Report of the
Comptroller and Auditor General of India

for the year ended March 2012

Union Government (Commercial)
No. 13 of 2013
(Compliance Audit Observations)

CONTENTS

PREFACE

1. The accounts of Government Companies set up under the provisions of the Companies Act (including Companies deemed to be Government Companies as per the provisions of the Companies Act) are audited by the Comptroller and Auditor General of India (CAG) under the provisions of Section 619 of the Companies Act, 1956. The accounts certified by the Statutory Auditors (Chartered Accountants) appointed by the CAG under the Companies Act are subject to the supplementary audit by CAG whose comments supplement the reports of the Statutory Auditors. In addition, these companies are also subject to test audit by the CAG.

2. The statutes governing some Corporations and Authorities require their accounts to be audited by the CAG. In respect of five such Corporations viz. Airport Authority of India, National Highways Authority of India, Inland Waterways Authority of India, Food Corporation of India and Damodar Valley Corporation, the relevant statutes designate the CAG as their sole auditor. In respect of one Corporation viz. Central Warehousing Corporation, the CAG has the right to conduct supplementary and test audit after audit has been conducted by the Chartered Accountants appointed under the statute governing the Corporation.

3. Reports in relation to the accounts of a Government Company or Corporation are submitted to the Government by the CAG under the provisions of Section 19-A of the Comptroller and Auditor General's (Duties, Powers and Conditions of Service) Act, 1971, as amended in 1984.

4. The cases mentioned in this Report are among those which came to notice in the course of audit during 2011-12 as well as those which came to notice in earlier years. Results of audit of transactions subsequent to March 2012 in a few cases have also been mentioned.

5. All references to 'Companies/Corporations or PSUs' in this Report may be construed to refer to 'Central Government Companies/Corporations' unless the context suggests otherwise.

EXECUTIVE SUMMARY

I Introduction

1. This Report includes important audit findings noticed as a result of test check of accounts and records of Central Government Companies and Corporations conducted by the Comptroller and Auditor General of India under Section 619(3) (b) of the Companies Act, 1956 or the statutes governing the Corporations.

2. The Report contains eleven theme based audit and 39 individual observations relating to 38 PSUs under 15 Ministries/Departments. The draft observations were forwarded to the Secretaries of the concerned Ministries/Departments under whose administrative control the PSUs are working to give them an opportunity to furnish their replies/comments in each case within a period of six weeks. Replies to 36 observations were not received even as this report was being finalised in April 2013. Earlier, the draft observations were sent to the Managements of the PSUs concerned, whose replies have been suitably incorporated in the report.

3. The paragraphs included in this Report relate to the PSUs under the administrative control of the following Ministries/Departments of the Government of India:

Ministry/Department (Number of PSUs involved)	Number of paragraphs	Number of thematic studies	Number of paragraphs/ thematic studies in respect of which Ministry reply was awaited
1. Atomic Energy (NPCIL)	1	-	-
2. Chemical and Fertilizers (BCPL)	-	1	1
3. Civil Aviation (AAI, AIL, PHHL)	3	2	3
4. Coal (CCL)	1	-	1
5. Commerce and Industry (MMTC)	2	-	2
6. Consumer Affairs, Food and Public Distribution (FCI)	3	-	3
7. Defence (BEML, BDL, BEL, MDL, HAL)	7	3	7
8. Department of Fertilizers (RCF)	1	-	1
9. Ministry of Finance	7	-	5

(GICL, NICL, NIACL, OICL, UIICL, PNBHFL, SBICPSPL)			
10. Petroleum and Natural Gas (GAIL, IOCL, HPCL, ONGC)	7	2	7
11. Power (DVC, NHPC, PFC)	3	1	4
12. Department of Public Enterprises (BEL, BHEL, BPSCPL, CSL, DCIL, FSNL, HPCL, MECON Limited, MRPL, NHPCL, NLCL, NMDC Limited, NTPC, NTPC SAIL Power Company Private Limited, PFCL, PGCIL, RECL, RINL, SAIL, SJVN)	1	-	1
13. Department of Shipping (SCI)	-	1	-
14. Steel (NMDC, SAIL)	3	-	-
15. Urban Development (DMRC)	-	1	1
Total	**39**	**11**	**36**

4. Total financial implication of audit observations included in eleven thematic studies is ₹ 9040.33 crore.

5. Individual Audit observations in this Report are broadly of the following nature:

- ❖ Non-compliance with rules, directives, procedures, terms and conditions of the contract etc. involving ₹ 1333.12 crore in 18 paras.
- ❖ Non-safeguarding of financial interest of organisations involving ₹ 1314.66 crore in 16 paras.
- ❖ Defective/deficient planning involving ₹ 202.06 crore in 3 paras.
- ❖ Inadequate/deficient monitoring involving ₹ 23.91 crore in one para.
- ❖ Non-realisation/ partial realisation of objectives involving ₹ 65.55 crore in one para.

6. The Report also contains a para relating to recoveries of ₹ 121.86 crore made by 4 PSUs and another para relating to corrections/rectifications by one PSU at the instance of Audit.

II Highlights of significant paras included in the Report are given below:

Ministry of Defence sanctioned in July 1999, design and development of an Intermediate Jet Trainer (IJT) by Hindustan Aeronautics Limited (HAL) at a cost of ₹180 crore to be completed by July 2004. Though the design and development of IJT was yet to reach the stage of obtaining approval for Initial Operational Clearance (IOC), the Ministry also sanctioned concurrent handling of Limited Series Production (LSP) (March 2006) and Series Production (SP) (March 2010) by HAL. Audit observed the following:

IOC originally scheduled for March 2007 had not been achieved even after six years of delay. The development was beset with a number of failures at various stages.

Set back to the scheduled timelines for different stages was due to non-freezing of engine design, change in weight of engine and experimenting with engine of inadequate thrust. Accidents to both the prototypes after completion of the prescribed number of flights resulted in suspension of flight test activities and modifications for strengthening the structure of the aircraft.

The prescribed procedure for fabrication and testing of the Structural Test Specimen whereby the basic airframe was to be tested to one-and-a-half times the designed load to prove the robustness of the design was not adhered to in respect of the first prototype. This resulted in cracking of specimen fuselage even at less load, leading to fabrication of another wing entailing extra expenditure of ₹ 38.78 crore.

Since the Company could not achieve refinement of stall characteristics and spin testing, engagement of a consultant at a cost of ₹ 23.59 crore was done as late as in December 2012.

Adoption of tentative purchase price for equipments /components while quoting for LSP resulted in extra expenditure of ₹ 63.59 crore.

Against the original sanction for development of ₹180 crore, the project had already incurred an expenditure of ₹ 516 crore.

Milestones set for release of funds to HAL were without linkage to definite and substantive physical progress. Against the sanctioned cost of ₹ 487 crore for LSP, the amount released by Ministry even before achievement of IOC was ₹ 444 crore. In respect of SP, against the sanction for ₹ 6180 crore, the releases amounted to ₹ 3075 crore but the expenditure was only ₹ 168 crore.

Acceptance of reduced initial life of engine despite calling quotations for engine with unlimited total technical life and later seeking enhancement of life resulted in avoidable expenditure of ₹ 131 crore.
Procurement of Line Replacement Units in advance of requirement resulted in warranty expired inventory of ₹ 114.76 crore.

On account of non-delivery of aircraft as per requirement, the intermediate stage training to the pilots of IAF was adversely affected as of March 2013.

(Para No. 7.8)

Bharat Dynamics Limited (BDL), was incorporated with the objective of manufacturing sophisticated Defence equipment required by the Armed Forces. BDL is a prime production agency for Guided Missiles in India. The Bhanur unit of BDL established (1988) for manufacturing Konkurs ATGM Systems and Unified Launchers was assigned with the production of Konkurs missiles since 1989 as a part of the contract entered into by the MoD. Since Konkurs missile was not defeating the tanks fitted with ERA panel, Army recognized (1994) the need for induction of Konkurs-M missile which is an advanced version of Konkurs and capable of defeating tanks protected by ERA.

Audit observed that, the process of finalizing the contract took about eight years from the date of recognizing (1994) the need of improved version of Konkurs-M. Further, technology absorption took a longer time than anticipated and this led to delay in execution of the contract by three years and consequential delay in supply of 14,722 missiles resulted in loss of ₹ 283.72 crore besides levy of Liquidated Damages (LD) of ₹ 38.81 crore by the Army. The estimated loss for supply of the balance 13,278 missiles is ₹ 297.25 crore and the likely LD is ₹ 75.57 crore. BDL planned (August 2010) to enhance the capacity for production of missiles in two phases at a cost of ₹ 50 crore and ₹ 130 crore respectively. Phase- I was to be completed by March 2012 and phase-II by March 2013. Though the first phase was to be completed by March 2012, the capacity remained at the same level of 3000 missiles per annum, even after spending ₹59.27 crore till February 2013.

Audit further observed that MoD, concluded a contract with M/s Rosoboron export for purchase of 10,000 Konkurs-M at a cost of ₹ 1223 crore for the Army on the ground that BDL had not been able to meet their contractual obligations due to problems in absorption of TOT. This indicates that the efforts of MoD to indigenize production of Konkurs-M missiles to avoid dependency on foreign suppliers was defeated despite buying technology at a cost of ₹ 249 crore from KBP under a contract concluded as early as in October 2002.

(Para No. 7.3)

Indian Oil Corporation Limited (IOCL) and GAIL (India) Ltd (GAIL) entered into E&P activities (1999) and started investing in domestic/overseas E&P projects either by way of acquiring Participating Interest (PI) in existing E&P blocks through farm-in or by participating in bidding rounds for E&P blocks. IOCL and GAIL had acquired 77 E&P blocks (GAIL 43 and IOCL 34) involving an expenditure of ₹ 5346.98 crore till 28 February 2013 out of which, the Companies were operator / joint-operator in five blocks and non-operator in the remaining blocks. The Companies had five E&P blocks under development and production, 43 under exploration/appraisal and 29 blocks had either been relinquished or decided to be relinquished on account of non-discovery of hydrocarbon.

Even after an experience of more than a decade in this business, neither IOCL nor GAIL had defined/documented policy or prescribed procedure for E&P activities. GAIL and IOCL had acquired E&P assets mainly by relying on technical assessment by other JV partners instead of conducting detailed due diligence or revalidation of reservations/limitations (expressed by consultants) at their end. Further, these Companies in most cases had not apprised their Board of Directors about the known risks/ limitations before acquiring the respective block. Inadequate analysis and interpretation of data and non-revalidation of reservations/limitations expressed by advisors had resulted in infructuous expenditure of ₹ 1258.46 crore. Further, despite having adequate provisions in Joint Operating Agreement, GAIL and IOCL had not invoked non-operator's audit rights in 13 out of 40 E&P assets and 18 out of 32 E&P assets respectively.

(Para No. 10.1)

With a view to increasing the availability of ethanol through in-house production, Hindustan Petroleum Corporation Limited (HPCL) decided to bid (18 December 2007) for four of the fifteen closed sugar mills offered (November 2007) for sale by the Government of Bihar and became successful (February 2008) in procuring two such sugar mills at Sugauli and Lauriya located in East Champaran and West Champaran districts, respectively, in Bihar. HPCL decided to establish two integrated sugar, ethanol mills with co-gen power plants at these locations. Despite the fact that ethanol production was a new line of business for HPCL, it showed haste in decision-making and did not carry out proper due diligence. Pre-bid consultant *viz.* IDBI appointed (10 December 2007) by the Company had cautioned it by stating that a successful bid would only result in acquiring land in interior Bihar as there were serious infrastructure constraints for ethanol production and that it had not carried out an independent verification of the information for bidding for the mills.

Configuration Study Report (CSR) submitted (October 2008) by the HPCL's another consultant *viz.* M/s MITCON had suggested three options for setting up the mills with alternatives for utilizing sugarcane juice for production of sugar and ethanol. However, CSR was not presented to HPCL Board for approving an appropriate option and prepare Detailed Feasibility Reports (DFRs). Instead, a team of functional directors and officials of Ministry of Petroleum and Natural Gas was reported to have chosen (30 October 2008) the third option that envisaged utilization of 50 *per cent* sugarcane juice in each mill for production of ethanol and remaining 50 *per cent* for production of sugar. Capacity of ethanol plants was decided accordingly. The projected Internal Rate of Return (IRR) - a vital parameter for capital investment decision – for this option was 10.25 *per cent.*

DFRs prepared (February 2009) by M/s MITCON for setting up Integrated Sugar-Ethanol-Cogen power plants for the chosen option at each of the locations was based on a set of unlikely optimistic assumptions and projected a rosy picture for establishing the plants and indicated higher IRRs than those projected in CSR. Thus, the projects were made to appear viable though they were not. HPCL did not apprise the Board of the implementation mechanism for setting up integrated sugar, ethanol and cogen power plants though the proposal was approved (June 2009) by the Board. Proposal for formation of the subsidiary was also not submitted to the Board for approval.

The first year of operations of the mills, demonstrated that the option adopted for production of ethanol was not financially viable. Due to this, HPCL Biofuels Limited –subsidiary of HPCL- through which the projects were implemented - decided (August 2012) to utilize 100 *per cent* sugarcane juice for production of sugar. This would result in extra expenditure of ₹ 58.71 crore towards enhancement in the boiler capacity of the two sugar mills, idle capacity of ethanol plants at both the mills and consequent unfruitful expenditure of ₹ 28.45 crore. Thus, the main objective of setting up the two sugar mills *i.e.* to increase availability of ethanol by in-house production was not achieved, despite the fact that investment of ₹ 715.21 crore had been made in the two sugar mills as of 31 March 2012.

(Para No. 10.2)

The Government of India approved (April 2006) the Assam Gas Cracker Project for producing polymers at an estimated project cost of ₹ 5461 crore and accordingly a company named Brahmaputra Cracker and Polymer Limited (BCPL) was formed (January 2007) for implementing the project. Due to non-availability of natural gas in required quality and quantity, the production capacity of the project at 2.2 lakh TPA of ethylene was sub-optimal. The selection of the project site location, transfer of GAIL's LPG plant at Lakwa to the project and poor quality of detailed feasibility report prepared by M/s EIL further affected the viability of the company. There was considerable delay in appointment of Engineering, Procurement and Monitoring Consultant and selection of licensor for basic engineering process package due to which the project cost has been revised (November 2011) to ₹ 8920 crore (including capital subsidy of ₹ 4690 crore).

(Para No. 2.1)

Bharat Electronics Limited (BEL) entered into a contract for procurement with a foreign vendor M/s Rheinmetall Air Defence, AG, Zurich (RAD) despite the fact that the CBI was investigating the firm's deals for alleged corrupt practices in earlier contracts which had the risk of the firm being blacklisted. As the firm was eventually blacklisted, this led to blocking of BEL's funds of ₹ 502.31 crore.

(Para No. 7.4)

Twenty CPSEs'(BEL, BHEL, BPSCPL, CSL, DCIL, FSNL, HPCL, MECON Limited, MRPL, NHPCL, NLCL, NMDC Limited, NTPC, NTPC SAIL Power Company Private Limited, PFCL, PGCIL, RECL, RINL, SAIL, SJVNL) leave rules/policy for encashment of sick leave or of EL with HPL exceeding 300 days, on superannuation, violated the DPE guidelines and resulted in irregular payment of ₹ 413.98 crore for the period from January 2007 to November 2012.

(Para No. 12.1)

The Airports Authority of India (AAI) manages 122 airports and was vested with 52868.36 acres of land as on 31 March 2012 spread across country. The Land Management Department of AAI was responsible to keep proper record, to establish ownership of land vested with AAI.

Audit however observed that the above department could not fully achieve the objectives for which it was created. Out of 37455.729 acres of land test checked in Audit, 14053.202 acres of land was not mutated in the name of AAI. Further, 888.44 acres of land was under encroachment (March 2012) due to which AAI had to defer creation/operationalisation of certain facilities.

A number of agencies were unauthorisedly occupying land at various airports. However, in absence of agreements with the parties AAI was unable to realise license fee/lease rent due amounting to ₹225.78 crore. An amount of ₹ 181.11 crore was also outstanding towards compensation for assets transferred by AAI to Government agencies like Indian Navy and NHAI.

(Para No. 3.1)

In pursuance of DPE guidelines Steel Authority of India Limited introduced Performance Related Pay scheme for its executives. A Remuneration Committee headed by an

Independent Director of the company was to decide the PRP and policy for its distribution within the prescribed limit. The DPE guidelines inter alia prescribed that the company should (i) adopt a 'Bell Curve Approach' in grading the executives so that not more than 10 to 15 *per cent* are graded as 'Outstanding/Excellent' and 10 *per cent* of executive should be graded as 'Below Par'. No PRP 'was to be paid to those achieving below par' rating (ii) the executives who got "Outstanding", Very Good". "Good" and "Fair" performance rating should get up to 100 *per cent*, 80 *per cent*, 60 *per cent* and 40 *per cent* PRP. Thus quantum of PRP was to be linked to the performance rating of the executives.

Audit observed that (i) the company had not adopted 'Bell Curve Approach' in grading and paid PRP to all its executives (ii) the Remuneration Committee adopted a PRP formula wherein the multiplier for the weightage of Employee Performance Rating exceeded the DPE prescribed limit.

By not adhering to the DPE guidelines the company made an irregular payment to its executives amounting to ₹ 319.61 crore for the years 2007-08 to 2010-11.

(Para No. 14.2)

Hindustan Aeronautics Limited (HAL) signed (January 2003), a Co-operation Agreement (agreement), with Turbomeca, France (TM) at a cost of ₹ 878.08 crore for co-development and indigenous production of 320 Shakti engines in five phases (0 to 4) by 2013. The assembly kits for various phases were to be supplied by TM at the agreed prices subject to escalation (with 2002 as base year) valid up to the year of delivery.

Audit observed that even after more than a decade, the self-reliance in manufacture of an engine to suit requirements of ALH has not been achieved as envisaged. The need for variants of engines to operate at different climatic conditions and altitude was not foreseen leading to frequent modifications requiring more investment in terms of time and money. HAL had to bear additional burden due to the failure of TM, indicating undue favours extended to the foreign partner in the development and production of Shakti engines. Failure to ensure compliance to offset obligation by the foreign collaborator has so far denied an opportunity to the Indian industry to contribute towards self-reliance. Acquisition of additional technical know-how without optimal usage of free technical assistance has further contributed to extra cost on the project.

Thus, inability of HAL to absorb the technology and non-assessment of the available in-house capacity to manufacture Shakti engines impacted timely induction of ALH into Defence forces and also resulted in avoidable extra expenditure of ₹ 204.27 crore to HAL.

(Para No. 7.7)

General Insurance Corporation of India's reinsurance underwriting and profitability of treaties issued to Star Health and Allied Insurance Company Ltd (Star Health) covering Phase-I to V of Rajiv Aarogyasri Community Health Insurance Scheme was examined. Audit observed that imprudent acceptance of reinsurance treaties resulted in loss to GIC to the extent of ₹ 197.80 crore. The main observations are:

Liability accepted by GIC was not commensurate with the premium since premium to liability ratio of Star Health ranged from 1.09:1 to 1.02:1 as against premium to liability ratio of GIC which ranged from 1:4.12 to 1:5.54. Further, claim ratio of the GIC in three (2008, 2009 and 2010) out of five years exceeded 100 *per* cent of the earned premium.

GIC in 2008 worked out a renewal premium rate of 21.73 *per cent* considering the claim ratio @ 104 *per cent*; however, it had actually charged only 12.63 *per cent* without justifying the reasons for reduction of premium rate. Further, GIC failed to safeguard its interest by not including a condition to charge higher premium rate in the event of the claim ratio exceeding 104 *per cent.*

(Para No. 9.1)

Oil and Natural Gas Corporation Limited (Company) hired rig 'Actinia' from Reliance Industries Limited (RIL) for six months on assignment basis in deviation of standard tendering procedure citing requirement to drill at three locations. Actual deployment of the rig indicated that hiring of the rig was not necessary for drilling at any of the three identified locations. The entire expenditure ₹ 146.71 crore on hiring of the rig from February 2009 to July 2009 was, thus, avoidable. The rig idled for want of materials which resulted in unfruitful expenditure of ₹ 4.64 crore during February 2009.

