agencies authorised by Central Pollution Control Board.

Introduction

2.3.1 The Madhya Pradesh Power Generating Company Limited (Company) was incorporated on 22 November 2001 and consequent upon unbundling of Madhya Pradesh Electricity Board (MPEB), the function of power generation was vested (June 2005) with the Company and all the thermal and hydro generating assets of MPEB were transferred to it. The Company has four thermal power generating stations i.e. Amarkantak Thermal Power Station (ATPS), Chachai, Sanjay Gandhi Thermal Power Station (SGTPS), Birsinghpur, Satpura Thermal Power Station (STPS), Sarni and Shree Singaji Thermal Power Project (SSTPP), Khandwa with an installed capacity of 3720 MW as on 31 March 2014 in the State. The details of installed capacity and date of commissioning of each unit of these stations are given in ***Annexure 2.3.1***.

The National Environment Policy 2006 which articulated our national commitment to a clean environment as mandated by the constitution was intended to main stream environmental concerns in all current and developmental activities. One of the principles of this policy clearly states that environmental protection shall form an integral part of the developmental process to achieve sustainable development and cannot be considered in isolation.

Station Heat Rate (SHR) is a measure to calculate the heat required to generate each unit of electricity (kWh). It is an important measure for assessing the efficiency of a thermal power station or plant. Excess heat rate results in excess consumption of fuel (coal and oil) to generate a given kWh. Further, it increases air and water pollution due to more fly ash generated from the excess coal consumed. The actual SHR vis-à-vis norms fixed by MPERC for three Power Stations are given in table no. 2.3.1:

Table 2.3.1

Name of generating station[1]	2011-12		2012-13		2013-14	
	SHR Norms	Actual SHR	SHR Norms	Actual SHR	SHR Norms	Actual SHR
STPS Sarni Unit 6-7	2700	3450	2700	3690	2700	3727
STPS Sarni Unit 8-9	2700	3490	2700	3691	2700	3676
STPS Sarni Unit 10-11	--	--	--	--	2400	3183
ATPS Chachai Unit 1-2	3300	3669	3300	3767	3200	3791
ATPS Chachai Unit 3	2450	2670	2450	2845	2450	2705
SGTPS Unit 1-2	2600	2990	2600	3051	2600	3102
SGTPS Unit 3-4	2600	2938	2600	3057	2600	3122
SGTPS 500 MW	2425	2559	2425	2644	2425	2615

(Source: Data furnished by STPS)

[1] Units 1-5 decommissioned, hence not considered.

As evident from the table, SHR, in the STPS, Sarni ranged between 3450 and 3727 against the norm of 2700 during the period 2011-12 to 2013-14. As a result of this, air pollution level of STPS, Sarni continued to be consistently high as compared to other two thermal power stations of the Company. Thus, keeping in view the importance of environment preservation, a performance audit on adherence to environment norms in STPS was undertaken.

The plant has separate environmental monitoring wing working under the control of plant head. Laboratory has been established under the charge of Senior Chief Chemist and his responsibilities are as under:

- To test and analyse samples as per requirements of the various statutes and submitting reports to Madhya Pradesh Pollution Control Board (MPPCB);
- Obtaining consent for operating, handling and storage of hazardous waste from MPPCB; and
- To deal with the legal cases related to environmental pollution filed against the plant.

2.3.2 For monitoring and implementation of the pollution control policy, rules and regulations for environment protection, Central Pollution Control Board (CPCB) and State Pollution Control Board (SPCB) have been established. The Madhya Pradesh State Pollution Control Board (MPSPCB) is looking after the implementation of pollution control policies and Acts in the State of Madhya Pradesh. Ministry of Environment and Forests (MoEF) and Government of India (GoI) are also vested with powers under different statutes to issue directions to the pollution causing industries/ bodies directly.

Audit Objectives

2.3.3 The Performance Audit was taken up with broad objective of forming an opinion on the existence and adequacy of the mechanism put in place by the STPS in the units 6 to 11 for:

- Improving the operational efficiency of plant i.e. reducing the SHR;
- Prevention and control of air pollution i.e. dust levels (Suspended Particulate Matters) in flue gas emission from the plant;
- Prevention and control of water pollution by recycling water of ash ponds and waste water through Effluent Treatment Plant(ETP) and Sewage Treatment Plant(STP) respectively;
- Proper disposal of used oil, transformer oil, oil soaked waste, exhausted resin.