(Para No. 10.7)

Indian Oil Corporation Limited failed to synchronize conversion of Gas Turbines at its Panipat Refinery, to use Re-liquefied Natural Gas, with the commissioning of Dadri Panipat Spur Pipe Line project that resulted in avoidable expenditure of ₹ 135.81crore on account of usage of costlier fuel for generation of captive power during August 2010 to March 2012.

(Para No. 10.3)

The New India Assurance Company Limited, National Insurance Company Limited, The Oriental Insurance Company Limited and United India Insurance Company Limited suffered a loss of ₹ 121.81 crore, during the period of four years ending June 2012, due to their imprudent decision to enter into a co-insurance agreement with Star Health and Allied Insurance Company. Substantial part of claim was borne by the four PSU insurers who accepted the co-insurance in spite of low premium and without putting in place appropriate checks and balances to safeguard their financial interests.

(Para No. 9.2)

Oil and Natural Gas Corporation Limited (Company) awarded a contract on the basis of forged documents submitted by the bidder. The contract was terminated four years later owing to inability of the contractor to implement the project leading to a loss of ₹ 114.78 crore to the Company.

(Para No. 10.8)

MMTC Limited imports and supplies gold, platinum and silver to exporters under various schemes as per Foreign Trade Policy of Government of India. MMTC also imports Gold and Silver for sale in domestic market under OGL Scheme. Trading of bullion is regulated in accordance with the instructions/guidelines contained in the Precious Metals Procedural Drill (bullion drill) and internal Circulars issued by the Company from time to time. The bullion drill mandates obtaining of Foreign Exchange Rate Cover (FERC) to hedge against exchange rate fluctuations. The cost of such FERC is to be borne by the customer. Further, instructions issued on 18.12.2006 required each transaction to be treated as separate and squared off on completion, so as to avoid bunching of transactions. Failure to adhere to the instructions on bullion trading, camouflaged accounting and ineffective internal control in MMTC Limited resulted in non-realization of dues amounting to ₹ 295.99 crore from customers and avoidable loss of ₹ 53.27 crore (till December 2012) towards interest.

(Para No. 5.1)

GOI accorded approval for the Airport Metro Express Line (AMEL) from New Delhi railway station to Indira Gandhi International Airport (IGIA) (May 2007) / Dwarka (January 2009) through Public Private Partnership (PPP) mode. A Special Purpose Vehicle viz. Delhi Airport Metro Express Private Limited (DAMEPL) was incorporated with the consortium Reliance Energy Limited/CAF holding 100 *per cent* equity. As per Concession Agreement entered into (August 2008) between Delhi Metro Rail Corporation (DMRC) and DAMEPL, the work relating to design, installation, commissioning, operation and maintenance was undertaken through DAMEPL and civil work executed by DMRC.

In contravention of guidelines (January 2006) of the Ministry of Finance restricting the quantum of financial support in PPP in infrastructure to maximum of 40 *per cent* of the total project cost, the concessionaire was allowed to contribute only to the extent of 46.17 *per cent* (13.92 *per cent* equity and 32.25 *per cent* debt) of the total project cost.

DMRC failed to ensure the payments due to it and also withdrawals from the Escrow Account as per agreements. The operations were suspended on 8 July 2012 due to defects in civil works. The Joint Inspection Committee constituted by the Ministry for examining defects in civil structure attributed them to poor workmanship and absence of proper inspection during construction as well as operation. Though the line has resumed operations from 22 January 2013 the Concessionaire has invoked arbitration under Clause 36.2 of CA on the grounds including sustainability/financial viability of the project.

Further, the project has been executed using a unique model of PPP wherein the Concessionaire is operating a project of ₹ 5697 crore with an insignificant equity of ₹ one lakh.

(Para No. 15.1)

Pawan Hans Helicopters Limited was set up (October 1985) with the objective of providing helicopter support services to meet the requirements of oil sector, to operate in hilly and remote terrain, connect inaccessible areas, operate charters for promotion of travel and tourism and provide intra-city transportation. The Company has a fleet of 45 helicopters (March 2012) which consists of 35 - Dauphin N & N3 (10 seater), seven - Bell (6 seater), two - B3 (6 seater) and one - MI-172 (26 seater). Audit reviewed the operations of helicopters in PHHL during the period April 2009 to March 2012 with reference to MOUs and Agreements entered into so as to assess the efficiency of its operations.

The Company had shortage of average 22 to 18 Pilots during the period 2009-12 for its Dauphin fleet of helicopters at its Western Region from where operations to one of its largest customer viz. ONGC were catered to. ONGC deducted an amount of ₹ 16.98 crore, Fixed Monthly Charges (FMC) and liquidated damages, towards Aircraft On Ground of helicopters due to non availability of helicopters mainly for shortage of Pilots. There were instances of excess procurement of AS-4 kits, sliding doors, engines, delayed procurement of critical items, resulting in loss of FMC which indicate the need for an efficient inventory control system.

There was no system for timely recovery of debts due to which there was huge outstanding of ₹ 171.87 crore as on 31 March 2012 necessitating implementation of credit control procedure.

(Para No. 3.5)

The Shipping Corporation of India Limited disposed off 30 vessels during the period 2009-10 to 2011-12 and realized ₹ 598.67 crore as net sale proceeds. Audit noticed following deficiencies in process of disposal:

The process of disposal was carried out on the basis of guidelines which were not approved by Government.

Deviations in preparation of techno economic study (TES) like inclusion of Management Expenses in TES and adoption of incorrect scrap rate for TES were noticed

Delays in initiating proposals by Operating Division and non-revision of scrap rate in case of delay in sale were also noticed on account of which actual realization obtained by the Company was lower and resulted in less realization.

Audit observed deficiencies in the process of tendering and restricted competition. There were also delays in processing tender leading to avoidable expenditure of standing charges.

Deficiencies in the system of collection of EMD, forfeiture of EMD and discrepancy between buyers and agency remitting the EMD and sale proceeds were observed.

The perpetuation of the practice of one agent representing more than one prospective buyer and one agent bidding for two firms for the same vessel had the potential for cartel formation.

(Para No. 13.1)

The Theme Audit on "Ash Management in Thermal Power Stations of DVC" covering the period 2009-10 to 2011-12 highlights deficiencies concerning generation and evacuation/disposal and utilization of ash. Audit observed that except the year 2009-10, the Corporation could not utilize the generated ash fully. It was also observed that the bulk of ash utilization centered on mine fillings by incurring huge avoidable transportation cost.

Failure of the Corporation to limit fly ash generation by way of beneficiated/blended coal resulted in loss of opportunity to save generation cost. It was observed that despite two of its thermal power stations being under the Ministry of Environment and Forests (MoEF) coverage to use beneficiated/blended coal, the Corporation continued to violate such stipulation of MoEF.

The ash management situation aggravated due to considerable delay in acquisition of land at Bokaro Thermal Power Station (BTPS) and Mejia Thermal Power Station (MTPS). Audit also observed significant delays in installation of dry fly ash collection system in the thermal power stations despite it being a mandatory requirement from pollution control angle. This has not only brought one of the thermal power station's (BTPS) unit to the brink of closure due to the discharge of ash slurry into the Konar river but also created serious health related problems for the local inhabitants, destroyed agricultural land and polluted adjoining dams near MTPS. Further, it was observed that the Corporation did not exercise appropriate control in either framing a sound and feasible qualifying requirement for tendering of evacuation of ash or exercised any due diligence before awarding of contract to Lafarge India Private Limited.

(Para No. 11.1)

CHAPTER I: DEPARTMENT OF ATOMIC ENERGY

Nuclear Power Corporation of India Limited

1.1 Violation of CVC guidelines and loss due to not availing refund of terminal excise duty

NPCIL placed purchase order for End Shields on nomination basis instead of through competitive bidding in violation of guidelines laid down by the CVC based on the judgement of Hon'ble Supreme Court of India and forfeited the benefit of refund of terminal excise duty resulting in a loss of ₹ 5.93 crore.

Central Vigilance Commission (CVC) issued orders (July 2007) asking all Chief Vigilance Officers to apprise their respective Boards/managements about the observations contained in the judgement[1] of the Hon'ble Supreme Court on transparency in works, contracts and consultancy contracts awarded on nomination basis. The CVC re-emphasised that tendering process or public auction was a basic requirement for award of contract by any Government agency as any other method, especially award of contract on nomination basis, would amount to a breach of Article 14 of the Constitution guaranteeing the right to equality, which implies right to equality to all interested parties.

According to the aforesaid judgement of the Hon'ble Supreme Court of India, contracts by the State, its corporations, instrumentalities and agencies must be normally granted through public auction/public tender by inviting tenders from eligible persons. The judgement also laid down rare and exceptional circumstances e.g., natural calamities and emergencies declared by the Government, where the supplier or contractor has exclusive rights in respect of goods or services, in which cases contracts may be awarded through private negotiations.

The above instructions of the CVC were placed by the Nuclear Power Corporation of India Limited (NPCIL) before the Board in its meeting held in December 2007 and were duly noted by it.

Furthermore, as per Foreign Trade Policy (FTP) of GOI (effective from 27 August 2009), supplies made to Nuclear Power Projects would be eligible for benefits of deemed export in cases where procedure of competitive bidding was followed. For availing the benefit of refund of excise duty in respect of supplies, it was necessary that the company invite competitive bids through public/limited tender.

A test check of records of NPCIL revealed that for supply and manufacture of End Shields for RAPP 8,[2] the purchase order (PO) for ₹ 59.80 crore was issued on nomination basis to M/s L&T without inviting competitive bids though several firms/vendors were available in this field. This award of contract by NPCIL on nomination basis without inviting public tender from eligible persons was in contravention of the judgement of the Hon'ble Supreme Court of India and the CVC instructions. Besides, as a result of such action, NPCIL forfeited the benefit of refund of ₹ 5.93 crore (₹ 57.55

[1] *Arising out of SLP (Civil) No. 10174 of 2006*
[2] *Rajasthan Atomic Power Project 8*

crore @ 10.3 *per cent*) paid towards terminal excise duty as provided under the para/clause ibid. The PO was placed (March 2011) on L&T at a negotiated price of ₹ 57.55 crore (excluding delivery charges) for manufacture, inspection, testing, packing, supply and delivery of End Shields assemblies and associated components for RAPP 8.

In response, the Management (March 2012 & May 2012) stated that after considering all aspects such as cost of the proposed work, experience in manufacturing and salvaging procedure of sub assemblies, project schedule for delivery of End Shield, the Board sub-committee approved (October 2010) placement of purchase order on nomination basis on M/s L&T. Competitive price was arrived at after negotiation based on the actual value of job obtained from competitive bidding carried out (December 2009) on similar requirement in KAPP 3*, 4 and RAPP 7. It was further contended that it would not have been proper to issue tender enquiry on other firms and reject them during technical evaluation on ground of them not meeting the time schedule merely for the sake of availing of fiscal concession.

It was further stated (September 2012) by NPCIL that M/s. L&T was better placed to meet the demanding delivery schedule of June 2013 as per Master Control Network (MCN) of RAPP-8. Moreover, any firm other than L&T would have to add or incur additional cost of ₹ two crore for transportation and packing of partially manufactured inner sub-assemblies of suspended TAPP-3 project lying at the Hazira compound of M/s. L&T which was to be used for the proposed project. The additional financial implication of ₹ 5.93 crore towards excise duty due on non-availment of fiscal benefit under FTP by NPCIL as pointed out by Audit would be considerably reduced, if the additional cost of ₹ two crore that had to be incurred by firm other than L&T was taken into consideration. The Ministry in its reply (November 2012) endorsed the view of the NPCIL.

The reply of the Management is not acceptable since the tendering process of NPCIL in the instant case was in violation of the orders of the Hon'ble Supreme Court. Further, it is not clear how NPCIL without actually having gone in for competitive bidding through public/limited tender, concluded (November 2010) that awarding contract to M/s L&T on nomination basis for the said work would be more economical and technically acceptable than other firms which had experience in the field. The actual techno-commercial competitiveness of a company could have been discovered only by way of competitive bidding through public/limited tender.

Audit also observed that though NPCIL selected M/s L&T on nomination basis on the plea that other firms would not be able to meet demanding delivery schedule of June 2013 as per MCN, the delivery date was subsequently extended to April 2014 in favour of M/s L&T.

Thus, by awarding contract on nomination basis without going in for competitive bidding process, NPCIL not only violated CVC instructions of July 2007 based on the judgement of the Hon'ble Supreme Court, but also lost the opportunity to avail refund of terminal excise duty as provided for in FTP resulting in a loss of ₹ 5.93 crore.

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* ***Kakrapar Atomic Power Project 3***

CHAPTER II: MINISTRY OF CHEMICALS AND FERTILIZERS

Brahmaputra Cracker and Polymer Limited

2.1 Assam Gas Cracker project

2.1.1 Introduction

The Government of India (GoI) approved (April 2006) the Assam Gas Cracker Project (AGCP) at an estimated project cost of ₹ 5461 crore and Brahmaputra Cracker and Polymer Limited (BCPL, company) was formed (January 2007) for implementing the project with GAIL, Numaligarh Refinery Limited (NRL), Oil India Limited (OIL) and Government of Assam (GoA) as promoters[1]. Due to non-availability of feedstock[2] in required quality and quantity, the production capacity of the project as approved by GoI was 2.2 lakh TPA of ethylene, though found to be sub-optimal by representatives of some Ministries[3] under GoI. During November 2011, the project cost was revised and approved by CCEA to ₹ 8920 crore (including capital subsidy of ₹ 4690 crore). An amount of ₹ 6032 crore has already been incurred for the project upto January, 2013 with physical completion of 88 *per cent*. Capital subsidy amounting to ₹ 3702 crore was received by the company for this project from the Central Government upto January, 2013.

2.1.2 Audit findings:

2.1.3 Pre-project activities

The pre-project activities of the project were not carried out efficiently and effectively which contributed to increase in the cost of the project which are discussed below:

2.1.3.1 Site Location

The project was originally proposed to be located at Tenhaghat village close to Duliajan (source of feed gas from OIL). The Indian Air Force, however, did not give clearance for setting up the project at Tenhaghat as the same was close to Chabwa Air Force Station. Therefore, the site was changed (October 2000) to the present location at Lepetkata. As the selected site was located 50 km away from Duliajan and 45 km. from Lakwa, the project required an investment of ₹ 114.65 crore for transportation of gas through pipelines. It was also observed that the selected site was on an undulating terrain with a long stretch of low-lying area along the river bank which was also highly flood prone. It was observed that the site selection was made without any initial topographical survey. The work for topographical survey and geotechnical soil investigation were awarded during November and December 2007 respectively. An amount of ₹ 291.18 crore was estimated for development of such land and ₹ 130.37crore had been incurred till January 2013.

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[1] ***Shareholding pattern- GAIL-70 per cent and OIL, NRL & GoA-10 per cent each***

[2] ***Natural gas and naphtha***

[3] ***MoCF, MoPNG etc***

Management replied (February 2013) that alternative land closer to the source of feedstock was not indentified primarily for saving time of two to three years required for land acquisition.

Management's contention for not identifying alternative land closer to the source of feedstock is not acceptable as there was delay of more than six years in acquisition of the entire land selected at Lepetkata.

2.1.3.2 Installation of additional gas processing facilities at Lakwa

As per the agreement with OIL (September 2007), BCPL would receive 60 lakh SCMD[1] natural gas which would be processed in Gas Sweetening Unit (GSU)[2] and Gas Processing Unit (GPU)[3] to recover feed gas. The cost of both the plants was ₹ 449.19 crore (GPU - ₹ 418.08 crore and GSU - ₹31.11 crore). There was also a provision in the Detailed Feasibility Report (DFR) for installation of another GSU and modification of the existing LPG plant of GAIL at Lakwa to a GPU at an estimated cost of ₹ 250 crore for processing of 13.50 lakh SCMD gas from ONGC, Lakwa for recovery of feed gas. Hence, there was provision for two GSUs and two GPUs in two different locations. Audit observed that the LPG plant of GAIL at Lakwa, commissioned in October 1998 with a capacity of 0.85 lakh TPA of LPG, was operated at a low capacity due to non-availability of adequate quantity and quality of gas and was incurring huge losses. Therefore, the conversion of the existing LPG plant of GAIL at Lakwa to a GPU and installation of new GSU could have been avoided.

Management stated (February 2013) that it was decided (March 1997) by the Cabinet to transfer the Lakwa plant of GAIL to the project.

It was further observed that though GoI had decided to transfer the LPG plant to the project at a price to be determined by an independent agency, no independent agency was appointed to settle the price.

The transfer of such loss making plant to the project would impact the economic viability of the project.

2.1.3.3 Deficiency in preparation of DFR

Engineers India Ltd. (EIL) prepared (December 2004) the Detailed Feasibility Report (DFR) on the basis of the scope of work and information provided by GAIL (major promoter) with an estimated project cost of ₹ 3996 crore and scheduled completion period of 60 months. The project cost was subsequently revised (August 2005) by EIL and approved by CCEA at ₹ 5461 crore. EIL prepared the DFR in accordance with the information provided by GAIL. It was noticed that though Front End Engineering Design (FEED)[4] should have been prepared first to arrive at an accurate cost estimate, no such FEED preparation was envisaged by GAIL. The DFR was prepared without pre-selection of required technology and licensor for the project. The cost of the project was also

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[1] ***Standard Cubic Metre per Day***

[2] ***Gas Sweetening Unit reduces the carbon dioxide from the feed gas before sending the same to downstream Gas Processing Unit.***

[3] ***Ethane/ Propane (C_2/C_3) is recovered in the Gas Processing Unit (GPU) and thereafter fed in the gas cracker plant.***

[4] ***Robust planning and design early in a project's lifecycle at a time when the ability to influence changes in design is relatively high and the cost to make those changes is relatively low.***

estimated on the basis of in-house data with EIL available without considering the non-standard capacity/size of the plant. Therefore, the DFR again had to be revised in December 2011 by EIL with an upward revision of project cost to ₹ 8920 crore. About 41 *per cent* of the increase in project cost (₹ 1412 crore) was due to changes in scope of work and engineering design etc. which were not envisaged in the original DFR. The standing committee constituted[1] to look into the cost and time overrun in respect of AGCP also observed (May 2011) that the DFR did not factor in the necessary technological/ engineering and utilities/ power requirement.

While accepting the above (February 2013) the management reply was however, silent on not providing the necessary information for detailed engineering by GAIL to EIL at the time of preparation of DFR.

2.1.4 Project Execution

The project was originally scheduled to be completed by April 2012. The project commissioning date has been revised to December 2013. The delay was mainly attributed to the following:

2.1.4.1 Appointment of EPMC

Appointment of Engineering, Procurement and Monitoring Consultant (EPMC) is the first step in executing a project. As per the DFR finalised (December 2004) by EIL, the appointment of EPMC should have been made 12 months prior to the project zero date. The CCEA approval for the project was obtained in April 2006. The zero date of the project was considered as April 2007[2]. It was, however, observed that the company initiated steps for award of contract for EPMC only in February 2007 and EIL was appointed as EPMC on nomination basis in September 2007 i.e. after a delay of 17 months from the date envisaged in the DFR/approval of the project, which further attributed to the overall delay in identification of licensor project execution.

It was further observed that fees of EIL as EPMC was fixed in September 2007 at an initial amount of ₹ 257 crore on actual cost reimbursable basis with a ceiling in utilisation of man hours instead of on a lump-sum basis which was against the standard industry practice of fixation of EPMC fees on lumpsum basis. Thus, the fees of EPMC increased with the delay in execution of the project to ₹ 464 crore.

2.1.4.2 Finalization of licensor

As per the revised DFR, all pre-project activities including selection of licensor for availability of basic engineering process package was to be completed before the zero date (April 2007) of the project. However, it was observed that after three months of appointment (September 2007) of the EPMC, the tender for selection of Ethylene Cracker Unit licensor (ECU) was floated (December 2007) and the price bids were opened after eight months of floating the tender. After opening the price bid, another month was taken to evaluate the bids and to place the same before the Board of Directors. Due to the high price bids, the Board decided (October 2008) on retendering. The same was re-floated (October 2008), bids were opened (December 2008) and the

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[1] ***Under the chairmanship of JS(PC) Deptt. of Chemicals & Petrochemicals with the representatives of Planning commission, Deptt. of Expenditure and Ministry of Statistics & programme Implementation***

[2] ***Laying of foundation stone***

work was awarded to M/s. Lummus Technology, USA in January 2009. The detailed agreement comprising terms and conditions was finalised in May 2009 and the process package for Ethylene Cracker Unit (ECU) was received in November 2009 from the licensor which resulted in delay of project activities by more than two years from the zero date.

Management stated (February 2013) that the delay in finalization of licensor was due to sub-optimal capacity of the plant on account of feedstock constraints.

2.1.5 Feasibility of Assam Gas Cracker Project

GoI recommended (June 1990) for setting up a petrochemical complex with a capacity of 3 lakh TPA of ethylene with natural gas available in Assam through OIL and ONGC. A new company 'Reliance Assam Petrochemicals Ltd[1] (RAPL)' was incorporated (October 1994) for implementation of the project. However, as the issues relating to availability of adequate gas and its price were not resolved between RAPL and GoI, the project remained a non-starter. Due to declining quality of gas, the extraction of ethylene was also declining and the available gas was sufficient to produce 1.58 lakh TPA of ethylene. Since, RAPL was reluctant for the project below 2 lakh TPA due to its sub-optimal size, GoI decided (February 2003) that GAIL would examine the feasibility of taking up the project on its own. After examining the feasibility, GAIL intimated (July 2004) that it would implement AGCP based on the available gas in Assam and for achieving economy of scale, it proposed to set up an additional naphtha cracker plant by sourcing 1.60 lakh TPA of naphtha from NRL to produce 2.2 lakh TPA of ethylene.

PIB recommended (September 2005) the proposed project to the CCEA for consideration of approval which was approved (April 2006) with a capital outlay of ₹ 5461 crore including capital subsidy of ₹ 2138 crore. Subsequently, Brahmaputra Cracker and Polymer Limited (company) was formed (January 2007) for implementing the project with GAIL as major promoter. As already mentioned project cost was subsequently revised and approved (November 2011) by CCEA to ₹ 8920 crore.

Audit observed the following:

- The required feed gas was not available due to which the size of the plant was sub-optimal (2.2 lakh TPA of ethylene) which was lower than the minimum economic capacity (3 lakh TPA) for petrochemical industry as considered by GoI in the year 1989.
- Maximum capacity of AGCP would be limited to 1.93 lakh[2] TPA of ethylene only which even was below than the projected capacity (2.2 lakh TPA).
- The price of the feed stock has been considered much lower than the market price.

The matter was reported to the Ministry in March 2013; their reply was awaited (March 2013).

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[1] ***Shareholding pattern of 11 per cent by AIDC, 40 per cent by Reliance Industries Ltd (RIL) and remaining 49 per cent by public.***

[2] ***OIL - 1.30 lakh TPA and ONGC - 0.15 lakh TPA and naphtha would generate 0.48 lakh TPA of ethylene.***

CHAPTER III: MINISTRY OF CIVIL AVIATION

Airports Authority of India

3.1 Land Management

3.1.1 Introduction

The Airports Authority of India (AAI) came into existence on 1 April 1995 with the merger of International Airports Authority of India (IAAI) and the National Airports Authority (NAA) with the enactment of the Airports Authority of India Act 1994. The AAI manages 122[1] airports and is vested with 52868.36 acres of land spread across country as on 31 March 2012. Airport operations involve activities on air side as well as city side. On the air side, land is required for creation of runways, taxiways, aprons, hangars, perimeter roads, control towers, while on city side land is required for construction/development of terminal building, car parking, approach roads, development of space to be allotted to various concessionaires, etc.

The scope of the audit was limited to examination of records available at the five Regional Offices[2] of AAI and at its Corporate Office for three years from 01.04.2009 to 31.03.2012. Detailed scrutiny of land records was also carried out at 13[3] selected airports. Audit reviewed the records relating to management of land, land acquisition, maintenance of land records, safeguarding of land, finalisation of land lease policy, execution of lease agreements and utilisation of available land for optimum revenue generation at the said offices.

3.1.2 Audit Findings

3.1.2.1 Planning

The requirement of land at a particular airport is dependent upon factors such as types of aircraft proposed to be operated, topological conditions of airport, future expansion plans, requirement for airport licensing authority, leasing of land to various parties for aeronautical/non-aeronautical operations, International Civil Aviation Organization (ICAO) guidelines etc. For an agency like AAI, a 'Master Plan' is expected to set out the plans for the development of airport area covering aeronautical and non-aeronautical services, which would be updated depending upon the requirement of each airport. However, Audit observed that master plans were available, in piecemeal, only for 74 out of 122 airports.

(a) Land Manual

The AAI established in the year 2000, a Directorate of Land Management at Corporate Headquarters (CHQ) to ensure availability of ownership documents, proper land records management, to prevent encroachments, formulate and implement land lease policy in

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[1] ***Domestic and international Airports – 96, , Civil Enclaves – 26***

[2] ***Eastern, North-east, Northern, Southern and Western Regional offices***

[3] ***Amritsar, Hyderabad, Jammu, Jaipur, Juhu, Leh, Lucknow, Pant Nagar, Safdarjung, Srinagar, Tirupati, Varanasi, and Visakhapatnam***

case of commercial utilization of available land, etc. However, AAI did not prepare a manual so that these important issues could be addressed on regular basis, uniformly throughout the organisation.

Management stated (March 2012) that the draft Land Manual has been prepared and was ready for circulation. However, the Land Manual was yet to be approved (October 2012).

(b) Cancellation of allotted land

Ministry of Urban Development (MoUD) allotted 2.0524 acres of land at Vasant Vihar, New Delhi (July 1985) to AAI for construction of residential quarters in lieu of AAI's land in the residential area in Lodhi Estate. While AAI took possession of the land in March 1987, as per the terms and conditions of allotment, it was required to complete the construction of the building within two years from the date of taking over possession. In spite of this stipulation, AAI neither put the land to use/made any plans for utilization of this land nor sought extension of time from the Delhi Development Authority (DDA). Resultantly, MoUD cancelled (September 2002) allotment to AAI.

Though AAI raised the issue with Committee of Disputes (COD), the COD confirmed (August 2009) the lapses on the part of AAI in not constructing residential quarters in time and not seeking extension of time for almost 17 years. Though the COD recommended reconsideration of the issue by the Secretary MoUD and also advised to see whether alternative suitable land could be allotted to AAI, as of March 2012, no land had been allotted to AAI by MoUD.

Management while accepting the facts, stated (March 2012) that MoUD was to give alternate land to AAI as advised by COD for amicable settlement of the issue. Thus, due to non-compliance of the terms and conditions of allotment, AAI lost 2.0524 acres of prime land at Vasant Vihar, New Delhi.

(c) Non-utilization of Begumpet Airport at Hyderabad

The commercial operations of Begumpet Airport, Hyderabad (with an area of 790 acres of land) were shifted to the new greenfield airport constructed at Shamshabad in March 2008. AAI incurred an expenditure of ₹ 2.18 crore during 2009 to 2012 on maintenance of the airport. The revenue earned in the preceding three years by AAI before shifting to new airport was as follows:

2005-06	2006-07	2007-08
₹ 135.49 crore	₹ 225.56 crore	₹ 222.21 crore

AAI decided (April 2008) to utilize the existing infrastructure for establishing Civil Aviation Training Centre (CATC), creation and expansion of Maintenance, Repair and Overhaul (MRO) facilities, establishment of high speed rail link to Hyderabad International Airport, establishment of convention centre and conducting Aviation Expos, facilities for general aviation aircraft, other services and usage for aeronautical purposes.

It was observed that only a 'Civil Aviation Training Centre' was created for organizing ATC training, air shows and the airport was being used for general aviation purposes. While the proposals of high speed rail link was kept in abeyance by the Government of Andhra Pradesh, proposal for MRO facility could not materialize and tendering was yet to commence (February 2013) in respect of work relating to Convention Centre.

Therefore, an airport with 790 acres of land in a prime locality of Hyderabad, which was generating revenues of about ₹ 200 crore per year was only being partially utilized. Management replied (March 2012) that the proposal to further utilize the existing space was under active consideration. It was however noted in Audit that no concrete plan has emerged to utilize the existing land at Hyderabad airport.

3.1.2.2 Illegal occupation of space in excess of allotment

AAI issued instructions (May 2007) to all Airport Directors to periodically inspect and measure the land allotted to the various allottees/lessees at particular airports so as to ensure that no additional land has been occupied by the allottees/lessees other than the land actually allotted to them.

In the following cases test checked in Audit it was observed that the Directorate of Land Management did not take appropriate steps for removal of unauthorised occupants of excess area:

3.1.2.3 Excess occupation of land by private parties

(a) Fly Tech Aviation Limited (Fly Tech) at Nadirgul was allotted a hanger space of 465 sqm for a period of 3 years from 01-3-1996 to 28-02-1999 with a license fee of ₹ 2345 per month. The above lease was extended upto 28-02-2002 and thereafter no lease was granted in favour of the agency. The agency continued with the occupation of the said hangar. In addition, Fly Tech was also occupying land measuring 12132.69 sqm illegally. AAI initiated proceedings in 2001 under Public Premises (Eviction of unauthorised occupants) Act 1971 and issued eviction orders in April 2006 which were confirmed by the High Court of Andhra Pradesh in July 2009. AAI claimed ₹ 27 crore as damages upto July 2010 from the agency.

Audit observed that though the eviction order issued in April 2006 was confirmed by the High Court of Andhra Pradesh, the AAI, on the request (September 2009) of the party, appointed a Conciliator in December 2009 to settle the dispute between the parties. This led to further litigation which was still pending resulting in non-realization of damages of ₹ 27.37 crore (March 2012).

Management stated (March 2012) that the findings of conciliator appointed (December 2009) were not acceptable to AAI as the amount offered by the agency to AAI was very less as compared to the amount claimed. On the request of AAI, a panel of two former judges of High Court has been appointed to examine the issue. The report of the panel was awaited.

The fact remained that AAI did not take timely action even after issue of eviction orders in 2006 and confirmation of the same by the High Court of Andhra Pradesh and M/s Fly Tech continued with occupation of the land.

(b) M/s Indamer & Company was allotted a hangar measuring 1247.96 sqm in January 1954 at Juhu Aerodrome by Director General of Civil Aviation (DGCA) and an agreement was executed. Though AAI increased the rate of license fee from time to time, M/s. Indamer disputed the enhanced rate and continued to pay at 1996 rates. AAI initiated eviction and recovery proceedings under PPE Act 1971 in December 2001. The Estate Officer closed the case on 28 July 2004 and matter was reserved for pronouncing the judgment, but till date the same has not been pronounced.

AAI constituted a committee in October 2010 and again in March 2011 to negotiate but the matter was still unresolved. This led to non recovery of ₹ 12.86 crore (March 2012) outstanding from M/s Indamer while unauthorized occupation of hanger continued without any valid agreement.

(c) AAI allotted an area of 3252.79 sqm to M/s MESCO Airlines in April 1993 for 15 years for construction of hangar at Juhu Airport. The party defaulted in payment of license fee and royalty since November 1997. On initiation of proceedings by AAI under the Public Premises (Eviction of Unauthorised Occupants) Act, 1971 the party moved the High Court of Bombay.

In compliance with the order of the High Court (January 2003), AAI appointed an arbitrator (February 2003). The arbitrator gave award (August 2008) in favour of AAI and directed MESCO to pay ₹ 1.27 crore towards license fee to AAI. Accordingly, M/s MESCO paid the same to AAI. While reviewing the statement of assessment, collection and outstanding dues in respect of MESCO, submitted (June 2008) by AAI to the Arbitrator, AAI noticed (June 2011) that a sum of ₹ 1.20* crore recoverable from MESCO was not included in the statement. Apart from the above an amount of ₹ 2.06 crore, towards interest for delayed payments was also not included by AAI in its claim.

Management stated (March 2012) that the total outstanding amount due from the party was under examination. Audit, however, observed that the management did not take any concrete action either to finalise and recover the amounts due or to fix responsibility for the lapse in submitting an incorrect statement to the arbitrator.

3.1.2.4 Excess occupation of land by Government Agencies / PSUs

(a) AAI allotted (December 1995) land measuring 2017.60 sqm to M/s Mysore Sales International Limited (MSIL) for air cargo complex at Bangalore Airport for a period of five years. MSIL also occupied 547.8 sqm of adjacent land unauthorisedly. After expiry of agreement, AAI did not renew the agreement and MSIL continued occupying the total land measuring 2565.4 acres without paying any license fee.

To settle the issue, AAI decided (August 2009) to charge 50 *per cent* of applicable rate of licence fee and entered into (February 2010) another agreement with the party for the period from 18 January 2001 to 31 March 2010. Even after conclusion of agreement at reduced rate, M/s MSIL neither cleared its outstanding dues nor paid current lease rentals and was in unauthorized occupation of the space (March 2012). Efforts, made by AAI for getting the space vacated and to realise dues amounting to ₹ 2.63 crore (March 2012) from MSIL, were not found on record.

Management stated (March 2012) that AAI was contemplating legal action/ eviction proceeding against the party. Audit, however, noticed that no legal action, either to evict or realize the dues, was initiated against the party till October 2012.

(b) BSF was in unauthorized occupation of Hangar No. 3 measuring 2285.10 sqm at Safdarjung airport since January 2005. AAI decided (January 2012), without realization of dues or an agreement for payment of dues from January 2005, to allot Hangar No.3 for

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** (i) ₹ 0.76 crore considered as received, though the same was not related to the period of claim (ii) Instead of showing an amount of ₹ 0.28 crore as opening balance of license fee dues amount was shown as NIL(iii) Amount of license fee billed shown lesser by ₹ 0.16 crore.*

a period of five years or upto the date of construction of hangar on the land to be allotted to BSF. Later on AAI had withdrawn (November 2012) allotment of above Hangar from BSF and allotted the same to Strategic Forces Command.

Failure to enter into agreement or to realize the dues even at prevailing rates for a period of seven years resulted in revenue loss of ₹ 3.45 crore (January 2005 to March 2012) to AAI.

3.1.2.5 Maintenance of land records and safeguarding of land

The ownership of land is determined as per the records available with the revenue authorities of the concerned State. It is, therefore, essential that all land ownership records are available, properly maintained and updated at all the airports. Further the land available should also be properly safeguarded from encroachments by timely construction of boundary wall. The Land Management Department was responsible to liaise with the authorities concerned to obtain the land ownership documents, wherever these were not available.

3.1.2.6 Land Records

In view of discrepancies between AAI land records and revenue records of the respective State Governments, as also difference in the land records maintained at various levels of AAI itself, AAI instructed (September 2007) all Airport Directors to take corrective steps for reconciliation and up-dation of records at all the Airports.

Audit scrutiny of records of 37455.729 acres land, (i.e. 70.85 *per cent* of total land of 52868.36 acres) revealed that 14053.202 acres land was not mutated* in the name of AAI (March 2012).

A test check of records at the following airports revealed discrepancies in the land records maintained and land under actual possession as on 31.3.2012, as shown in the table below:

(Land in acres)

Name of Station	As on 31.3.2012		Difference
	Land held as per AAI records	Actual land under possession	
Amritsar	1008.000	975.000	(-)33.00
Dehradun	250.080	326.420	76.34
Goa	48.495	54.770	6.275
Jammu	129.210	134.500	5.29
Varanasi	1120.202	632.770	(-)487.43

AAI stated (March 2012) that necessary instructions had been issued to the concerned officers to complete the land records at all airports.

Audit scrutiny further revealed that due to discrepancy in the ownership records AAI had to forgo possession of 7341 sqm of land at Lucknow Airport without any compensation. National Highways Authority of India (NHAI) approached (January 2001) AAI for

* ***The process of recording of land owners name as per the title in the records of State Government revenue authority***

transfer of 5600 sqm of land for construction of by pass at Lucknow Airport on payment basis along with transfer of ownership. Although, as per AAI records the said piece of land was in their possession, ownership of land in the land records continued in the name of Defence Authorities, as it was not mutated in the name of AAI.

In March 2003, NHAI without any consent/permission of AAI broke the boundary wall of the above stated land and constructed the road on the said land. The total land used by NHAI for construction of road was 7341 sqm for which NHAI had shown its willingness to pay the compensation. However, in absence of proper documents AAI could not establish its ownership on this land and the matter was still unresolved.

Management stated (March 2012) that the matter would be taken up further with NHAI.

3.1.2.7 Boundary Wall

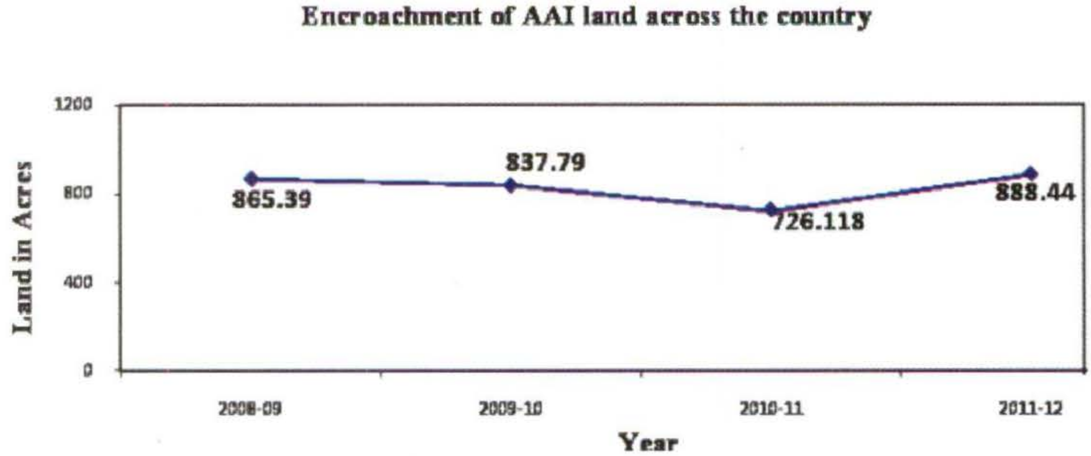
AAI issued (March 2000) instructions for construction of boundary walls immediately after demarcation of land boundaries at all airports for safeguarding of AAI land from encroachment by local habitants.

Audit scrutiny revealed that even after lapse of more than ten years, construction of boundary wall at five airports namely Lucknow, Aurangabad, Balurghat, Jharsuguda and Warangal was not completed due to non-demarcation of land, non-availability of clear site, obstruction by local habitants etc.

Management stated (March 2012) that necessary instructions for securing the land by construction of compound wall/security fencing to avoid encroachment had been issued to the Airports/Regional Headquarters.

3.1.2.8 Encroachment

The area under encroachment from March 2009 to March 2012 is shown in the chart given below:



Audit scrutiny revealed that due to encroachment of land, creation of various facilities at airports was delayed or deferred as discussed under:

(a) The work relating to the Construction of Fire Station (Cat-IX) and Emergency Medical Centre was awarded in August 2008 at Lucknow Airport. The same could not commence as the AAI was not able to provide encumbrance free land at the proposed site which was encroached by local villagers. As a result, the work awarded at a cost of ₹ 9.08 crore was foreclosed in August 2009.

Management in their reply (March 2012) stated that Engineering Department had been requested to ensure land free of encroachment for future constructions. However, the fact remained that the fire station and emergency medical centre required could not be constructed due to encroachment.

(b) AAI paid ₹ 1.25 crore in May 1994 to the Government of Andhra Pradesh for rehabilitation and eviction of private parties from the encroached land of 96.06 acres at Hyderabad airport. However, as no action was taken by the State Government, therefore, AAI demanded (August 2007) refund of its amount after a lapse of 13 years. It was observed in audit that neither were the encroachments removed nor was the AAI able to realize the outstanding amount (October 2012).

Management stated (March 2012) that the issue of removal of encroachment / realization of money would be taken up with the State Government.