Audit Criteria

2.3.4 The audit findings were based on the criteria derived from following:

- The norms prescribed for air pollution by thermal power stations under Air (Prevention and Control of Pollution) Act, 1981 and Environment Protection Act and rules, 1986;

- The norms prescribed for water pollution by thermal power station under Water (Prevention and Control of Pollution) Act, 1974 and Water (Prevention and Control of Pollution) Cess Act, 1977;
- Hazardous Waste (Management and Handling) Rule, 1989
- Directions issued by CPCB and MPPCB from time to time in respect of pollution by thermal power stations; and
- Norms prescribed by Madhya Pradesh Electricity Regulatory Commission (MPERC) and Central Electricity Authority (CEA) and decision of Board of Directors and internal guidelines issued from time to time in respect of pollution by thermal power stations.

Scope and Methodology of Audit

2.3.5 A Performance Audit of the Company was incorporated in the C&AG's Audit Report, (Commercial) for the year ended March 2010. The audit findings also included environmental issues relating to Air pollution, Ash disposal and Water pollution. The report was discussed by the Committee On Public Undertakings (COPU) on 13 October 2011 but no recommendations were made by COPU so far (November 2014). The recommendation made by the audit in the Audit Report and action taken thereon, if any, by the STPS have been suitably incorporated in the respective paragraphs.

The Performance audit on adherence to Environment Norms in plant was undertaken during the period April 2014 to June 2014 covering the period 2011-12 to 2013-14. During the audit, out of 11 units only 6 units, i.e. Unit 6 to 11 were audited, as the remaining five units (1 to 5) were decommissioned during October 2012 and January 2014.

Audit covered the scrutiny of various records relating to Environmental Issues, Act, Rules, Regulations and Guidelines issued by the Statutory Authorities in respect of environmental norms for thermal power plants, Board Agenda and Minutes of the Company, discussion and interaction with the Management and collection of data by issue of audit requisitions and audit enquiries.

The scope and methodology of audit were explained to the management in the Entry Conference held on 16 May 2014. Audit findings emerging from the review were reported (July 2014) to the Company and Government of Madhya Pradesh (GoMP) and discussed (7 November 2014) in the Exit Conference, attended by the Principal Secretary Energy, GoMP and Managing Director of the Company. The views expressed by the Management/Government in the Exit Conference and through their replies (October 2014), have been taken into consideration while finalising the report.

Audit findings

Audit was conducted on the lines of broad objectives and the performance of STPS has been studied in the light of various statutes as mentioned above. Audit findings have been discussed in the succeeding paragraphs.

Operational efficiency of STPS

Excess Station Heat Rate in comparison to MPERC norms and its impact on environment

2.3.6 Station Heat Rate (SHR) is an important measure for assessing the efficiency of a thermal power station or plant. Efficiency improvements could have broader impacts, by increasing efficiency (i.e., decreasing the heat rate), less fuel is required to generate each kWh. Likewise an increase in efficiency has an impact on the level of emissions a plant releases. Since less fuel is required to generate a given kWh, fewer emissions arising out of combustion of coal containing carbon dioxide, nitrogen oxides, sulphur oxides, chlorofluorocarbons etc. are released for that given kWh.

On analysis of ***table 2.3.1*** relating to SHR, we observed that, the STPS did not meet the targets fixed by MPERC during the period from 2011-12 to 2013-14. The actual SHR was more than the target fixed by MPERC for each unit. Since the actual SHR was more than the prescribed norms, the consumption of coal and oil was also in excess as against the norms fixed by the Company. The details of coal and oil quantity norms fixed by the Company, excess quantity consumed, value of excess quantity and ash generated due to excess quantity consumed during the period 2011-12 to 2013-14 for the units 6 to 9(2011-12, 2012-13) and units 6 to11(2013-14),are indicated in table number **2.3.2** and **2.3.3**:

Table 2.3.2

Year	Total coal consumed (MT)	Quantity (MT) norms fixed by the company for consumption	Excess consumption of coal (MT)	Value of excess consumption (₹ in crore)	Ash generated due to excess consumption (MT) (based on 40 per cent ash content in coal)
2011	3730661	3037112	693549	208.33	277420
2012	4178091	3243039	935052	244.77	374021
2013	4069351	3116317	953034	402.36	381214
Tota	**11978103**	**9396468**	**2581635**	**855.46**	**1032654**