(c) The CAT-II lighting facility, required by ICAO to enable the aircrafts to land during low visibility, was provided at Lucknow and Amritsar Airports at a cost of ₹ 5.18 crore and ₹ 5.31 crore respectively during 2004 and 2008. However, the same could not be operationalised till February 2011 and November 2011, respectively, due to non-availability of encumbrance free land.

Management in their reply (March 2012) stated that Engineering Department had been requested to ensure land free of encroachment for future constructions. It was further intimated that the encroachment at Lucknow was mainly on account of relocation of Mosque/Temple which took considerable time. At Amritsar Airport the delay was due to the requirement for execution of ORP/Blast Fence by Defence.

The reply was not acceptable as failure of management to make available encumbrance free land led to non-installation of CAT-II lighting procured at a cost of ₹ 10.49 crore.

3.1.2.9 Lapses in renewal /execution of agreements

Audit scrutiny of lease agreements revealed the following deficiencies:

3.1.2.10 Agreement with Public Sector Undertakings/Govt. Departments

(a) Pawan Hans Helicopters Limited (PHHL) was required to pay lease rent at the prevailing rates[1] for the land and hangar spaces occupied under different agreements entered with AAI at Juhu, Safdarjung, Rajahmundry and Guwahati airports.

Instead of paying lease rent at prevailing rates, PHHL however, paid lease rentals at pre-revised rates[2] on the ground that the rates demanded by AAI were excessive.

To resolve the issue, MoCA appointed an arbitrator who gave the award in May 2003. As per the award, the PHHL was required to pay lease rent at pre-revised rates, during the period up to March 2005 for Safdarjung, June 2007 for Rajahmundry, March 2008 for Guwahati and March 2009 for Juhu. Thereafter, license fee was required to be paid as per rates approved by the Board of AAI.

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[1] *Juhu – ₹660/-per square meter per annum (psmpa), Safdarjung – ₹240/- psmpa for land and ₹100/- psmpm for hanger, Rajahmundry – ₹9 psmpa for land and ₹78/- psmpa for hanger and Guwahati - ₹1510/- psmpa for hanger*

[2] *Juhu – ₹ 330/- psmpa, Safdarjung –₹ 85/- psmpa for land and ₹ 30/- psmpm for hanger, Rajahmundry – ₹9 psmpa for land and Guwahati - ₹1200/- psmpa for hanger*

Audit, however, observed that AAI did not get fresh agreements signed with PHHL, incorporating a clause for charging license fee at applicable rates with effect from April 2005 (Safdarjung), April 2008 (Guwahati) and April 2009 (Juhu). As regards Rajahmundry airport, PHHL had signed revised agreement with AAI and was paying lease rent at rates as per the award. Consequently non-payment of dues as per arbitration award resulted in dues amounting to ₹ 16.83 crore as on March 2012. However, as the issue was not resolved an arbitrator was again appointed (July 2012) by MoCA and award was awaited (October 2012).

(b) AAI was having long pending disputes with Air India (erstwhile Indian Airlines) relating to license fee for the space allotted to them. MoCA appointed (February 2005) an arbitrator to adjudicate on the outstanding dues/issues. The arbitration award was pronounced in February 2009. As per the award, payment of license fee in respect of land/space allotted by AAI to Air India at International Airports Division (IAD) airports and National Airports Division (NAD) airports should follow the Brahma Award and accordingly adhere to 25 *per cent* hike every 3 years w.e.f. 1.04.2001 at IAD airports and 15 *per cent* hike every three years was to be adhered as per the agreement at NAD airports.

Audit observed that the AAI was not able to realise the dues as per the arbitration award resulting in outstanding dues of ₹ 161.16 crore as on 30 September 2012.

(c) AAI leased out (February 2005) land measuring 6766 sqm to NHAI for temporary traffic diversion during the construction of Highway at NH-8, Mahipalpur, New Delhi for a period of six months which was later on increased for one more year i.e. upto July 2006. However, during joint survey conducted in June 2010, and subsequently in August 2012, the aforesaid land was found in occupation of NHAI without any renewal of the agreement or payment of licence fee. Consequently, an amount of ₹ 4.43 crore was outstanding for the period from August 2006 to March 2012.

The AAI Headquarters instructed (January 2013) it's Regional Headquarters (NR) to take up matter with NHAI.

(d) At the five[1] airports test checked, Central Public Works Department (CPWD) was found occupying land measuring 27416.88 sqm., without paying any license fee. Though efforts were made by AAI from time to time (through erstwhile National Airport Authority and International Airports Authority of India) to realise outstanding amount of license fee or to get the land vacated, they could not succeed. Presently, as no agreement exists between AAI and CPWD for charging license fee at prevailing rates, the AAI was unable to enforce license fee amounting to ₹ 8.29 crore[2] (March 2012).

Management stated (March 2012) that the recovery of long pending license fee was not becoming possible. Management reply was not acceptable because as per AAI's rationalized policy (2008) Government Departments were to be charged at 50 *per cent* of the prevailing rate. The AAI, however, neither applied the above policy to CPWD nor contemplated action to get the land vacated.

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[1] ***Amritsar (8766.8 sqm), Jaipur (4047.0 sqm), Lucknow (3949.8 sqm), Srinagar (5823.0 sqm) and Vishakhapatnam (4830.28 sqm)***

[2] ***Amritsar - ₹1.00 crore (1995 to 2012), Jaipur - ₹2.08 crore (till March 2012), Lucknow - ₹0.97 crore (till March 2012), Srinagar - ₹ 0.82 crore (2008 to 2012) and Vishakhapatnam - ₹ 3.42 crore (till October 2012)***

(e) A plot of land measuring 4645.15 Sqm was allotted to CGHS at Hyderabad Airport for construction of dispensary on payment of license fee @₹ 1 per annum for a period of 10 years with effect from 03 February 1981 to 02 February 1991. CGHS disputed revisions made by AAI in license fee for subsequent periods.

To resolve the issue, the Board of AAI accorded (September 2008) *ex-post facto* approval for renewal of lease for the period 03-02-1991 to 31-3-2008. The Board also approved extension of lease for further period from April 2008 to March 2011 subject to settling the outstanding dues.

Management stated (March 2012) that the Board of AAI approved the lease for further period from April 2008 to March 2011 subject to payment of the outstanding dues. Accordingly, CGHS had cleared the outstanding up to 31 March 2008. Management's reply was not acceptable as no agreement for the land under occupation was executed and the dues for subsequent period were not paid by CGHS. Consequently, of ₹ 3.29 Crore (upto March 2012) was outstanding against CGHS.

3.1.2.11 Benefit to Private Party at Raipur and Ranchi Airports

AAI decided (August, 2005) to charge license fee at the prevailing rate for allotment of land to contractors engaged in construction work at airports. Thereafter, in July 2008 a technical instruction (No.18) was issued in this respect. In contravention of above instructions the tender documents relating to the work for construction of new terminal building at Raipur and Ranchi airports were issued in June 2008 and October 2008, respectively, specifying that the contractor would be allotted land within the airport premises in non-operational area for installation of plant & machinery, storing and stacking of materials at a nominal license fee of ₹ 1 per annum. M/s KMB-ERA (JV) and M/s Ahluwalia Contracts (India) Ltd. were awarded contracts in September 2008 and January 2009 for construction of new terminal buildings at Raipur and Ranchi respectively.

AAI allotted a total area of land measuring 3984 sqm and 36781 sqm to the contractors at Raipur and Ranchi airports, respectively, at a license fee of only ₹ 1 per annum, instead of the prevailing license fee. The above resulted in loss on account of non-recovery of license fee of ₹ 2.38 crore (upto March 2012).

3.1.3 Compensation pending with Government Department/Statutory Corporation

3.1.3.1 Indian Navy

In compliance with the, sanction (January 1986) of Government of India to transfer the civil aerodrome at Vishakhapatnam for the use of Indian Navy, the AAI handed over (June 1987) land measuring 794.70 acres and structures thereon to the Indian Navy. AAI raised (July 1991) a claim of ₹ 174 crore on Indian Navy, towards cost of land and structures of the aerodrome. The amount was payable within one month failing which naval authorities were liable to pay interest at the rate of 12 *per cent* per annum on the amount.

AAI took up (January 2001) the issue with Ministry of Defence after lapse of 13 years. Thereafter, AAI sought (December 2004 and January 2010) permission from MoCA to refer the case to the Committee on Disputes (CoD) to which MoCA did not respond.

Management stated (March 2012) that the issue would be taken up with the naval authorities.

3.1.3.2 National Highways Authority of India

AAI transferred (2006) land measuring 3881.40 sqm to National Highways Authority of India (NHAI) for construction of fly-over in front of Chennai airport and raised (January 2008) a demand for ₹ 7.11 crore on NHAI. The amount remained unrealized even after lapse of 6 years.

Management stated (March 2012) that matter would be taken up further with NHAI.

Conclusion

The Land Management Department was responsible to keep proper record and to establish ownership of land vested with AAI. Audit however observed that the above department could not fully achieve the objectives for which it was created. Out of 37455.729 acres of land test checked in Audit, 14053.202 acres of land was not mutated in the name of AAI. Further, 888.44 acres of land was under encroachment (March 2012) due to which AAI had to defer creation / operationalisation of certain facilities as detailed above.

A number of agencies were unauthorisedly occupying land at various airports. However, in absence of agreements with the parties AAI was unable to realise license fee / lease rent due.

Recommendations

- ***Immediate steps need to be taken to ensure availability of complete land records in the name of AAI.***
- ***Efforts should be made to remove the unauthorized occupation and encroachments.***
- ***Efforts should be made to recover outstanding dues from defaulters.***

The matter was reported to the Ministry in December 2012; their reply was awaited (March 2013).

3.2 Loss of revenue

Loss of revenue of ₹ 6.22 crore due to non-realisation of its due share by AAI in the electricity charges collected by DIAL from the concessionaires in excess of per unit rate charged by the service provider i.e. BSES Limited

Airports Authority of India (AAI), in the capacity of state promoter, signed Operation, Management & Development Agreement (OMDA) with Delhi International Airport Private Limited (DIAL), a Joint Venture Company (JVC), on 04 April 2006 and handed over Indira Gandhi International (IGI) Airport, Delhi to DIAL on 03 May 2006 on 'as is where is' basis As per OMDA, DIAL was required to operate and maintain IGI Airport at Delhi initially for 30 years, which was further extendable for another 30 years, on payment of upfront fee of ₹ 150 crore and an Annual Fee in the form of revenue share of 45.99 *per cent* of revenue of DIAL for the year. In order to ensure credit of revenue share accruing to AAI, OMDA provided for appointment of an Independent Auditor by AAI in consultation with DIAL. The revenue share was to be calculated on the basis of quarterly revenue of DIAL as certified by the said Independent Auditor.

Clause 1.1 of OMDA defines the revenue as under:

"Revenue means all pre-tax gross revenue of JVC, excluding payments made by JVC, if any, for the activities undertaken by Relevant Authorities or payment received by JVC for provision of electricity, water, sewerage or analogous utilities to the extent of amounts paid for such utilities to third party service providers".

The Independent Auditors appointed in terms of OMDA highlighted in Audit Report for the quarter ended 31 March 2012 on the revenue of DIAL that as against ₹ 6.47 per unit being charged by the service provider i.e. BSES Limited for High Tension (HT) and Low Tension (LT) both, DIAL was collecting from the concessionaires electricity charges at the rate of approximately ₹ 9.66 per unit in case of LT and at ₹ 6.91 per unit in case of HT. The Independent Auditor highlighted in its report that DIAL did not share with AAI an additional amount of ₹ 13.52 crore collected from various concessionaires, during the period April 2010 to March 2012, over and above the per unit rate payable to BSES Limited.

As per the definition of revenue mentioned above, any recovery in excess of the amount paid to service providers shall be considered as revenue of DIAL. Accordingly, AAI was entitled to get its due share of 45.99 *per cent* in the above amount of ₹ 13.52 crore.

DIAL stated (November 2011) that they were following the practice adopted by AAI of levying 27 *per cent* service charges on electricity charges recovered from various concessionaires/Airlines at IGI Airport. DIAL further stated that the service charges levied on electricity charges was necessary to recover the huge costs incurred on creation and maintenance of distribution lines and infrastructure within the Airport.

The Ministry of Civil Aviation stated (March 2012) that since, as per legal provisions, DIAL cannot make any profit from distribution of electricity, it is imperative that both the parties (AAI and DIAL) should not take any advantage on the electricity charges. Ministry further stated that they have issued instructions to AAI and DIAL to resolve the issue in right perspective.

The reply of the Ministry as well as DIAL was against the provisions and the definition of revenue stipulated in OMDA. Further, as the DIAL was also recovering utility/facilitation charges @ ₹ 500 per sqm. per month from concessionaires / airlines for providing space equipped with all the facilities, the contention of DIAL for levying service charges on electricity charges to recover the huge costs incurred on creation and maintenance of distribution lines and infrastructure within airport was not acceptable.

Thus, due to non-realisation of its due share by AAI in the amount of ₹ 13.52 crore collected by DIAL towards electricity charges from concessionaires, in excess of per unit rate charged by BSES Limited, the AAI suffered loss of revenue of ₹ 6.22 crore.

3.3 Non-realization of due share in the revenue of DIAL.

Delhi International Airport Limited (DIAL) utilised the value of Duty Credit Scrip amounting to ₹ 91.83 crore, earned under Served From India Scheme (SFIS), for payment of import duty but did not account for the same as 'Income'. This deprived the AAI from getting 45.99 *per cent* share of the above revenue, i.e. ₹ 42.23 crore receivable as per OMDA. The AAI further sustained loss of ₹ 9.84 crore (till January 2013) towards interest due to non- realisation of the above amount.

Airports Authority of India (AAI), in the capacity of state promoter, signed Operation, Management & Development Agreement (OMDA) with Delhi International Airport Private Limited (DIAL), a Joint Venture Company (JVC), on 04 April 2006. As per the agreement, AAI handed over Indira Gandhi International (IGI) Airport, Delhi to DIAL on 03 May 2006 on 'as is where is' basis. As per OMDA, DIAL was required to operate and maintain IGI Airport at Delhi initially for 30 years, which was further extendable for another 30 years, on payment of upfront fee of ₹ 150 crore and an Annual Fee in the form of revenue share of 45.99 *per cent* of revenue of DIAL for the year. As per Clause 11.1.2.4 of the OMDA the revenue of DIAL was to be verified on quarterly basis by an Independent Auditor appointed by the AAI.

DIAL was entitled to custom duty scrip under Served From India Scheme (SFIS) of Foreign Trade Policy issued by the Government of India. Under the terms of SFIS, service providers are entitled to duty credit scrip as a percentage of foreign exchange earned by them that can be utilized for payment of import duty in case of imports.

The Independent Auditors appointed in terms of OMDA highlighted in Audit Reports on the revenue of DIAL for the quarters ended 31 March 2011 and 31 March 2012 that an amount of ₹ 91.83 crore of custom duty scrip was utilized (₹ 65.01 crore during 2009-10, ₹ 24.09 crore during 2010-11 and ₹ 2.73 crore during 2011-12) by DIAL for payment of duty on imports. However, DIAL did not account for the above amount of custom duty scrip while measuring the value of Fixed Assets, as required vide provisions of Accounting Standard-10, 'Accounting for Fixed Assets', and Accounting Standard-2, 'Valuation of Inventories', according to which the cost of purchase of fixed assets, consumables, spares etc. should be recorded at their full value inclusive of the import duties payable thereon whether by way of cash or by way of utilisation of the duty credit entitlement, in order to provide the fairest possible approximation to the costs incurred in bringing these items to their present location and working condition.

The Statutory Auditors in their Statutory Auditors Report on the accounts of DIAL for the financial years ended 31 March 2011 and 31 March 2012 also opined that DIAL should have recorded the aforesaid amount of custom duty scrip utilized by it for payment of duty on imports, as income.

This also deprived of the AAI from getting 45.99 *per cent* share of the above revenue which worked out to ₹ 42.23 crore (45.99 *per cent* of ₹ 91.83 crore). AAI also sustained loss of ₹ 9.84 crore (up to January 2013) towards interest on the above amount.

On being pointed out, Ministry of Civil Aviation stated (March 2012) that AAI had initiated the action to recover its share of revenue from DIAL. Audit, however, observed that an invoice raised in March 2012, for an amount of ₹ 40.98 crore, was not realized as of January 2013.

Despite acceptance of the audit observation by the Ministry, the AAI could not realize its due share of revenue, amounting to ₹ 42.23 crore from DIAL till January 2013. Delay in realization of the above amount also resulted in loss of interest of ₹ 9.84 crore (up to January 2013) to AAI.

Air India Limited

3.4 Loss of revenue due to avoidable termination of Ground Handling Agreements

Air India Limited suffered loss of revenue of ₹ 12.21 crore from January 2010 to March 2012 and would suffer a recurring revenue loss of ₹ 8.53 crore per annum from April 2012 onwards due to termination of Ground Handling Agreements by three customer airlines at Mumbai Airport.

Air India Limited (AIL) provides ground handling services to 'customer airlines'[1] at various airports in India. Depending upon the requirement of services by airlines, AIL enters into Ground Handling Agreements (GHA) with customer airlines for comprehensive handling[2] or specific handling services as per standard prescribed by International Air Transport Association. GHA executed with the customer airlines are either specific period contracts or can remain valid for an indefinite period until terminated by either party after giving prior notice[3] in writing to the other party.

Audit scrutinized one year's daily Flight Handling Discrepancies Report (FHDR) of AIL in respect of Malaysian, Ethiopian and Saudi airlines and noticed that customer airlines had been complaining of substandard services provided by AIL. These deficiencies in services were also stressed upon by said airlines through e-mails to AIL. However, no timely corrective action was taken by AIL leading to termination of GHAs resulting in loss of ₹12.21 crore during the period January 2010 to March 2012 and a recurring loss of revenue of ₹ 8.53 crore per annum from April 2012 onwards. Specific details of three cases of termination of GHAs are given below:

(i) **Malaysian Airlines (MH):** MH operates daily flights at Mumbai and had renewed an existing agreement with AIL from August 2007 to July 2010. MH terminated the agreement seven months before its expiry, citing prolonged and continuous deterioration of services provided by AIL and resultant difficulties faced by the former. Scrutiny of FHDR revealed that MH faced numerous problems with AIL because of shortage of loaders, improper handling *etc.*

(ii) **Ethiopian Airlines (ET):** ET renewed GHA with AIL at Mumbai airport in September 2005 for a three year period which was further extended indefinitely with the provision that either party could terminate the agreement giving 90 days prior notice. Even after ET pointed out (August 2008) that the service levels of AIL were very low and stressed the need for drastic improvement and assurance by AIL for improvement in quality of services, AIL failed to take timely corrective measures and improve the standard of services to satisfy the airline. ET terminated the GHA in February 2010 on account of the poor quality of services rendered by AIL.

(iii) **Saudi Arabian Airlines (SV):** SV renewed GHA with AIL for Mumbai airport in November 1999. The agreement was for an indefinite period with the option of either

[1] ***Customer airlines of AIL included Malaysian Airline (MH-from August 2007 to July 2010), Ethiopian Airline (ET- September 2005 till date of termination), and Saudi Arabian Airline (SV-28 November 1998 till date of termination).***

[2] ***Comprehensive handling comprises Passenger handling, Ramp handling, Cargo, Cabin Cleaning services, Flight Operations, Departure Control System, X-Ray of checked baggage and strapping, Baggage Reconciliation System and partial security services etc.***

[3] ***Sixty days in case of Saudi Arabian airline and Malaysian Airlines and ninety days in the case of Ethiopian airline.***

party terminating it with due notice. SV terminated the GHA for Mumbai airport in March 2012 citing, *inter alia*, lack of redressal of its complaints by AIL despite several follow-ups as a cause for termination.

Audit noticed that section 4.6 of the operating manual of the Ground Services Department of AIL provided a procedure for holding review meetings with customers to sort out mutual problems in executing terms of contracts. However, AIL did not produce any records in support of conducting regular periodical meetings with the customer airlines.

Thus, lack of corrective action and seriousness of AIL in dealing with the deficiencies pointed out by the customer airlines resulted in loss of revenue of ₹ 12.21 crore to AIL during the period January 2010 to March 2012 due to termination of GHAs by the two airlines (MH and ET) and a recurring loss of revenue of ₹ 8.53 crore per annum from April 2012 onwards owing to termination of GHAs.