(Source: Data furnished by STPS)

Table 2.3.3

Year	Total Oil consumed (KL)	As per Norms (KL)[2]	Excess quantity consumed (KL)	Value of excess quantity (₹ in crore)
2011-12	18213	5911	12302	49.27
2012-13	16747	7436	9311	45.13
2013-14	26794	6966	19828	110.45
Total	**61754**	**20313**	**41440**	**204.85**

(Source: Data furnished by STPS)

[2] In the year 2013-14, the consumption norms appear to be lower as compared to the year 2012-13, due to inclusion of newly commissioned unit 10 and 11 for which the consumption norms were less than the existing units 6 to 9.

It is evident from the above that 25.82 lakh MT (27 *per cent*) of coal and 0.41 lakh KL (204 *per cent*) of oil was consumed in excess of norms during the period 2011-12 to 2013-14 which has effect on air and water pollution due to generation of 10.33 lakh MT of excess ash and releasing of greenhouse gases. The Company has also incurred an additional expenditure of ₹ 1060.31 crore on excess consumption of coal and oil putting unnecessary burden on the Country's natural resources.

Government/Company replied (November 2014) that excess SHR was due to aging of plants, non availability of coal as per design and non-implementation of comprehensive Repairs and Maintenance (R&M) schedule.

Further, Principal Secretary, Energy in Exit Conference (November 2014) directed Company to review the position and take decision on the matter of renovation/modernization/replacement of the plant.

The reply was not acceptable as the MPERC norms for SHR are fixed after considering various parameters relating to respective plant and are not same for every plant. Hence each plant is expected to achieve its respective norms**.** Delay in appropriate action for maintenance of plants to increase the efficiency of the equipment lead to excess heat rate and this has resulted in excess consumption of coal and oil which had deleterious effect on environment and adverse impact on financial position of the Company.

Expenditure incurred on controlling the pollution

2.3.7 As per MoEF / MPPCB, the STPS has to upgrade Electro Static Precipitators (ESP), construct Sewage Treatment Plant (STP), install online monitoring equipment and create facility for 100 *per cent* utilisation of ash.

The STPS incurred total expenditure of ₹ 4.61 crore on R&M of ESP, as discussed in ***paragraph-2.3.9***. Further, ₹ 78.11 lakh was incurred on repair and procurement of on-line monitoring equipment, as discussed in ***paragraph-2.3.10*** and ₹ 1.27 crore was incurred on materials/consumables during the period from 2011-12 to 2013-14. Despite incurring above expenditure the STPS failed to control the pollution resulting in non compliance with norms fixed by MoEF and MPPCB.

Prevention and Control of Air Pollution

Coal ash, being a fine particulate matter, is a pollutant under certain conditions when it is airborne and its concentration in a given volume of atmosphere is high. Flue gas emission from thermal power plants affects the environment, if not controlled. Control of dust levels (Suspended Particulate Matters) in flue gas is an important responsibility of thermal power stations. Further, ash is the residue after combustion of coal for generation of power in coal based thermal power stations. A portion of the ash, around 20 *per cent*, is collected as 'Bottom ash' at the bottom of the furnace. Another portion is collected as 'Fly ash' in the Electrostatic Precipitators (ESP). This has to be collected and disposed of without letting it out in the atmosphere.

Non-achievement of specified SPM levels

Company could not control the Suspended Particulate Matter (SPM) levels in flue gas as required under The Environment (Protection) Rules, 1986

2.3.8 The Environment (Protection) Rules, 1986 prescribed the Suspended Particulate Matter (SPM) level at 150 mg/Nm^3 (milligrams per cubic meter). MPPCB in its consent letter (February 2011) further stated that industry shall upgrade all the existing ESPs maintain the same properly so that the emission from all stack could be within the prescribed standards and shall upgrade the same to achieve norm of 50 mg/Nm$^{3.}$

The unit wise monthly average of SPM levels during the period 2011-12 to 2013-14, is given in table no.2.3.4:

Table 2.3.4

(Monthly average of SPM in mg/Nm^3)

Unit	Year		
	2011-12	2012-13	2013-14
6	403	459	404
7	439	477	396
8	485	470	414
9	463	461	418
10	-	-	Not available[3]
11	-	-	

(Source: Data compiled from monthly reports furnished by Company to MPPCB)

It may be seen from above table that SPM levels were in excess of the norm of 150 mg/Nm^{3}as required under the Environment (Protection) Rules, 1986 and remained consistently high in all the units during the performance audit period. As already reported in the C&AG's Audit Report, (Commercial) for the year ended March 2010 (Para 2.2.50), the emission levels continue to remain on a higher side and evidently the proposed remedial measure, as assured by the Energy Department in the COPU meeting (June 2012) i.e. renovation of ESPs was not taken, as discussed in subsequent paragraph.

The Units 10 and 11 were commissioned on 18 August 2013 and 16 March 2014, however, no data on Stack Emission was collected by STPS for analysis of SPM.

Recommendation: We recommend that Company should take up renovation of ESPs to keep the SPM levels within the norms.

Non-upgradation of Electro Static Precipitators and Non-installation of Ammonia Flue Gas Conditioning System

2.3.9 The MPPCB directed time to time (October 2007, February 2011, October 2013) to upgrade all the existing ESPs[4]. The MoEF, keeping in view

[3] Data not furnished by the Company, claiming no such reports are being prepared for unit 10 & 11

[4] Electrostatic Precipitator (ESP) reduces dust concentration containing the SPM in flue gases from coal fired boilers in thermal power plants.

of high SPM level, has also directed (February 2009) to renovate the ESPs of units 6 to 9.

We observed that the Company had not initiated action for augmentation of ESPs of units 6 to 9. The ESPs of Units 6 to 9 were designed for outlet burden of 340 to 380 mg/Nm^3. In order to reduce the emission within the norms, the Company incurred an expenditure of ₹4.61 crore towards repair and maintenance work and mechanical rectification of ESP during the period 2011-12 to 2013-14. In a bid to achieve reduction in SPM of Stack, the STPS initiated action of dozing of Ammonia gas at the inlet of ESPs of Units 6 to 9 occasionally from October 2005 onwards through temporary in-house design system.

The Company neither up-grade it's Electro Static Precipitators (ESPs) nor implement Ammonia Flue Gas Conditioning system on a regular basis resulting in high SPM levels

We noticed that the STPS tested Ammonia dosing continuously for two days during September 2013 in Units 7, 8 and 9 and successfully brought down the SPM levels within the limits (150 mg/Nm^3). It is pertinent to mention that the MPPCB officials conducted test on 12 March 2014 in Units 6 and 8 (7 and 9 were under shutdown) with dozing of Ammonia and reported 85 mg/Nm^3 and 77 mg/Nm^{3}of SPM levels respectively. Though the results obtained were under the norms, as per Environment (Protection) Rules, 1986, the STPS did not implement the ammonia flue gas conditioning system on permanent basis. An amount of ₹ 17.69 lakh was incurred on purchase of 24,800 Kgs of ammonia gas for temporary usage for the period from 2011-12 to 2013-14. Further, to bring down the SPM levels within the norms, the Company, approved (September 2013) for implementation of Ammonia Flue Gas conditioning with a total financial commitment of ₹2.99 crore for all the four Units for one year including installation, operation and taxes. However, no order was placed so far (November 2014).

Government/Company replied (November 2014) that due to very high capital expenditure involved the comprehensive R&M was not envisaged. Further, in Exit Conference Company stated (November 2014) that now ammonia dosing is being adopted on a regular basis.

The reply confirms, no concrete action was taken so far which resulted in continuous high SPM levels.

Recommendation: We recommend that Company should implement Ammonia Flue Gas Conditioning System till renovation of ESPs is not done to keep the SPM levels within the norms.

Installation of Real time continuous monitoring equipment

2.3.10 Real time continuous monitoring equipments are installed with the objective of monitoring the current emission levels. This helps in knowing the exact position of emission levels at a given point of time with high precision.

The MPPCB had been giving consent from time to time for operation of STPS under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 subject to the additional condition that the Company should install real time continuous monitoring system at all sources of the emission. In February 2011, the MPPCB directed the STPS to complete the same within six months.

We noticed that during 2005-06, STPS incurred an expenditure of ₹1.33 crore on procurement and installation of on-line monitoring and other equipment for units 6 to 9. These systems were working satisfactory till the end of the year 2010, there after system started giving frequent problems and later become out of order. So, to comply with the condition of the Act, Company collected the samples manually. Company incurred expenditure ₹ 18.11 lakh on repairs and maintenance of the equipments but these could not be made functional till date (November 2014). Further, the on-line monitoring equipment procured at a cost of ₹ 60.00 lakh between October 2011 and December 2012 for Units 10 and 11 was not installed so far (November 2014).