The Management in its reply (September 2012) stated that:

- The discrepancies raised by MH and ET were due to certain deviations in GH services which were minor in nature and had not resulted in any delay in flights. Majority of these discrepancies were due to infrastructure problems mainly on account of space constraints and shortage of manpower at Mumbai Airport, which were beyond the control of the Management.
- With the change in GH Policy by the Government of India, new ground handling agents in Delhi were offering heavy discounts to customer airlines to grab business. SV terminated GHA with AIL as per an arrangement between that airline and M/s Celebi*. As per the arrangement between the two, the latter would reduce handling charges at Istanbul, for taking over GH work at Mumbai.

The reply is not acceptable on the following counts:

- Complaints made by MH and ET airlines through e-mails and FHDR and the note of Under Secretary for Civil Aviation, Ministry of Transport, Government of Malaysia (October 2009) to the High Commission of India, Kuala Lampur pointing to difficulties faced by MH on account of disruption in GH services as a result of ongoing industrial dispute between Air India Management and its staff indicated that the customer airlines terminated their GHAs with AIL due to poor quality of GH services of AIL. The contention that these deficiencies were minor showed absence of seriousness in dealing with the customer airlines which led to termination of the GHAs.
- Issues like space shortage are common to all the ground handlers and are not unique to AIL alone. The fact remains that AIL failed to address these bottlenecks.
- The contention that SV terminated the GHA with AIL pursuant to an offer made by M/s Celebi to SV for taking over latter's ground handling work at Mumbai, is in itself testimony to the fact that M/s Celebi was offering better GH services at lower rates at Mumbai. It also points to the inability of AIL to compete effectively

* ***A private party providing handling services at Istanbul in Turkey where SV is operating and a new entrant in India in the business.***

in the altered business environment. The statement that with the change in GH Policy by the Government of India, new GH agents were offering heavy discounts to customer airlines to grab business is also an admission of the poor services, high rates and resultant inability of AIL to retain customers for GH operations. In an era of intense competition, AIL failed to retain existing customers by providing satisfactory services and taking effective steps to improve its GH services which resulted in loss of business as well as revenue for the company.

The matter was reported to the Ministry in October 2012; their reply was awaited (March 2013).

Pawan Hans Helicopters Limited

3.5 Operations of Helicopters

3.5.1 Introduction

Pawan Hans Helicopters Limited (the Company) was incorporated on 15 October 1985 as a Government Company under the Companies Act, 1956. As on 31 March 2012, the paid up share capital (₹ 245.62 crore) of the Company was held by the Government of India and Oil & Natural Gas Corporation Limited (ONGC) in ratio of 51:49. The Company was set up with the objective of providing helicopter support services to meet the requirements of oil sector, to operate in hilly and remote terrain, connect inaccessible areas, operate charters for promotion of travel and tourism and provide intra-city transportation. The Company has a fleet of 45 helicopters (March 2012) which consists of 35 - Dauphin N & N3 (10 seater), seven - Bell (6 seater), two - B3 (6 seater) and one-MI-172 (26 seater). The Company earned a net profit of ₹ 35.59 crore and ₹ 18.51 crore in 2009-10 and 2010-11, respectively, while it had a loss of ₹ 10.35 crore in 2011-12.

Audit reviewed the operations of helicopters in PHHL during the period April 2009 to March 2012 with reference to MOUs and Agreements entered into so as to assess the efficiency of its operations.

3.5.2 Audit Findings

3.5.2.1 Operations with ONGC

ONGC is the largest customer to which the Company has been providing helicopter services for off shore operations since October 1986. The Company earned ₹ 522.44 crore as revenue from ONGC operations during 2009-10 to 2011-12 which amounted to 43.72 *per cent* of its total operating revenue for that period. Audit observed following deficiencies in operations with ONGC:

3.5.2.2 Aircraft on Ground

ONGC awarded a contract (October 2006) to the Company for hiring 12 Dauphin helicopters (eight N and four N3), including two on standby, to meet its offshore operations. The contracted helicopters were to be made available on all days without delay and were not entitled to any Aircraft on Ground (AOG) days. The contract also provided for deduction of Fixed Monthly Charges (FMC) and levy of liquidated damages for AOG days of any of the contracted helicopters.

The Company entered into two more contracts with ONGC in July 2010 for three N3 helicopters & April 2012 for seven N3 helicopters. These two contracts stipulated a permissible AOG of two days per month per helicopter beyond which LD was to be recovered by ONGC and no payment of FMC was to be made to the Company for such days.

Audit observed that while entering into contract with ONGC (October 2006), the Company was aware of the fact that it did not have sufficient number of pilots to fulfill its commitment under the contract. Even then the Company did not recruit desired number of pilots for its Dauphin fleet resulting in shortage of average 22 to 18 pilots during the period 2009-10 to 2011-12 at Western Region, from where the ONGC operations were catered,

Audit noticed that out of total 738.5 Aircraft on Ground (AOG) days over the period 2009-10 to 2011-12 in operation of Dauphin fleet under the above contracts, 64 *per cent* of AOG days were attributable to shortage of pilots. The remaining 36 *per cent* of AOG days were due to non-availability of spares, delay in maintenance and shortage of engineers.

ONGC deducted an amount of ₹ 6.61 crore as FMC and ₹ 10.37 crore as liquidated damages for AOG days during the period April 2009 to March 2012 on account of non-availability of helicopters.

3.5.2.3 AS-4 retro fitments of Dauphin Helicopters

As per Company's agreement (October 2006) with ONGC referred to above, eight Dauphin N helicopters were required to be Aviation Standard-4 (AS-4)[1] compliant.

The Company awarded (August 2005 to July 2007) three piecemeal contracts to M/s. Sofema, an authorized representative of M/s Eurocopter France, at a total cost of ₹ 83.42 crore (13561696 Euro) for retro fitment of its 17 Dauphin N, besides six Dauphin N3, helicopters as per Aviation Standard-4 (AS-4).

Audit observed that only 10 Dauphin N helicopters (considering 20 *per cent* maintenance reserve) were sufficient to meet the requirement of ONGC for eight AS-4 compliant Dauphin N Helicopters. However the Company went for retro fitment of 17 Dauphin N helicopters. Further, no other client of the Company had insisted upon AS-4 compliance nor it was mandatory requirement as per DGCA or the manufacturer of the helicopter. Moreover, with the introduction of vintage clause[2] (July 2010) by ONGC future utilization of these AS-4 compliant Dauphin N helicopters with ONGC was also bleak as the entire fleet of Dauphin N helicopters was more than 24 years old as on 31 March 2012.

Audit further observed that even after more than five years of delivery, AS-4 kits valuing ₹ 9.94 crore were awaiting installation as on 31 March 2012. Thus, procurement of seven AS-4 kits for Dauphin-N helicopters was in excess of requirement which resulted in additional operational expenditure of ₹ 27.92 crore (March 2012).

[1] ***The AS-4 is a modification kit required for safety in offshore operations introduced by ONGC as per requirements of its aviation advisors.***

[2] ***The age of helicopter should not be more than five years as on the date of techno-commercial bid opening.***

3.5.2.4 Inventory Management

Non-moving inventory constitutes the items which have not moved for a period of more than three years. As on 31 March 2012, the Company had a total inventory of ₹ 121.20 crore, consisting of stores, spares, repairables, rotables etc. out of which ₹13.88 crore was non-moving. The age wise analysis of inventory was not made available to Audit. It was noticed in Audit that inventory, spares and other major components of the helicopters valued at ₹ 1.87 crore (March 2012) was blocked due to acceptance of supplies of either short, unsuitable or damaged items etc. Management had failed to take necessary effective steps.

3.5.2.5 Non-availability of spares

The Company entered into an agreement with the Government of Odisha (November 2011) for providing one MI-172 helicopter at Koraput/ Bhubaneshwar at FMC of ₹ 1.56 crore for 30 hours minimum guaranteed flying and ₹ 86,500 per hour beyond 30 hours. The agreement was for the period from 07 August 2011 to 31 December 2011, which was further extended up to June 2012.

It was observed in Audit that the helicopter remained unserviceable during the period 27 May 2012 to 20 June 2012 (25 days) for want of a critical spare 'circuit breaker' and was made serviceable only after the spare part was obtained on loan basis from a Russian party. Although, the Company had issued instructions during June 2010 for fixation of re-order level for all the inventory items but poor forecasting, non-fixation of re-order level and long lead time resulted in non-availability of critical spare at the time of need and the Company suffered a loss of ₹ 1.98 crore on account of deduction of FMC and penalty charges.

Management stated (February 2013) that it made attempts to procure the item immediately (30 May 2012) after the helicopter was on ground and the purchase order for the item was issued on 14 December 2012. The receipt of the item was still awaited.

The reply of the Management confirms its failure to manage inventory of the critical item as even after AOG situation, the Management took about seven months to place the purchase order.

3.5.2.6 Negligence in procurement of Rear left sliding doors

The Company placed an order (November 2007) with M/s Vectra Aviation, an authorized distributor of M/s Eurocopter, for supply of 10 rear left sliding doors of Dauphin N helicopters under Part.No. 365A87-3031-0003 for a value of ₹ 2.45 crore. The same were supplied (December 2009) and payment was released during 2009-10. The Company placed another order (February 2008) with M/s Vectra Aviation under Part No.365A87-3031-0206 for supply of 10 rear left sliding doors of Dauphin N helicopters for a value of ₹ 2.40 crore. The same were supplied during December 2009 to January 2010 and payment of ₹ 2.20 crore was released during 2010-12.

Audit observed that Part No.365A87-3031-0206 was an alternate Part No. for 365A87-3031-0003, i.e., different code name for same spare/component. Realizing this fact the Company merely sent a fax (July 2008) to M/s Vectra Aviation for cancellation of second purchase order and relied on 'OK' report of Fax transmission. It neither received nor did it make any attempt to obtain any formal acknowledgement from M/s Vectra Aviation regarding the cancellation of the order. The Company on receipt of the delivery raised the issue of cancellation of order with the supplier, who denied the receipt of any fax. On repeated requests by the Company to take back the spares, the supplier conveyed that the 10 doors supplied could not be taken back as these were specifically made on order for the Company and M/s Eurocopter had stopped manufacturing Dauphin N helicopters. Thus, negligence in ensuring cancellation of order led to unnecessary purchase of 10 rear left sliding doors for Dauphin N helicopters resulting in wasteful expenditure of ₹ 2.20 crore.

3.5.2.7 Radio Altimeter Indicator

M/s Prime Industries supplied eight radio altimeter indicator (Part No. 9599-607-12185) for Dauphin N helicopters to the Company during 2009-10 at a cost ₹ 0.72 crore against the purchase orders issued during February 2009 to April 2009. On physical inspection (July 2009) of the altimeters, it was found that all the eight altimeters (Part No. 9599-607-12185) had the graduations in meters. However, the altimeters already installed on Dauphin N helicopters and others lying in the inventory had graduation in feet (Part No. 9599-607-12183). As the installation of two different types of indicators on the helicopter would have resulted in chaos and miscommunication posing serious safety threat and risk to helicopters, the Company got the radio altimeter indicator with meter graduations converted into feet graduations from M/s D J Aviation at cost of ₹ 0.24 crore during 2010-11.

Audit observed that M/s D J Aviation was not authorized to make the required changes. In view of U.K Civil Aviation Authority's advice (July 2012) to not install on aircraft the subject component, until further corrective action has been undertaken, the converted radio altimeter indicator became useless and resulted in loss of ₹ 0.96 crore.

3.5.2.8 Float of Engines

As on March 2012, the Company maintained float of different types of helicopter engine as detailed below:

(As on March 2012)

Types of Helicopter	Aircrafts available	No. of engines installed	No. of engines kept on float
Mi-172	01	02	06*
Dauphin N	18	36	19
Dauphin N3	17	34	04
Bell	07	07	02
B-3	02	02	NIL

It was observed in Audit that the Company had not fixed any standard/norms for the minimum float of engines to be kept for various types of helicopters, high variation was noticed in float of engine kept. The further observations are as follows:

3.5.2.9 Engine for MI-172 Helicopter

The Board approved (September 2010) procurement of two new engines, over and above available float of four engines (including one engine to be declared as beyond repair) for MI-172 helicopters, at a price of ₹ 3.27 crore (US$ 6,95,800) for first engine and ₹ 3.41 crore (US $740000 less 2 *per cent* discount) for second engine from M/s Klimov, Russia.

Purchase agreement for first engine was entered into in November 2010 and for second engine in October 2011.

Audit observed that after accident of one MI-172 helicopter at Tawang, Arunachal Pradesh on 19 April, 2011, the Company was left only with one MI-172 helicopter in their fleet. At that point in time (April 2011), though the Company had a float of five engines (including newly procured first engine received in March 2011), purchase agreement for second engine was signed in October 2011, which was delivered in March 2012. Thus, decision of the Management for procurement of second engine was imprudent.

3.5.3 Violation of Aircraft Rules 1937

(a) Rule 78 (1) of Aircraft Rules 1937 stipulates that, "No aerodrome shall be used as regular place of landing and departure by a scheduled air transport service or for a series of landings and departures by any aircraft carrying passengers or cargo for hire unless it has been licensed or approved by Director General as per conditions laid down under such license or approval". Further, Rule 78 (4) provides that "no person shall operate or cause to be operated any flight from a temporary aerodrome or an aerodrome which has not been licensed or approved, as the case may be, under these rules unless it meets the minimum safety requirements laid down by Director General".

Audit observed that inquiry committee appointed by MoCA for probe in accident of MI-172 helicopter at Tawang had stated that Rule 78 was applicable not only to aerodromes but also to helipads and it was the responsibility of the operator to ensure that its helicopter lands at licensed helipads. Further it stated that no airfield/helipad in Arunachal Pradesh was licensed or approved. On scrutiny of records, it was seen that as on 30 June 2012, the Company was operating helicopters from the airfields/helipads at Gangtok, Katra, Phata (Kedarnath), Amarnath, Portblair, Patna, Koraput and Gadchiroli without any license or approval of DGCA. Thus, in the absence of requisite licence or approval, the safety of these aerodrome/helipads was questionable.

Management in its reply (February 2013) stated that the responsibility of approving the helipads lies with DGCA and operations from various helipads are being carried out as per standard operating procedures approved by DGCA.

The reply of the management was not acceptable as enquiry committee appointed by MoCA had emphasized that under Rule 78 it was also the responsibility of the operator to ensure that its helicopter lands at licensed helipads.

(b) Audit further observed that in pursuance of elaborate procedure given in Section 5 of CAR on 'Air Safety' issued by DGCA, proper records regarding Pre Flight Medical checks of crew were not maintained by the Company.

Management stated (February 2013) that now they have started keeping the record at all bases.

In absence of any documentary evidence furnished to Audit the reply could not be substantiated in Audit.

3.5.4 Blocking of Funds

As on 31 March 2012, the amount outstanding from various parties was ₹ 171.87 crores out of which ₹ 42.22 crore was outstanding for the period ranging more than one to 16 years against which the Company has made a provision of ₹ 3.40 crore. Of the above amount, the Company could not recover an amount of ₹ 3.84 crores from the Governments of Arunachal Pradesh and Punjab as services were provided to them without any formal contract.

Audit further observed that the huge outstandings were due to lack of timely and vigorous follow-up by the Management with its debtors as there was no system in place for timely recovery of debts. The position of outstanding was critical in view of the fact that the Company had to pay interest of ₹ 14.46 crore on loans of ₹ 232.83 crore during 2011-12. Thus failure of the Company to recover dues led to borrowings to finance its operations resulting in further outgo on account of interest. Audit noticed that the amount outstanding of ₹ 171.87 crore as on 31 March 2012 further increased to ₹ 192.10 crore by the end of December 2012.

The Management accepted (February 2013) in its reply that there was delay in signing of the contracts with State Governments of Arunachal Pradesh and Punjab and consequent non-realization of dues. It further replied that consistent efforts were being made to recover the amounts outstanding.

Conclusion

The Company had shortage of average 22 to 18 Pilots during the period 2009-12 for its Dauphin fleet of helicopters at its Western Region from where operations to one of its largest customer viz. ONGC were catered to. ONGC deducted an amount of ₹ 16.98 crore (FMC and liquidated damages) towards AOG of helicopters due to non availability of helicopters mainly for shortage of Pilots. There were instances of excess procurement of AS-4 kits, sliding doors, engines, delayed procurement of critical items, resulting in loss of FMC which indicate the need for an efficient inventory control system.

There was no system for timely recovery of debts due to which there was huge outstanding of ₹ 171.87 crore as on 31 March 2012 necessitating implementation of credit control procedure.

The matter was reported to the Ministry in February 2013; their reply was awaited (March 2013).

CHAPTER IV: MINISTRY OF COAL

Central Coalfields Limited

4.1 Non-revision of beneficiation charges

Central Coalfields Limited (CCL) introduced beneficiation charge of ₹ 130/- per tonne in 2002 on non-core sector consumers picking big sized coal from railway siding. The amount of ₹130/- was the difference between pit-head price per tonne of ROM and steam coal as in April 2002. Though the difference was enhanced to ₹ 180 in 2009-10 by Coal India Limited and implemented by another subsidiary, the same was not implemented by CCL resulting in revenue loss of ₹ 73.63 crore.

The management of Central Coalfields Limited (CCL), a subsidiary of Coal India Limited (CIL), observed (2001-02) that non-core sector consumers who were procuring coal under linkage/sponsorship by Rail indulged in heavy picking of big sized coal from the railway siding of CCL when rakes were placed for supplies. Local villagers were deployed for such picking and they were paid by the Handling Agents of consumers. Thus big sized coal was being selectively allowed to be lifted by consumers of non-core sector leaving behind extraneous material which was resulting into manual beneficiation, though later coal was loaded on the rakes by pay loaders. Hence an additional charge of ₹130/-(beneficiation charge)** per tonne, equal to the difference between the pit-head price of Run Of Mine (ROM) coal and steam coal at that point of time, was approved by the CCL Board (April 2002) to be charged from its non-core sector rail sale consumers. Depending on the increase in the difference between pit-head ROM coal and pit-head steam coal beneficiation charges of road sale of coal were enhanced by CCL to ₹165/- per tonne of coal in 2004 and ₹ 180/-per tonne in 2009-10. *

Audit, however, observed that CCL did not revise the beneficiation charges at ₹ 130/- per tonne for non-core sector consumers through rail sale since its introduction in 2002 (this issue never featured as an agenda of Board of Directors' meeting after 19.04.2002) which continued at the rate of ₹130 per tonne. It was seen in audit that in tandem with the revision of price by CIL in 2004 and 2009 enhanced charges @ ₹ 165/- and @ ₹ 180/- per tonne respectively were being imposed for road sale dispatches of ROM sized coal by CCL. Similarly, beneficiation charges were enhanced in Bharat Coking Coal Limited (BCCL), another subsidiary of CIL, from time to time in case of both road and rail sale of coal, in line with the enhancement of the differential between ROM and steam coal. Non-revision of beneficiation charges for rail sale to non-core consumers resulted in under realization of revenue of ₹73.63 crore in CCL during 2008-09 to 2010-11.