Company while accepting the fact stated (November 2014) that the system had been installed and data transmission to MPPCB would be started by the end of the year 2014. The submission of data by traditional method continued.

Thus, the fact remains that the manual collection of data may change at any stage due to improper collection, recording and reporting, which does not reflect the true and fair picture of SPM analysis.

Recommendation: We recommend that Company should take immediate steps to make the online monitoring equipments functional so as to comply with the norms prescribed by MPPCB.

Non utilization of fly ash

2.3.11 As per the consent letter (February 2011) MPPCB, directed to install dry fly ash collection system in Units 6 to 9 within the stipulated period between March 2012 and March 2015 to control air and water pollution under the provisions of Acts.

As per MoEF Notification (September 1999), every thermal plant should supply fly ash to manufacturing of ash-based products such as cement, concrete blocks, bricks units or for construction of roads or any other construction activity free of cost at least for 10 years from the date of publication of Notification and also, envisaged preparation of an action plan for utilisation of fly ash progressively.

The Company could not achieve hundred *per cent* fly ash utilisation, as it did not install the dry fly ash collection system,

Further, as per MoEF Notification (September 2009), 100 *per cent* fly ash generated from the Units 6 to 9 is to be utilised within the five years from the date of Notification. National Green Tribunal (NGT) has also issued notice (August 2013) to the Company in this regard and stipulated November 2014 as the time limit for 100 *per cent* utilization of fly ash for the old units. Further, the amount collected from sale of fly ash and fly ash based products by coal and / or lignite based thermal power stations or their subsidiary or sister concern unit, as applicable should be kept in a separate account head and should be utilized only for development of infrastructure or facilities, promotion and facilitation activities for use of fly ash until 100 *per cent* fly ash utilization level is achieved within five years.

We observed that:

- The STPS which produced on an average 20 lakh MT of ash per year did not install the dry fly ash collection system which was planned to be installed between March 2012 and March 2015 and the same was kept on hold till decision on units de-commissioning/leasing/extensive repair and maintenance. However, no action was taken till date (November 2014).

- STPS did not comply with the condition of Notification for supply of fly ash to building/manufacturing of ash-based products such as cement, concrete blocks, bricks units etc., free of cost and also did not prepare action plan for utilisation of fly ash;

- The actual utlisation of fly ash as per Notification (September 2009) was 10 *per cent* only as on 31 March 2014 and with the present trend of utilization, the scope of 100 *per cent* utilisation appears to be remote.

- During the period from 2011-12 to 2013-14, the STPS, Sarni received an amount of ₹ 2.68 crore on sale of fly ash and fly ash based product. However, no amount was utilized for development of infrastructure or facilities, promotion and facilitation activities for improving fly ash utilization. It was also noticed that the Company created a special reserve for utilization of revenue from the sale of dry fly ash and ₹ 35.96 crore has been parked in the form of Fixed Deposits as on 31 March 2013.

As mentioned in the C&AG's Audit Report, (Commercial) for the year ended March 2010 (Para 2.2.51), besides entering into an agreement (June 2010) with a private party for supplying 5,000 MT fly ash per month, no other development for ash disposal was achieved. Energy department, in the COPU meeting (June 2012) stated, though there are very few consumers of ash near Sarni, still, tenders for lifting fly ash was placed and the lifting had already started and assured to speed up the lifting. However, till date (November 2014), no significant achievement in this direction could be made.

Company replied (November 2014) that new units 10 & 11 have provision of dry fly collection whereas the old units 6 to 9 do not have the same due to old design, non-availability of space for renovation/installation and non-implementation of R&M scheme due to high capital cost. Further, due to non-availability of potential / bulk fly ash users in nearby area, percentage of utilisation of fly ash is low and same would increase in future. Further, Company also stated that efforts are being made to utilize the revenue for infrastructure development to provide fly ash to users.

Company stated in Exit Conference (November 2014) that efforts would be made to improve the position.

Recommendation: We recommend that Company should use the funds obtained from sale of fly ash to improve infrastructure/facilities for improving utilisation/lifting of fly ash.

Prevention and Control of Water Pollution

The Water (Prevention and control of pollution) Act, 1974 section 24 (1) specified that "No person shall knowingly cause or permit any poisonous, noxious or polluting matter determined in accordance with such standards as

may be laid down by the state board to enter (whether directly or indirectly) into any [stream or well or sewer or on land]. The waste water of the power plant (containing toxic substances and is at a high temperature) is the source of water pollution, causing loss of aquatic species and polluting ground water.

Total Suspended Solids exceeding the standards

Company could not recycle 100 *per cent* ash pond effluent as required by the MPPCB, as it did not construct the Effluent Treatment Plant for unit 6 to 9, which led to higher quantity of Total Suspended Solids in the effluent

2.3.12 As per the norms prescribed by MoEF / MPPCB, Total Suspended Solids (TSS) in effluents from water should not exceed 100 mg per liter. It was observed that TSS ranges from 106 to 125 mg in Ash Pond, 108 to 1707 mg in Pata Nala and 94 to 360 in Dhased Nala. The monthly details of TSS reported on 12 occasions in a year for the period 2011-12 to 2013-14 in six locations is indicated in table:

Table 2.3.5
(No. of months where Total Suspended Solids was less/more than 100 mg.)

S. No.	Location	Year 2011-12 TSS recorded		Year 2012-13 TSS recorded		Year 2013-14 TSS recorded	
		Less than 100	More than 100	Less than 100	More than 100	Less than 100	More than 100
1	Ash Pond	0	12	0	12	0	12
2	Denwa River	08	04	09	03	08	04
3	Dhased Nala	01	11	06	06	02	10
4	Tawa Reservoir	12	0	12	0	10	02
5	Denva-Tawa confluence point	04	08	08	04	07	05
6	Pata Nala	0	12	0	12	0	12

(Source: Data compiled from monthly reports and records of STPS)

It could be seen from the above that except Tawa reservoir the TSS in effluent discharges mostly exceeded the standards. Further, we observed that though the analysis was made in six locations, the STPS submitted the analysis reports to MPPCB in respect of only first three locations.

The reason for high TSS was that the Company had not constructed ETP for Units 6 to 9 as discussed in ***paragraph no 2.3.13***

Non fulfillment of condition for treatment/recycling of ash pond effluent

2.3.13 The MPPCB had been giving consent from time to time[5] for operation of STPS, Sarni under Section 25 /26 of the Water (Prevention & Control of Pollution) Act, 1974 subject to the condition of treatment/recycling 100 *per cent* ash pond effluent within six months from the date of consent order.

We observed that the STPS was treating/recycling the ash pond effluent of units 6 to 9 through settling tank which was not sufficient to meet the

[5] October 2007, February 2011, October 2013

condition prescribed by MPPCB. It was further observed that as against target of treatment/recycling 100 *per cent* ash pond effluent, the STPS recycled 19, 24 and 23 *per cent* of total effluent leaving a quantity of 11698098 M^3, 9162737 M^3 and 7364873 M^3 respectively for the years 2011-12 to 2013-14. This was far below the condition stipulated by the MPPCB. It was also observed that a quantity of 387126 M^3 of ash pond effluent of units 10 & 11 in 2013-14 was not recycled due to non-availability of Effluent Treatment Plant.

The Government of Madhya Pradesh after obtaining in principal approval from MoEF for diversion of forest land, allotted (November 2009) 111 hectare of forest land to the Company for construction of ash pond in STPS, Sarni. The Company placed order (August 2010) for construction of ash pond with a cost of ₹ 33.17 crore, which was to be completed within 18 months from the date of handing over (December 2010) of site. Thus, there is a delay and the work is still in progress (September 2014), despite the fact that new ash pond is needed, not only because the existing one is exhausted but also due to non-availability of effluent treatment system.

Company replied (November 2014) that for units 6 to 9, old ash pond is being exhausted and new ash pond would be functional soon for which environmental clearance is awaited. Further, the ash pond for unit 10 and 11 had started from September 2014.

Reply was not acceptable, the STPS violated the laid down procedure of MoEF and initiated action for construction of ash pond without environment clearance. The fact remains that new Ash pond was not constructed so far (November 2014).

Thus, despite the categorical stipulation in the consent order, recycling of 100 *per cent* ash pond effluent was not achieved.

Recommendation: We recommend that the Company should take steps to operationalise new ash pond for units 6 to 9 to save environment by controlling water pollution.