The Management admitted the fact and replied (February 2012 and November 2012) that:-

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* ***Clause no. 12 of price notification of CIL clearly states "For undertaking special sizing or beneficiation of coal, additional charges as may be negotiated between the purchaser and the producer may be realized over and above the pit-head prices".***

- On the basis of recommendation of the committee constituted in August 2011, a decision was taken not to enhance beneficiation charge for the time being and the status of enhancement of beneficiation charge of Rail sale would be reviewed every quarter.
- The amount incurred on account of 'Left behind charges" is borne by non core sector consumer themselves and by levying the beneficiation charges of ₹130/- per tonne, CCL during the year 2008-09 and2009-10 did not only offset the loss but also earned ₹ 2.77 crore during 2008-09 and ₹ 10.40 crore during 2009-10.
- The amount realised on account of beneficiation vis-a-vis deduction due to grade slippage was assessed for the period April 2011 to December 2011 which indicates that the amount realised on account of beneficiation charges @ ₹ 130/- per tonne is about ₹ 18.06 crore whereas the quality deduction against residual coal for the same period has been found to be about ₹ 13.90 crore. Hence enhancement of beneficiation charges was not justified.
- In response to an Audit query, the Vigilance Department of CIL intimated (December 2012) that the investigation by them revealed that apparent loss was sustained by CCL on account of non-enhancement of beneficiation charges due to increase of price difference as per notification of CIL. It was further stated that the matter was forwarded (April 2011) to Ministry of Coal (MOC) to accord permission to examine the serving Board Level Executives, which was awaited

The reply of the Management is to be viewed against the following:

(i) Beneficiation charges have not been revised by the management in case of Rail sale till date and it continued at the old rate of ₹ 130 per tone. BCCL, another subsidiary of CIL, has been revising the coal beneficiation charge both in case of rail sale and road sale with the revision of price notification of coal. BCCL is charging ₹ 180 per tonne as beneficiation charge as on date, in case of supply of coal by rail.

(ii) Though CCL earned a profit of ₹ 13.17 crore during 2008-09 to 2009-10 through levy of beneficiation charges @ ₹ 130/- per tonne, the company was deprived of earning additional revenue of ₹ 73.63 crore during 2008-09 to 2010-11 due to non revision of beneficiation charges from ₹130/- to ₹ 165/- in 2004 and to ₹ 180/- per tonne in 2009-10.

(iii) Grade slippage is concerned with quality of coal with reference to ash percentage only and it has no connection with beneficiation charge. From the record note of discussion of High Power Committee of CIL held on 06.09.2006, it is clear that the management worked out the beneficiation charge at ₹130/- per tonne, being the price difference of ROM coal and steam coal as was prevalent at that time and not with reference to quality of coal and grade with reference to ash.

(iv) Though in the reply (February 2012) it was stated that the matter would be reviewed by a committee at regular intervals, no such review was done by the management after August 2011 in respect of revision of beneficiation charge of coal supplied to non-core consumer through rail sale.

(v) It is pertinent to mention that enhancement of beneficiation charge would not be against the interest of the "Public at large" as such charge is being levied on non -

core consumers and not on core sector consumers like power, steel, cement and fertiliser.

(vi) Moreover, this case has been referred by CIL vigilance wing to MOC for examination of executives of CCL for fixing responsibility for the financial loss to the company.

Thus due to non revision of beneficiation charge, the company sustained recurring revenue loss of ₹ 73.63 crore.

The matter was reported to the Ministry in October 2012; their reply was awaited (March 2013).

CHAPTER V: MINISTRY OF COMMERCE AND INDUSTRY

MMTC Limited

5.1 Non-recovery of dues due to lapses in bullion transactions and camouflaged accounting

Failure to adhere to the instructions on bullion trading, camouflaged accounting and ineffective internal control in MMTC Limited resulted in non-realization of dues amounting to ₹ 295.99 crore from customers and avoidable loss of ₹ 53.27 crore (till December 2012) towards interest.

MMTC Limited (Company) imports and supplies gold, platinum and silver to exporters under various schemes as per Foreign Trade Policy of Government of India. MMTC also imports Gold and Silver for sale in domestic market under OGL Scheme. Bullion is imported either on consignment basis or against letter of credit/Standby Letter of Credit (SBLC). Trading of bullion is regulated in accordance with the instructions/guidelines contained in the Precious Metals Procedural Drill (bullion drill) and internal circulars issued by the Company from time to time.

When the transaction is under the Buyers Credit system, the Company obtains Buyers Credit in foreign currency usually for 90 days against funds deposited by the customer covering the value of gold plus incidentals. The amount received from the customer is converted into a Fixed Deposit (FD) by the Company. On expiry of the BC period, the same is liquidated by encashing the FD along with additional funds towards expenses or by availing of Loan Against Deposit (LAD). The interest and related costs of availing such LAD is to be borne by the customer. The bullion drill stipulates maturity period of FDs to be equivalent to the due date of the BC, which has been reiterated by instructions issued by MMTC from time to time.

Under the SBLC scheme, credit is extended by the supplier of gold to MMTC on the basis of 180 day SBLC opened in his favour. The SBLC arranged by MMTC in favour of the foreign supplier is secured with the funds (FD in the name of the Company) placed by the customer with MMTC or a SBLC established in favour of MMTC by the customer.

Under the Domestic Gold Loan scheme, the loan (credit) is provided by the supplier to the Company and the customer is required to furnish security in the form of Bank Guarantee (BG) in lieu of cost of gold delivered on loan. Loan could be advanced for a maximum period of 90 days. A ceiling of 200 KG per customer has been fixed under the scheme. The BG is required to be encashed by Company on default of payment of value of gold by the customer.

The bullion drill mandates obtaining of Foreign Exchange Rate Cover (FERC) to hedge against exchange rate fluctuations. The cost of such FERC is to be borne by the customer. Instructions issued in March and September 2008 mandated compulsory FERC for hedging all BCs in case of gold transactions. Further, instructions issued on 18 December 2006 required each transaction to be treated as separate and squared off on completion, so as to avoid carry forward of balances. In other words, bunching of transactions was prohibited.

Audit test checked the transactions of Regional Offices (ROs) at Chennai and Hyderabad and observed as under:

Regional Office, Chennai

It was noticed in Audit that the Chennai Regional Office of the Company failed to adhere to the bullion drill, instructions issued by the Company from time to time and the internal control measures in day to day operations which resulted in huge loss to the Company as discussed in succeeding paragraphs:

- The Chennai Regional Office of the Company entered into gold trading under the Buyers Credit system with M/s Shiv Sahai and Sons (M/s SSS) from 2007-08 onwards. However, it was observed that foreign exchange exposure was not hedged as the forward cover was kept open. As per para 7(i) of the Agenda item No. 2 given in the 'Note for consideration of Audit Committee of Directors' for 67th meeting of the Committee held on 10 February 2012, the differential exchange rate and the buyers' credit expenditure to the tune of ₹ 36.36 crore was not debited to the account of M/s SSS during financial year 2008-09.

  Further, as per instructions of bullion drill the total value received including the margin money deposited by the customer should have been utilised to obtain a fixed deposit in Company's name with maturity equivalent to the due date for payment under the buyer's credit. In contravention of these instructions, FDs pertaining to the above transactions with M/s SSS were placed with banks for periods longer (for one year and more) than the duration of the Buyers Credit for 90 days. The Company took loans against deposits to liquidate BCs on the due date. Further, while M/s SSS was duly given credit for the interest earned on FDs, the interest paid by the Company on LADs was not debited to the account of M/s SSS.

  It was only during September 2011 to March 2012 the Company raised Debit Notes for ₹ 81.61 crore on M/s SSS. M/s SSS disputed the Debit Notes raised by the Company and filed caveats in Madras High Court.

- Similarly, during the period from 2007-08 to 2008-09, the Company traded with M/s Surana Corporation Limited (M/s SCL) under SBLC scheme where the rate of gold was to be fixed at the time of settlement of the loan. In these transactions the Company issued invoices on provisional basis at the time of delivery to facilitate M/s SCL to avail VAT credit. When the price was finally fixed, the Company raised Debit Notes for differential cost. M/s SCL, however, took the provisional invoice as finally issued and did not consider the differential cost and other costs, accompanying SBLC transactions such as LIBOR charges, withholding tax, L/C charges etc. After a lot of correspondence exchanged between the Company and M/s SCL the Company sent a final demand of ₹ 18.21 crore pertaining to 2007-08 to 2008-09 in June 2012 which has been disputed by M/s SCL.

  As mentioned in para 7(iv) of the Agenda item No. 2 given in the 'Note for consideration of Audit Committee of Directors' for 67th meeting of the Committee held on 10-02-2012, in both of the cases mentioned at (a) and (b) above, most of the accounting transactions had been routed through Suspense Account and that Suspense Account was nullified by passing consolidated entries to other vendor accounts. Since vendor accounts have huge credit balances, the above debits against the customers remained concealed.

Lack of Internal Control in the Company also resulted in an erroneous Debit balance of ₹ 116.69 crore in Creditor Account (i.e. Vendor-M/s Natexis Commodity Markets- NCM) which included the erroneous/ camouflaged entries mentioned above.

- Another instance of collapse of internal controls was noticed in failure of the Management to reconcile bank accounts. As a result, un-reconciled FDs amounting to ₹ 17.99 Crore deposited in 2009-10 were transferred to Vendor Suspense Account in the same year. These FDs were later (2011-12) identified and encashed after remaining out of books of MMTC for about two financial years.

  Thus due to non-adherence to the stipulated guidelines, undue benefits were extended to the customers in the form of non realization of dues amounting to ₹ 99.82 crore. The Company also suffered avoidable loss of ₹ 38.56* crore (upto December 2012) towards interest on the above mentioned amount. The resultant losses/recoverables from the customers were concealed by way of creative accounting practices. These serious lapses were not noticed by the Corporate Office of MMTC till the end of 2011.

The Management while admitting the Audit observations regarding non debiting the interest on LADs to the customer's accounts and non posting the debit entries towards differential cost in the accounts of M/s SCL, replied (March & November, 2012) that:

(i) As M/s Shiv Sahai & Sons expected that Rupee will appreciate, the forward cover was kept open.

(ii) Volume of bullion transactions at RO, Chennai were on a large scale and hence it was not possible to settle on transaction to transaction basis.

(iii) Bullion Trading System (BTS) has been upgraded to incorporate Buyer's Credit and SBLC with effect from 04 July 2012.

(iv) In the Bullion Trade, there have been the cases of pending recoveries from the customers on account of lack of commercial prudence and delay in booking of accounting transactions, delay in reconciliation of bank account, non maintenance of proper record of financial securities (Fixed Deposits etc.), failure to seek periodical timely confirmation of balances from the customers, non accounting of interest and other expenses recoverable from the customers, recovery of TDS from the customers, wrong refunds to the customers, misuse of suspense accounts to manipulate vendor accounts which could not be pointed out by professional Internal Auditors (CA) and Statutory Auditors.

Reply of the Management was not acceptable in view of the following:

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* ***Interest @ 10 per cent***

(i) Keeping FERC open was in violation of the specific instructions mandating compulsory FERC requirement issued on 10 March 2008.

(ii) The contention of the Management that it was not possible to settle on transaction to transaction basis was not acceptable as it is contrary to company's own specific instructions dated 18 December 2006 which required that each transaction be treated as separate and carry forward of balances be avoided. It further stipulated that any release of bullion to any of the customers was to be made only when the party account was fully reconciled and should be upto date.

(iii) The changes effected in Bullion Trading System will be assessed in future only. The fact, however, remains that Company sustained losses due to poor internal controls.

(iv) The reply was silent on the reasons due to which Corporate Office failed to monitor and implement the norms/principles of accounting. The primary responsibility of ensuring adherence to bullion drill and internal orders and preparation of true and fair financial statements was that of the Management/Corporate Office of the Company. The company also did not provide any reason for transferring unclassified/ unlinked entries from suspense account to vendors account.

Thus failure in adherence by RO, Chennai to the instructions on bullion trading, camouflaged accounting and ineffective internal control resulted in non-realization of dues of ₹ 99.82 crore and avoidable loss of ₹ 38.56 crore (till December 2012) towards interest to the Company.

Regional Office, Hyderabad

Audit test checked the transactions of Regional Office (RO), Hyderabad, in March 2012 covering the period from 2010-2011 and 2011-12 (upto November 2011) and it was revealed that in case of one of the customers viz. M/s MBS, the Company kept forward cover open without taking additional security, in contravention of provisions of Bullion Drill and instructions mentioned above. Audit further noticed that shortfall in the amount of security given by M/s MBS increased from ₹ 19.04 crore in 2010-11 to ₹ 72 crore in November 2011. Despite bringing out the above position by Audit to the notice of the Management of RO, Hyderabad in March 2012 and the Corporate Office in April 2012, the Company did not take any effective steps to makeup the deficient security from the customer and continued bullion trading with M/s MBS.

Audit further observed that during January 2012 the Corporate Office (CO) procured from its supplier viz. Standard Chartered Bank (SCB) 500 kg gold valued at USD 2,55,35,400 (in two tranches of 250 kg each on 11th and 13th January 2012) on loan for 90 days repayable on 10 and 11 April, 2012. This bullion was issued by RO, Hyderabad to M/s MBS group for a value of ₹ 142.10 crore in contravention to the provisions of Bullion Drill and circulars issued from time to time on trading of bullion; the bullion was delivered without adequate security from M/s MBS, no FERC was taken to hedge against foreign currency rate fluctuations and quantity restriction of 200 kg per customer was flouted.

While the said quantity of 500 KG Gold was handed over to M/s MBS in January 2012, the payment for the same was not received on due dates i.e. 10 and 11 April, 2012. To meet the obligation for repayment of loan to SCB on due dates, the RO requested CO to transfer funds amounting to ₹ 140 crore. Though the said amount was transferred from CO to RO, Hyderabad on the due date of remittance of loan in April 2012, yet RO Hyderabad repaid the loan by utilizing receipts from cash sales made to various other parties mainly M/s Chanda Anjaiah Parmeshwar and fresh Buyer's Credit (BC) was taken against those cash sales. Till March 2013, an amount of ₹196.17 crore approximately remained unrealised from M/s MBS towards loss on forward cover kept open, interest and bank/miscellaneous charges not booked to MBS and outstanding exposure shown as on 31 March 2012. The status of recovery of ₹ 196.17 crore from M/s MBS Group was not made available to Audit.

The Management while reiterating the facts of the case stated (March 2013) that as per request (April 2012) of the RO, Hyderabad seeking fund of ₹ 40 crore for making remittance to the foreign supplier and Buyers Credit liabilities due on 11 and 18 April 2012 the matter was examined at CO. As per details given by RO, Hyderabad, against the total liability of ₹ 210 crore, financial security of ₹ 167 crore was available with an exposure of ₹ 43 crore in respect of M/s MBS Group. Under the circumstances, CO had no option but to transfer the required funds to effect the remittance as not doing so would have irrepairably damaged the credibility of the Company, as there had never been any instance of delay or default in payment to the foreign bullion suppliers. It was further stated that matter was under Audit by M/s KPMG and the Final Report was awaited.

Management's reply tantamounts to acceptance of non adherence to the instructions on bullion trading, camouflaged accounting and ineffective internal control in the Company which resulted in non-realization of dues of ₹ 196.17 crore from M/s MBS and avoidable loss of ₹ 14.71crore[1] (till December 2012), towards interest thereon to MMTC Ltd.

The above cases points to the utter failure of the Corporate Office and higher Management of MMTC to monitor and control the actions of its Regional Offices. The fact that such improprieties were allowed to flourish for years together, in spite of warning signs such as un reconciled bank accounts, is a telling comment on the quality of Corporate Governance in the Company. The Ministry of Commerce needs to take serious note of the transactions and prevent failure of the control mechanism in the Company.

The matter in case of RO Chennai and RO Hyderabad was reported to Ministry in October 2012 and March 2013, respectively; their reply was awaited (March 2013).

5.2 Imprudent investment in Joint Venture with M/s Indiabulls Financial Services

Guidelines of Forward Market Commission[2] issued in May 2008 (ahead of incorporation of the JV) had negated the main premise on which investment by the Company in the JV was considered viable. The Company did not revisit its decision of equity participation in the JV. Resultantly funds of ₹ 26 crore were blocked in the loss making venture.

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[1] ***Interest @10 per cent for nine months from April 2012 to December 2012.***
[2] ***A Regulatory Authority set up in 1953 under the Forward Contracts (Regulation) Act, 1952.***

M/s India Bulls Financial Services Limited (IBFSL)* approached (June 2007) MMTC Limited (the Company) with a proposal to become strategic partner in an International Commodity Exchange proposed to be set up for Spot and Future markets that would target commodities such as agro products, industrial metals & minerals, bullion and precious metals and energy (gas and crude). The proposal envisaged incorporation of a Joint Venture with an equity capital of ₹ 100 crore to which IBFSL and MMTC were to contribute ₹ 74 crore and ₹ 26 crore, respectively.

The Company in response requested (June 2007) IBFSL to get the Detailed Project Report (DPR) and Feasibility Study prepared by reputed consultant like Price Waterhouse Coopers (PWC), SBI Capital etc. The IBFSL engaged M/s PWC accordingly. The Board of Directors of the Company considered the feasibility report prepared by PWC in its 350th meeting held on 07 September 2007. The Board approved the proposal to invest ₹ 26 crore, subject to approval by the Government of India, for acquiring equity shares of Special Purpose Vehicle being created by IBFSL.

The advantages enumerated by the Company while seeking (September 2007) approval of the Ministry of Commerce and Industry (MoCI), to the above proposal, *interalia*, included:

- MMTC would be able to trade in existing products such as gold, silver and agricultural commodities in the exchange and a turnover of minimum of ₹ 500 crore per year was expected. The Company could also trade in commodities of its interest such as iron ore and coal.
- The Company would be given 'most favoured customer' rates and treatment in the exchange and would be made a member without payment, which in turn would bring down its costs of hedging/commodity trading considerably.
- Selected warehouses of the Company would be declared designated warehouses.
- Tie up with quality assurance services would help the Company to procure commodities of the requisite standards / specifications.

MoCI approved (October 2007) the proposal for equity participation by the Company.

Accordingly, on 18 August 2008 a JV in the name of International Multi Commodity Exchange Limited (IMCEL) was incorporated. A 'Shareholders Agreement' (SHA) was entered into on 12 February 2009 amongst the Company, IBFSL and IMCEL. The Company invested ₹ 26 crore (in March and May 2009). IBFSL had 40 *per cent* stake in the JV while KRIBHCO, IDFC and Indian Potash and others held the balance 34 *per cent* of equity capital. The name of the JV was subsequently changed in July 2009 to Indian Commodity Exchange Limited (ICEX). The Department of Consumer Affairs, Ministry of Consumer Affairs, Food & Public Distribution (MoCA F&PD) granted recognition to ICEX on 9 October 2009 and ICEX started its operations on 27 November 2009. The ICEX did not show profit since its creation and it had accumulated losses of ₹ 63.50 crore as of 31 March 2012.

***** *A retail financial services company in the business of consumer loans, commercial vehicle loans, home loans, brokerage and depository services, for equities and commodities, distribution of mutual funds and other third party products.***

In the meantime, the regulatory authority viz. Forward Markets Commission (FMC) issued (May 2008) 'Guidelines for recognition of new National Commodity Exchange'. Para 5.2 of the said guidelines stipulated that "the proposed exchange shall have a demutualised structure i.e. the share holders of the Exchange shall not have any trading interest either as a trading member or client at the Exchange."

Audit observed that the above guidelines of FMC were issued much ahead of incorporation of the JV and had negated the main premise on which the investment by the Company in the JV was considered viable. The Management, however, did not revisit its decision of equity participation in the JV in the changed scenario.

It was further observed that as per the SHA and the revised guidelines issued by FMC on 17 June 2010, equity investment in the commodity exchange was subject to a lock in period of three years, which could be relaxed by one year by the FMC in exceptional circumstances. As such the minimum lock in period for an equity investor was two years.

Disregarding the provisions of lock in period, IBFSL on 2 August 2010 proposed to the Company to induct M/s. Reliance Exchangenext (R-NEXT) with 26 *per cent* stake in ICEX as Anchor Investor* with MMTC Limited and IBFSL each divesting 15 *per cent* and 11 *per cent* of their equity for a total consideration of ₹ 47.35 crore (₹ 9.10 for each share of ₹ 5). On 19 August 2010, IBFSL gave Right of First Refusal to the Company whereby IBFSL offered its 26 *per cent* holding in ICEX to MMTC Limited on the same terms and conditions as offered to R-Next. The Company was to reply within 30 days. After receiving the offer from IBFSL, MMTC Limited engaged M/s IDBI Capital Market Services Limited to value the shares of the exchange and asked IBFSL to grant time till 05 October 2010 for taking a decision. In any case as per the SHA, MMTC had time till 2 November 2010 to respond to the first offer and till 19 November 2010 to the ROFR offer.

Again, in blatant violation of the SHA and FMC guidelines, 15 months before the completion of mandatory lock in period, an application was made by ICEX on 27/31 August 2010 to the FMC to transfer the stake of IBFSL to R-NEXT. The FMC, within 4 working days vide letter dated 6 September 2010, forwarded the application to the Department of Consumer Affairs, MoCA F&PD, for its approval.

The Department of Consumer Affairs, MoCA F&PD, showing unusual alacrity, within a period of 12 working days (including time taken for delivery of correspondence), in turn accorded approval to induct R-next into ICEX and informed FMC of its approval vide letter dated 23 September 2010. This enabled IBFSL to transfer 26 *per cent* equity to R-NEXT on 13 December 2010, i.e., within just 13 months of recognition of the Commodity Exchange.

As the Company could have accepted the offer of IBFSL and partly divested its equity till 2 November 2010, the hasty decision of the Department of Consumer Affairs, MoCA F&PD to relax the lock in period denied the Company the opportunity of taking a decision to partly divest its holding in ICEX.

The Management in its reply (March 2013) reiterated the facts of the case and stated that the revised guidelines of FMC were informed to the Board of Directors in its 358th meeting held on 23 July 2008.

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* ***Anchor Investor is an investor who plays the lead role in managing a National Commodity Exchange.***

The above reply was not acceptable because despite being aware of the revised guidelines of FMC, before incorporation of the JV, the Management did not revisit its decision which resulted in blocking of ₹ 26 crore in an unfruitful venture. The hasty decision of the Department of Consumer Affairs, MoCA F&PD also denied the Company an opportunity to dilute its investment in the venture.

The matter was reported to the Ministry in March 2013; their reply was awaited (March 2013).

CHAPTER VI: MINISTRY OF CONSUMER AFFAIRS, FOOD AND PUBLIC DISTRIBUTION

Food Corporation of India

6.1 Non recovery of society commission paid to State Government and their Agencies

FCI paid society commission amounting to ₹ 23.44 crore to State Government and their agencies for procurement of wheat/paddy without ascertaining whether Societies were actually engaged by these agencies during 2010-11.

FCI makes direct procurement of wheat and paddy for the Central Pool and also through the State Governments and their Agencies. In turn, the State Government and their agencies can engage societies, Self Help Groups, and cooperative Societies for procurement of wheat & paddy. For this purpose, commission to Societies was payable maximum @ two and 2.5 *per cent* of Minimum Support Price (MSP) for wheat and paddy during Rabi and Kharif Marketing Seasons of 2010-11 as per GoI instructions (March 2010). Further, payment of commission to Societies/sub-agents shall be admissible only wherever they are entrusted with the task of procurement in terms of GoI instructions issued in March 2005.

A test check of records of 19 district offices of FCI Uttar Pradesh (UP) region revealed that ₹ 23.44 crore was released under 'Commission to Societies' to various State Government Agencies (SGAs)* during 2010-11 without verifying whether societies were entrusted with the task of procurement. While releasing the amount of society commission to SGAs, FCI did not exercise any check whether SGAs actually engaged any society for procurement. Thus, payment of ₹ 23.44 crore as society commission without confirmation of engagement of such societies by SGAs was in violation of GoI instructions.

While accepting that payment of society commission to SGAs was released without confirming the actual engagement of such societies, the Management stated (March 2013) that no pre-condition for payment of society commission was mentioned for paddy either in the cost sheet or Government instructions regarding principles for fixation of incidentals/economic cost of wheat/rice. The Management, pursuant to the audit observation, has effected a recovery of ₹ 16.12 crore out of total amount of ₹ 23.44 crore and stated that no commission was paid to the SGAs of UP from KMS/RMS 2011-12 onwards.

Though, the Management intimated recovery of ₹ 16.12 crore but release of payment of society commission without confirming the actual engagement indicated lack of internal checks which exposed the FCI to risk of such payments being made in other States for which they had not initiated any action to establish mechanism to prevent recurrence of such instances.

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* *State Food Deptt., UP Cooperative Federation, UP Agro, U.P.S.S., S.F.C, UP State Warehousing Corp., Nafed, Karamchari Kalyan Nigam.*

While FCI stated to have discontinued with the practice of releasing payments to SGAs in case of non engagement of societies, to protect the interest of the Government, FCI may review all payments of this nature across the country during the past five years and effect necessary recovery in cases where payments were released in violation of GOI instructions.

The matter was reported to the Ministry in August 2012; their reply was awaited (March 2013).

6.2 Excess expenditure on handling of foodgrains

FCI (UP) Region paid handling charges of foodgrains to Handling and Transport contractors/DPS labour under incorrect clauses of tender rates, which resulted in excess expenditure of ₹ 6.48 crore during RMS/KMS 2010-11 and 2011-12.

Wheat/rice procured by State Government of Uttar Pradesh (UP) and its agencies for the Central Pool for the Kharif Marketing Season/Rabi Marketing season (KMS/RMS) 2010-11 and 2011-12 was to be delivered at a designated storage platform of Food Corporation of India (FCI) for subsequent storage in godowns. The costs of transportation and handling charges for delivery of wheat/rice from mandi/ mills to the designated platform of FCI storage point were to be paid based on the rates prescribed in the cost sheet issued by Government of India (GOI) for RMS/KMS 2010-11 and 2011-12. Thereafter, handling of foodgrain bags from the designated platform to the FCI godowns for storage was performed by Handling and Transport (H&T) labour and Direct Payment System (DPS) labour for which the payments were regulated by H&T contract agreement entered into by FCI[1] and the schedule of rates applicable for DPS labour laid down by FCI[2] respectively.

Scrutiny of records of 12 district offices[3] out of 19 district offices of UP region revealed that FCI wrongly paid higher rate of handling charges to H&T contractors under clause for 'unloading from transport vehicles and stacking the foodgrain bags in godown' @ ₹ 45 *per* hundred bags[4] instead of ₹ 27 *per* hundred bags[5] for the work actually carried out for 'removing/collecting scattered bags of foodgrain from platform and stacking them inside godowns.' Thus, application of wrong clause under the agreement and payment at higher rates was not in accordance with the work actually performed by H&T contractor which resulted in excess payment of ₹ 4.98 crore during RMS/KMS 2010-11 and 2011-12.

Similarly, for handling of the foodgrains, FCI UP region also wrongly paid DPS labourers under clause for 'unloading from transport vehicles and stacking them inside the godowns' @ ₹ 226 *per* hundred bags[6] instead of ₹ 137 *per* hundred bags[7] for actually

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[1] ***Model Tender Form Part II (20) a,b,c.***
[2] ***Part II (20) a,b,c of Direct Payment System (DPS) schedule of rates.***
[3] ***Gorakhpur, Moradabad, Kanpur, Gonda, Varanasi, Bareilly, Lucknow, Faizabad, Sitapur, Shahjanpur, Allahabad and Azamgarh.***
[4] ***Clause Part1(3) a,b,c of HTC model tender form.***
[5] ***Clause Part II (20) a,b,c of the HTC model tender form.***
[6] ***Clause Part I (3) (a),(b),(c) of Schedule of rates and services for DPS labour (Rates includes Above Schedule of Rate @2180 per cent).***
[7] ***Clause Part II (20)(a),(b),(c) of Schedule of rates and services for DPS labour(Rates includes Above Schedule of Rate @ 2180 per cent).***

'removing/collecting scattered bags of foodgrains and stacking them inside the godowns.' This resulted in excess payment of ₹ 1.50 crore to DPS labourers during RMS 2010-11 and 2011-12.

Audit further observed that such wrong payments of handling charges were made in violation of relevant clauses of the aforesaid contract and despite issue of instructions in this regard by Regional Office, Lucknow in September 2006 which indicates weak internal check.

The Management in its reply stated (September 2012) that observation was noted for future compliance and the field offices were instructed to ensure the payment of handling charges under the correct clause of Part II (20) for the handling work done in future.

The reply of the Management is not acceptable as it neither furnished reasons for violation of the existing instructions issued in September 2006 nor intimated action taken to fix responsibility for applying wrong clause under the H&T contract/Schedule of rates applicable to DPS labour. The Management remained silent on the issue of recovery of excess payment from the contractors/labourers.

Thus, due to irregular payment of handling charges against the wrong clause of the H&T contract and schedule of rates, FCI incurred excess expenditure of ₹ 6.48 crore on payment to H&T contractors and DPS labourers during KMS/RMS 2010-11 and 2011-12 which was yet to be recovered from the parties concerned.

The matter was reported to the Ministry in October 2012; their reply was awaited (March 2013).

6.3 Misappropriation of the amount of Service Tax by the Contractor

FCI's failure to ensure compliance with the statutory/contractual provisions resulted in misappropriation of service tax amounting to ₹ 5.37 crore by the contractor appointed for handling and transportation of imported wheat during 2006-07 and 2007-08.

Food Corporation of India (FCI), RO Ahmedabad appointed (August 2006) M/s. Kailash Enterprises as Stevedoring, Clearing, Handling and Transportation/Cargo Handling Contractor (Contractor) for handling the imported wheat during 2006-07 and 2007-08 at Kandla Port. As per clause XIII of the tender document for the SCH&T contract, the contractor was to produce records such as vouchers, receipts including statutory returns, etc., relating to execution of contract for verification by FCI. Further, as per Service Tax Rule 4A (1)(i), every person providing taxable service shall issue invoice or bills containing *interalia* name, address and registration number of such person.

Scrutiny of records revealed that FCI admitted the bills of the Contractor which did not bear service tax registration number though mandatory under the Service Tax Rules. After noticing that the Contractor did not produce any documentary evidence of remittance of service tax to the department concerned, FCI advised (December 2006) the Contractor to make immediate payment and furnish challans within three days. The Contractor failed to furnish the required documentary evidence/proof of remittance to FCI. Despite such failure on the part of the Contractor, FCI continued to entertain the claims submitted by the Contractor and released the payments subsequently.

Further, FCI released ₹ 5.37 crore to the Contractor towards service tax during the years 2006 to 2008 through 109 bills[1] without verifying proof of remittance of service tax[2] into Government account by the Contractor though enabling clause for verification of any document/record was stipulated in the tender document.

The Management stated (January 2012) that although the onus of remittance of service tax was on the SCH&T contractor, but in view of audit observations, they persuaded them to remit the tax and submit challans as proof of payment. In the meanwhile, the Management encashed the bank guarantee of ₹ 2.35 crore of the contractor and referred the matter of non remittance of service tax to the Commissioner, Central Excise and Service Tax.

The contention of the Management is not acceptable as encashment of the Contractors' bank guarantee of ₹ 2.35 crore was meant for adjustment towards loss of gunnies, grab charges, shortages, demmurages, etc., amounting to ₹ 3.29 crore and was not for making good the amount of service tax not remitted. Tax authorities confirmed (January 2012) that though the Contractor had charged and collected service tax from their clients, but failed to deposit the same to Government accounts and also failed to declare such facts to the department at the relevant time. An offence case was booked against the contractor and was under investigation (January 2012) by the Commissioner, Central Excise and Customs.

Thus, FCI's failure to ensure compliance with the statutory/contractual terms resulted in misappropriation of ₹ 5.37 crore by the H&T Contractor.

The matter was reported to the Ministry in November 2012; their reply was awaited (March 2013).

[1] ***2006-07 : 98 bills amounting to ₹3.70 crore; 2007-08: 11 bills amounting to ₹1.67 crore.***
[2] ***Service tax for 2006-07 was 12.24 per cent (service tax 12per cent and education cess 2 per cent) and for 2007-08 :12.36 per cent (service tax 12 per cent and education cess 3 per cent).***

CHAPTER VII: MINISTRY OF DEFENCE

BEML Limited

7.1 Imprudent decision to takeover a defunct company

Imprudent decision of BEML to takeover Mining and Allied Machinery Corporation Limited without establishing its viability resulted in blocking of ₹ 59.41 crore.

M/s. Mining and Allied Machinery Corporation Limited (MAMC), set up in 1965, was manufacturing and supplying underground mining equipment to Coal India Limited (CIL) and other mining companies apart from Damodar Valley Corporation Ltd. (DVCL). MAMC had a history of incurring loss since its inception and was declared sick and referred to the Board for Industrial and Financial Reconstruction (BIFR) in 1992. It was closed in January 2002 due to lack of orders coupled with labour problems and was under litigation for nearly 15 years after it was referred to BIFR. In May 2007, Hon'ble High Court of Calcutta decided that the assets, except the township which was to be handed over to the Government of West Bengal, would be the property of the High Court under the custody of official liquidator. In the meantime, BEML Limited (BEML) received an invitation (April 2007) from CIL to join a consortium to takeover and revive MAMC. The Board of BEML decided (May 2007) to evaluate the proposal of CIL. However, without the approval of the Board, BEML entered into a consortium agreement (September 2007) with CIL and DVCL and the consortium filed an application (October 2007) in the High Court for revival of the defunct company.

The High Court, which had published (September 2007) an auction sale notice, granted (October 2007) a stay order on the sale process and directed the consortium to file an unconditional corporate guarantee to pay the amount, falling short of ₹150 crore at the resale of the assets of MAMC, in the event of consortium backing out of the proposal to revive MAMC. Accordingly, BEML filed (October 2007) the guarantee. However, as the revival proposal became unattractive due to unresolved outstanding liabilities, it terminated (October 2009) the consortium agreement. The decision to terminate the agreement was placed before the Board as an agenda item only in April 2010, requesting for ratification of the Board. However, as BEML was legally bound under the corporate guarantee, the Board decided (May 2010) to take part in the auction process to secure the assets of MAMC by reviving the consortium agreement.

Accordingly, a fresh consortium agreement was signed (June 2010) with CIL and DVCL to acquire the assets of MAMC. It was also decided to share all the expenditure and form a Joint Venture Company (JVC) to restart MAMC. The consortium bought (June 2010) the assets of MAMC for ₹100 crore in the auction sale, in which BEML's contribution was ₹48 crore. With this acquisition, the Court discharged the liability towards the guarantee furnished by the consortium. BEML had also incurred ₹11.41 crore towards other expenses. Further, BEML continued to incur recurring monthly expenses of ₹8.55 lakh from July 2012 towards private security arrangement.

It was also noticed that BEML independently formed (August 2010) a wholly owned subsidiary company, without the consent of CIL and DVCL, in the name of MAMC Industries Limited on the plea that incorporating a new company involves a series of formalities and necessary amendments to the Memorandum and Articles of Association could be made subsequently to suit the requirement of a JVC.

We observed serious deficiencies in the decision and action to purchase the assets of MAMC as mentioned in the succeeding paragraphs:

- Without waiting for the report of the Committee that had been formed (May 2007) by the Board to evaluate the proposal and establish its viability, Chairman and Managing Director (CMD) BEML signed (September 2007) the consortium agreement to takeover MAMC. The report of the Committee was received in October 2007. The CMD informed the Board regarding the signing of the consortium agreement in an Action Taken Report (October 2007);
- Although MAMC had incurred losses since its inception (1965) and had not generated business beyond 10 *per cent* of its capacity, BEML signed (September 2007) the consortium agreement without conducting due diligence;
- The subsequent due diligence report obtained in November 2008, indicated that revival of MAMC would be viable if firm orders are received from CIL/DVCL. Even though firm orders were not obtained and there were no assurances on getting adequate return on investment, BEML went ahead with the proposal and invested ₹ 48 crore;
- An unconditional corporate guarantee for the amount falling short of ₹150 crore was filed before the High Court without getting prior approval of the Board, despite the directives of the Board (May 2007) to revert to them for a final decision; and
- BEML formed a wholly owned subsidiary company without the consent of CIL and DVCL who were also the consortium members, which later on (September 2010) invited serious objections from them. Consequently, the JVC was still to be formed (November 2012) and business operations of the subsidiary could not be commenced.

Management stated (November 2012) that (i) the Board was informed of all developments well in advance/periodically seeking necessary approval/ratification and that the signing of consortium agreement did not have any financial commitment; (ii) corporate guarantee was filed as per the court directives; (iii) project was taken up on the assumption that demand for underground mining would increase and CIL/DVCL would bring synergy to the project; (iv) due diligence report obtained had also confirmed the stand taken by the management; and (v) the investment would prove to be prudent from the long term prospective when the underground mining is revived by CIL.

The reply counters the fact that the Board's approval was not sought as required by the Board, which also highlights poor corporate governance of the company. BEML ventured into the process of takeover of the defunct company even without a firm commitment from its consortium members, despite the caution in the due diligence report that the market for underground mining was not robust and was likely to remain so.

Thus, the imprudent decision of BEML to takeover MAMC without establishing its viability has ended in blocking of ₹ 59.41* crore (November 2012) with no foreseeable return. The decisions taken in this regard by BEML, without getting approval of the Board, were reflective of poor corporate governance of the company.

The case was reported to the Ministry in December 2012; their reply was awaited (March 2013).

7.2 Defective terms of trading with an Iron ore trader

Failure to incorporate suitable clauses to obtain bank guarantee and adequate terms to safeguard the interest of BEML coupled with undue favour to a business associate resulted in non-recovery of ₹ 35.42 crore.

BEML Limited (BEML) entered (March 2010) into a Memorandum of Agreement (MOA) for iron ore trading with M/s. Prasanna V. Ghotage, Belgaum, (PVG), a sole proprietary concern engaged in sourcing, supply, export and trading of iron ore, besides providing logistics. In pursuance of the MOA, BEML entered into nine tripartite contracts during 2010-2012 valuing ₹ 92.49 crore with PVG and M/s. Nordbell Commercial Limited (NCL), British Virgin Islands (Buyer), for shipment of iron ore to China. As per the MOA, BEML will source the iron ore from PVG for which 80 *per cent* of the purchase value of the material delivered at the Port has to be paid based on inspection certificates issued by inspection agencies recommended by BEML. PVG was required to furnish a guarantee to perform all its obligations under the agreement and to indemnify BEML against all losses, damages, costs, claims, expenses, taxes/statutory levies whatsoever which BEML may suffer, pay or incur by reason of or in connection with any such default on the part of the supplier (PVG). PVG was also to give a cheque for ₹45 crore as security towards execution of the contract. BEML, in turn, would receive payment from the overseas buyer.

After execution of eight contracts, the trading activity came to a standstill consequent on a ban imposed (September 2011) by the Government of Goa on iron ore exports.

Audit of the transactions revealed the following irregularities:

- The due diligence exercise based on which PVG was selected did not cover core issues such as trustworthiness, credibility, competence, commitment and dependability;
- PVG furnished (March 2010) a deed of guarantee and an un-dated cheque for ₹45 crore in line with MOA. MOA was *ab initio* defective as an enforceable bank guarantee was not insisted upon;
- BEML paid PVG ₹ 17.93 crore in July 2011 towards 80 *per cent* for shipment of 85,000 MT iron ore (55 *per cent* Fe grade) under the eighth contract. BEML also paid, in August 2011, ₹ 8.57 crore to PVG towards the ninth contract to ship 25,000 MT iron ore (58 *per cent* Fe grade). However, 55,000 MT of inferior Fe grade (45.02 *per cent*) was actually shipped (January 2012) as against the required 55 *per cent* Fe grade. The remaining quantity of 30,000 MT against the eighth contract and the entire quantity contracted under the ninth contract could not be delivered due to imposition of ban on iron ore export by the Government of Goa and the trading activity came to a standstill. By that time, PVG had a liability to

* *₹48 crore + ₹11.41 crore.*

pay back ₹29.82 crore on account of unadjusted advances, recoverable duties, demurrages and other costs; and

- BEML did not present the cheque for ₹45 crore which PVG had given as security, to recover the amount due from PVG.

Management stated (January 2013) that PVG was selected after assessing experience in iron ore trading and a guarantee was accepted as PVG expressed their inability to convince their bankers for issuing a bank guarantee. Progressive payments to PVG were released as per the terms of MOA. BEML did not mention the reasons for not presenting the cheque to recover the dues.

In another case, BEML received a purchase order from PVG in September 2011 for supply of eight hydraulic excavators and 20 wheel loaders, at a total value of ₹8.09 crore. 20 *per cent* was to be paid as advance and balance 80 *per cent* was to be deducted from the iron ore shipment bill. PVG gave two cheques (September/October 2011) for a total of ₹1.84 crore towards advance payment and requested BEML (October 2011) to withhold presentation of the cheques. BEML, therefore, did not present these cheques. PVG subsequently paid ₹ 0. 40 crore towards advance.