Continuation of Power Plant without Sewage Treatment Plant

Despite the requirement of MPPCB and Water (Prevention & Control of Pollution) Act, 1974, the Company has not constructed STP so far

2.3.14 The MPPCB had been giving consent from time to time (October 2007, February 2011, October 2013) for operation of STPS under Section 25 /26 of the Water (Prevention & Control of Pollution) Act, 1974 subject to the condition that construction of STP for treatment of domestic waste for township should be completed within 16 months from the date of consent order.

We observed that despite the categorical stipulation in the consent order (February 2011), the Company issued (September 2013) work order at a cost of ₹ 13.58 crore after a lapse of more than two year for construction of sewage / drainage collection network on turnkey basis for township and public buildings, which was under progress (November 2014).

Company in Exit Conference (November 2014) stated that STP would be functional from March 2015.

Improper disposal of Hazardous Waste

The Company was not disposing the hazardous waste (resin) within the time limit of 90 days stipulated in the Hazardous Wastes (Management, Handling and Trans boundary Movement) Rules 2008.

2.3.15 MPPCB while giving consent (10 June 2010) to operate thermal plant, stipulated that the Company should comply with Hazardous Wastes (Management, Handling and Trans boundary Movement) Rules 2008 and granted authorisation to the Company that it would operate a facility for collection, treatment, storage, transportation and disposal of hazardous waste viz., used oil, transformer oil, oil soaked waste, exhausted resin and batteries. Used oil should be disposed of to the authorised re-processors registered with CPCB and exhausted resin to M.P. Waste Management Project, Dhar. As per these rules, all hazardous waste should be disposed off within ninety days. The MPPCB has given (June 2010) consent for facility of collection, treatment, storage; transportation and disposal of resin 5000liters in five years.

The details of hazardous waste quantity generated, sold and balance for the years 2011-12 to 2013-14 are given in table no. 2.3.6:

Table 2.3.6

Details of hazardous waste

Material	2011-12				2012-13				2013-14			
	O. B	Received	Sold	C. B	O. B	Received	Sold	C.B	O.B	Received	Sold	C.B
Used oil (Qty in KL)	3.46	9.50	8.99	3.97	3.97	5.20	5.17	4.00	4.00	5.50	0	9.50
Exhausted Resin (Qty.in KL)	6.90	4.59	0	11.50	11.50	1.00	0	12.50	12.50	3.00	0	15.50

(Source: Data furnished by the STPS)
Note: O.B-Opening Balance and C.B- Closing Balance

We observed that

- the quantity of resin received in three years itself was 8595 liters as against the permitted quantity of 5000 liters;
- the closing balance of resin as on 31 March 2014 was 15495 liters. This was more than the quantity of 5000 liters authorised by the MPPCB;
- STPS did not dispose-off used oil and resin (hazardous waste)within the time limit of 90 days stipulated in the Act and same had accumulated for years together rendering threats to environment;

In the Exit Conference Company accepted the audit observation and stated (November 2014) that after obtaining permission, the resin is now being disposed by combusting along with the coal in furnace.

Recommendation: We recommend that Company should take immediate steps to adhere to norms for disposing of hazardous waste.

Conclusion

- **The Company failed to increase the efficiency of Satpura Thermal Power Station and also failed to achieve Station Heat Rate norms fixed by Madhya Pradesh Electricity Regulatory Commission (which rose to as high as 3727 against the norm of 2700 during the review period) which resulted in excess consumption of coal (2581635 MT) and oil (41440 KL) and also effected the air and water pollution.**

- **The Company neither renovated the Electro Static Precipitator to control emission of coal ash in flue gas nor implemented Ammonia Flue Gas Conditioning, leading to the monthly average of Suspended Particulate Matter levels in the flue gas discharge being 396 to 485 mg/Nm^{3}as against the norm of 150 mg/Nm^3, On-line monitoring equipments were not functioning resulting in non-depiction of emission levels at a given point of time with high precision.**

- **Water pollution was high, as there was no action plan for 100 *per cent* utilisation of fly ash. The new ash pond, equipped with Effluent Treatment Plant could not be completed and put to use resulted in Total Suspended Solids exceeding the standards in the water and there was a delay in the construction of Sewage Treatment Plant also.**

- **Company did not dispose-off the exhausted resin within the time limit of 90 days as stipulated in the Hazardous Wastes (Management, Handling and Trans-boundary Movement) Rules, 2008 and accumulation of the same posed threats to environment.**