On supply of the equipment (September to November 2011), PVG gave a cheque for ₹ 7.36 crore as security for iron ore supplies due, by February 2012 against the balance 80 *per cent.* BEML presented the cheque belatedly in June 2012 although iron ore was not supplied within the stipulated period. The cheque bounced due to insufficient funds. Another cheque furnished by PVG (July 2012) for ₹ 7.36 crore was presented (September 2012) which was also dishonored. BEML issued a legal notice under the Negotiable Instruments Act in September 2012 and lodged a criminal complaint in January 2013. As assessed by the Management, an amount of ₹ 5.60[1] crore was due from PVG after return of two hydraulic excavators and eight wheel loaders[2] due to quality issues.
Management stated (January 2013) that efforts were being made to take back the balance quantity.

The replies are not acceptable as BEML failed to recognize the inherent risk of not insisting on a bank guarantee and the terms for releasing progressive payments were inadequate to safeguard the financial interests of the company. The entire transactions which resulted in non-recovery of substantial amount from PVG, require independent investigation for fixing of responsibility.

The matter was reported to the Ministry in February 2013; their reply was awaited (March 2013).

Bharat Dynamics Limited

7.3 Procurement, Production and Supply of Konkurs-M Missiles

7.3.1 Introduction

7.3.1.1 Bharat Dynamics Limited (BDL), was incorporated in July 1970 under the administrative control of Department of Defence Production, Ministry of Defence (MoD)

[1] ***Excluding taxes and duties***
[2] ***PVG returned two excavators and eight wheel loaders valuing ₹ 3.20 crore during September 2012 to December 2012.***

with the objective of manufacturing sophisticated Defence equipment required by the Armed Forces. BDL is a prime production agency for Guided Missiles in India.

7.3.1.2 The Bhanur unit of BDL established (1988) for manufacturing Konkurs ATGM[1] Systems and Unified Launchers was assigned with the production of Konkurs missiles since 1989 as a part of the contract entered into by the MoD with the erstwhile USSR for production of Infantry Combat Vehicle BMP-II. Konkurs missile with single war head was capable of defeating tanks and armoured personnel carriers other than T80 UD tanks protected by Explosive Reactive Armour (ERA) panels. BDL was producing 2000 Konkurs missiles per annum and had orders upto March 2000. Since Konkurs missile was not defeating the tanks fitted with ERA panel, Army recognized (1994) the need for induction of Konkurs-M missile which is an advanced version of Konkurs and capable of defeating tanks protected by ERA.

7.3.1.3 BDL had been interacting (1996) with M/s. KBP Instrument Design Bureau[2], (KBP)Tula, Russia, Original Equipment Manufacturer (OEM) for the manufacture of Konkurs-M missiles. BDL proposed (April 1999) to MoD to manufacture Konkurs-M missiles for optimum utilization of their production facility. Accordingly, a transfer of technology (TOT) contract was entered into (October 2002) by MoD with KBP, for transfer of partial licence and technology for Konkurs-M missiles, rendering technical assistance in setting up and augmentation of the existing facilities including sale of 4000 missiles in various stages[3] of technological readiness at a total cost of US $ 54.37 million (₹ 249 crore) to enable BDL to produce 24,000 missiles from component level. The TOT contract was valid for a period of 15 years. MoD assigned (November 2002) the contract to BDL with the responsibility for its implementation.

7.3.1.4 Army placed five indents (September 2003 to March 2008) on BDL for the manufacture and supply of 28,000 Konkurs -M missiles during the period March 2004 to March 2012. Of these, 6000 missiles were to be supplied from imported fully finished missiles (FF-1500), semi knocked down (SKD- 1500) and complete knocked down (CKD - 3000) kits. The balance 22,000 missiles were to be manufactured from component level from October 2005. BDL had supplied 14,722 missiles up to January 2013, leaving a backlog in supply of 13,278 missiles.

7.3.1.5 BDL identified 431 common components (CCs) used in Konkurs and Konkurs-M missiles. Konkurs-M missiles had 133 uncommon components (UCCs) which were covered in the TOT contract (October 2002). These UCCs were to be initially imported and later indigenized. CCs and UCCs were to be integrated for the production of Konkurs-M missiles.

7.3.1.6 When the integration of CCs with imported UCCs commenced in February 2006, BDL encountered a major reliability problem. Further, technology absorption took a longer time than anticipated and the technical problems relating to integration of CCs with UCCs were finally resolved in February 2009. This led to delay in execution of the contract by three years and consequential delay in supply of the missiles to the Army. The delay in supply of 14,722 missiles resulted in loss of ₹283.72 crore[4] besides levy of

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[1] ***Anti Tank Guided Missile (ATGM);***
[2] ***Konkurs was developed by KBP in 1962.***
[3] ***1000 fully finished, 1000 semi knocked down and 2000 complete knocked down.***
[4] ***This is the loss as intimated by BDL, being the difference between cost price and selling price***

Liquidated Damages (LD) of ₹38.81 crore by the Army. The estimated loss for supply of the balance 13,278 missiles is ₹297.25 crore and the likely LD is ₹75.57 crore. More importantly, BDL could not completely supply the missiles as required by the Army for defence preparedness.

7.3.2 *Audit objective, scope and methodology of audit*

The Audit objectives were to examine the reasons for delay in execution of the contract, consequent loss and impact on defence preparedness. The scope of audit included review of planning, procurement, production and supply of Konkurs - M missiles, covering the period from October 2002 to March 2012. The audit criteria were management decisions, approval of the administrative ministry and the Board of Directors, pricing, delivery schedules, sales realization, and absorption of technology. The methodology involved review of files at MoD, review of Board minutes, review of contract, Army indents, production records and discussions with Management.

7.3.3 *Audit findings*

7.3.3.1 *Delay in finalization of contract*

The delay in entering into contract was observed in the following stages:

- Although Army recognized the need to induct Konkurs-M missile in 1994, the trial evaluation in Russia was conducted in 1998 after a lapse of about four years;
- Subsequent to trial evaluation in January 1998, the evaluation trials of Konkurs-M missile against ERA panels were completed in India in October 2001, after a lapse of about three-and-a-half years; and
- Finally, the contract was concluded in October 2002 after completion of evaluation trials in India, after a lapse of one year.

Thus the process of finalizing the contract took about eight years from the date of recognizing (1994) the need of improved version of Konkurs-M, which was not justified.

MoD, while remaining silent on the reasons for delay in finalizing the contract, stated (January 2013) that the contract was finalized by a committee consisting of representatives from Army, Acquisition Wing of MoD, Defence (Finance) and DDP*. Reply is not specific and also does not addresss the issue on undue delay in finalization of the contract which adversely affected the defence preparedness as Army was deprived of the capability of defeating tanks protected by ERA panels. Army was solely dependent on BDL for supply of missiles as the contract was assigned to BDL with the responsibility of absorption of technology and manufacture and supply of missiles.

7.3.3.2 *Deficiency in contract*

The TOT contract provided for transfer of technology in respect of identified 133 UCCs and did not cover new components that would have to be introduced, if any. While the contract also provided for updation of existing Konkurs documentation, it did not provide the technology required for the core activity of integrating UCCs with CCs as discussed in the succeeding paragraphs:

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* *Department of Defence Production*

(A) A new/additional component, viz., Generator Assembly, was introduced (March 2003) by KBP for resolving the technical snags in the first lot of imported fully finished (FF) missiles received in March 2003. However, KBP did not transfer its technology on the ground that this component was not covered under the contract. Subsequently, Generator Assembly was indigenized by BDL (January 2010) through reverse engineering process entailing a delay of about five years. The contract signed was deficient as it did not foresee the necessity to provide for transfer of technology for new components, if any, subsequently introduced by KBP.

(B) The third indent (February 2004) placed by the Army envisaged production of missiles from component level and supply of 2860 missiles by October 2005 which required integration of UCCs with CCs. Integration activity which commenced only in February 2006 in small lots to facilitate gradual technology absorption, encountered major reliability problems. The technical problems were also inconsistent from lot to lot which were finally resolved in February 2009, by which time supply of 9000 missiles against the indents placed by the Army was pending. The contract did not provide for technical support for integration and successful proof firing of the missiles. In the absence of such a clause, BDL could not insist upon KBP for technical support in resolving the integration problems. In the meantime (October 2005 to January 2009), BDL had imported 7000 UCCs at a cost of ₹241.24 crore for production of the Konkurs-M missiles and supply to the Army. Thus the delay in resolving the integration problems resulted in non-utilisation of the imported UCCs for periods ranging from 17 to 49 months.

MoD, while replying (January 2013) did not comment on the absence of technical support for integration of UCCs with CCs. It, however, stated that in case of TOT contracts, OEMs give certain percentage of TOT documents and for balance items, the company resorts to indigenisation either through reverse engineering or through local development agencies. The reply is not acceptable as the contract did not provide for TOT of new/additional components and technical support for integration of UCCs and CCs which led to delay in absorption of technology and execution of the contract. MoD was also not specific as to what items can be transferred under TOT. Thus the contract was deficient to this extent.

7.3.3.3 Delay in updation of technical documentation

As per the contract, KBP had to carry out an analysis of the technical documentation of Konkurs missile earlier transferred, to decide whether Konkurs documentation is useful for Konkurs-M production and to carry out necessary correction of design documents, without any charge. The technical analysis (April 2003) by KBP indicated certain discrepancies in the technical documentation of Konkurs available with BDL, which was due to amendments made by KBP during 1992-2002 without the knowledge of BDL. BDL had also carried out modifications without KBP's knowledge.

Accordingly, KBP recommended that various checks/inclusions be carried out to the design and technology process documents and that the technical documentation common for Konkurs and Konkurs-M be used in the manufacture of Konkurs-M. As per the contract, KBP had to provide necessary corrections of design documents in respect of CCs. However, KBP declined to provide corrections to the design documents in respect of two CCs viz., Launch Tube and Ignitor which had been fine tuned by KBP. Launch Tube was finally fine tuned (February 2009) and an alternative material for Ignitor was identified by BDL. Thus, the failure of BDL to enforce the contractual provisions led to delay in supply of the missiles by BDL to the Army. BDL stated (October 2011) that though the subject Ignitor is common for both Konkurs and Konkurs-M, a new control section introduced in the Konkurs-M missiles was not compatible with the same and hence BDL took the initiative to find an alternative material. BDL added that in the absence of TOT, such delays were normal and unavoidable. MoD did not comment on this issue.

7.3.3.4 Failure to enhance capacity

In view of the accumulated backlog in supplies, at the instance of MoD (February 2010), BDL planned (August 2010) to enhance the capacity for production of missiles in two phases, i.e., from 3000 missiles per year to 4500 missiles per year in phase-I and 6000 missiles per year in phase-II, at a cost of ₹ 50 crore and ₹ 130 crore respectively. Phase- I was to be completed by March 2012 and phase-II by March 2013. Though the first phase was to be completed by March 2012, the capacity increased only marginally by 500 missiles per annum, even after spending ₹59.27 crore till February 2013.

MoD stated (January 2013) that heavy investment was not planned initially and production was affected due to technical snags. The backlog was expected to be cleared by 2015-16 by enhancing production from the year 2013-14. Reply is not acceptable as the backlog remained at 13,278 (January 2013) and even phase I of enhancement of capacity had not been completed. Even with the existing capacity of 3000 missiles per year, on an average only 1791 missiles per annum could be produced/supplied by BDL during the period 2009-12.

7.3.3.5 Levy of LD

Against the indented quantity of 28,000 missiles, BDL had supplied 14,722 missiles to the Army till January 2013, leaving a backlog of 13,278 missiles. The delay in production/delivery had resulted in levy of LD aggregating to ₹38.81 crore as of January 2013 and the LD would be even higher when the remaining missiles are delivered as mentioned in paragraph 7.3.1.6 above.

7.3.3.6 Loss due to cost overrun

The first four indents placed by the Army upto March 2006 for 12,860 missiles were on fixed price arrived at considering the costs involved and profit mark up estimated at the time of submitting the quotation. The fifth indent (March 2008) for supply of 15,140 Missiles was on fixed price with an annual escalation of about 5 *per cent*. BDL has incurred a loss of ₹283.72 crore in the supply of 14,722 missiles till January 2013 (excluding LD). Further, there is a likely loss of ₹297.25[♥] crore (excluding LD) in respect of balance 13,278 missiles yet to be supplied.

MoD stated (January 2013) that the price of Konkurs-M missiles was fixed based on the price of imported FF missiles and the difference between the FF price and the price of SKD/CKD items planned to be imported was allowed as value addition to BDL. Due to technological issues encountered by BDL during execution of indent 03/2004, the deliveries of Konkurs-M were delayed by a few years. The consumption of material in acceptance tests was also more than expected, besides increase in cost due to time

[♥] ***The loss is as estimated by BDL in February 2013.***

overrun. MoD's reply is an admission of the failure of BDL to absorb the TOT to produce and supply the missiles as planned, which had resulted in loss of ₹283.72 crore in the supply of 14,722 missiles till January 2013 (excluding LD), besides an estimated likely loss of ₹297.25 crore in the committed supplies to be made to the Army against pending indents.

7.3.3.7 Additional import of Konkurs-M

We observed that MoD, in November 2012, concluded a contract with M/s Rosoboronexport for purchase of 10,000 Konkurs-M at a cost of ₹ 1223 crore for the Army on the ground that BDL had not been able to meet their contractual obligations due to problems in absorption of TOT. This indicates that the efforts of MoD to indigenize production of Konkurs-M missiles to avoid dependency on foreign suppliers was defeated despite buying technology at a cost of ₹249 crore from KBP under a contract concluded as early as in October 2002.

7.3.3.8 Absence of monitoring by the Board of Directors/MoD

As per the DPE guidelines (2003), the Government Director has a dual role, i.e. as a Director of the Company and also as a representative of the Government. Even though BDL has a Government nominated Director/Directors on its Board, the delay in implementation of the contract due to various technical problems and consequent delays in supplies were not seen and deliberated upon by the Government nominee.

On a review of agenda and minutes of the Board meeting, we observed that there was no specific agenda item related to monitoring of this major project. The Board did not question the slow progress of work relating to the project as evidenced from the fact that during the period December 2002 to March 2011, 49 Board meetings were held and specific issues relating to integration and delays in supplies were not discussed. Further, during 2011-12 although eight Board meetings were held, only one Board meeting mentioned an agenda item relating to procurement of capital items for Konkurs-M. Thus the Board in spite of a Government nominee/nominees, was found to be ineffective in monitoring the implementation of the contract.

MoD stated (January 2013) that the Board had been regularly monitoring the indigenization programme and technical reliability issue of Konkurs-M. The reply is not acceptable as the agenda and minutes of the Board meetings did not provide any evidence of the fact that the issue was discussed, indicating weakness of corporate governance. Review/monitoring by the Board and also assistance/guidance from MoD for timely implementation of the contract was not on record.

Conclusion

Absence of technical support for integration due to deficiencies in TOT contract and consequential problems in absorption of technology, coupled with delay in production/supply of the missiles has led to a loss of ₹323 crore (including LD) till January 2013, besides an expected loss of ₹297.25 crore in the committed supplies to be made to the Army against pending indents. Failure of BDL to supply the missiles indented by the Army, resulted in conclusion of a contract for import of 10,000 missiles at a cost of ₹ 1223 crore, defeating the very objective of avoiding dependence on foreign supplier for this ammunition. Further, the delay in supply

created a capability gap in the Army to fight tanks fitted with ERA panels, thereby impacting the Army's operational preparedness.

Bharat Electronics Limited

7.4 Signing of a contract with a firm of doubtful integrity

BEL entered into a contract for procurement with a foreign vendor despite the fact that the CBI was investigating the firm's deals for alleged corrupt practices in earlier contracts which had a risk of the firm being blacklisted. As the firm was eventually blacklisted, this led to blocking of BEL's funds of ₹ 502.31 crore.

Bharat Electronics Limited (BEL) concluded (December 2009 and March 2010) contracts with M/s Rheinmetall Air Defence, AG, Zurich (RAD) for purchase of one set each of Technical Data Package (TDP) and Manufacturing Data Package (MDP) at CHF 91,036,880 (equivalent to ₹422.32 crore[1]) and CHF 39,643,679 (equivalent to ₹180.34 crore[2]) to manufacture, assemble, integrate, test, support and sell in India the new technology and upgrade the existing systems for gun fire control.

Under the above contracts, individual purchase orders were to be placed by BEL on RAD as and when requirements arose. Placing of purchase order requires the approval of the Procurement Sub-committee of BEL's Board. When the proposal for placing purchase order of the said systems was put up before the Procurement Sub-Committee (30 July 2010), the Joint Secretary (Electronic System-ES) of the Department of Defence Production (DDP), Ministry of Defence (MoD), informed the Sub- Committee that procurement from the firm would need clearance of the MoD since procurements from the firm were under examination by the Ministry. The Chairman and Managing Director of BEL also agreed to the same. This was followed up (3 August 2010) with a written communication from the Ministry in which it was stated that the Central Bureau of Investigation (CBI) had recommended blacklisting of RAD and the matter was under MoD's examination and (hence) procurement needed its (MoD's) clearance. The Sub-Committee cleared the proposal subject to MoD's clearance. However, when BEL sought (16 August 2010) MoD's advice on whether it could go ahead with the procurement since no instructions had been received regarding any ban on RAD, the Joint Secretary informed BEL (6 September 2010) that it was not legally valid to blacklist a company in anticipation of actual blacklisting. He, therefore, advised BEL to take a decision as deemed appropriate.

Thereafter, after obtaining approval (22 September 2010) of the Chairman and Managing Director (CMD) BEL placed two purchase orders (22 September 2010) on RAD for CHF 93,652,880 (₹ 434.45 crore) and also paid interest free advance of CHF 14,047,932 (₹ 65.17 crore) on the same day. BEL placed two more purchase orders for CHF 26,818,368 (₹ 122 crore) on 20 October 2010. Subsequently, the Board in its meeting on 29 October 2010 granted post-facto approval for placing the purchase orders and release of the advance. The remaining payments were to be made by irrevocable Letters of Credit (LC). Both the advances and LCs were covered by Bank Guarantees (BG) for 110 *per cent* encashable in case of non-supply.

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[1] ***At the Exchange rate of ₹46.39 per CHF as on 17 September 2010***

[2] ***At the Exchange rate of ₹45.49 per CHF as on 29 October 2010***

In April 2012, when supplies against purchases ordered were still under way, MoD (Vigilance) informed BEL of its decision to debar RAD from further business dealings with all its (MoD's) wings for a period of 10 years in view of filing of charge sheet in a case related to illegal gratification and imposition of penalties against RAD and requested strict compliance. Considering the progress of manufacture as also financial implications[1] if the company was to stop further interactions with RAD, BEL requested MoD (17 April 2012) for continuance of technical assistance and supplies from RAD for all ongoing contracts. However, MoD, after consultations with the Ministry of Law, advised BEL (2 July 2012) to terminate all the existing contracts with RAD and to take all possible measures to recover the entire amount paid in consultation with the legal advisers.

After consulting legal advisers, BEL intimated (28 August 2012) RAD about the intention to cancel the contract. RAD initiated (August/September 2012) legal proceedings against BEL which were pending adjudication as of November 2012.

We observed the following irregularities in signing and partial execution of the above contracts:

- MoD had frozen business with RAD after it was named by the CBI in a case of allegation of kickbacks received from RAD by a former Director General Ordnance Factories (DGOF) in May 2009[2]. Therefore, the Joint Secretary's communication of September 2010 allowing BEL to take action regarding procurement from RAD as deemed appropriate was inappropriate. Further, BEL's decision to enter into a contract with RAD was also against the interest of the Company;
- According to BEL's Delegation of Powers, placing purchase orders for above ₹ 30 crore and payment of any interest free advance requires approval of the Board. However, BEL placed purchase orders in September/October 2010 for a total of ₹ 556.45 crore and also made payment of interest free advance of ₹65.17 crore, even before obtaining the approval of the Board;
- Though the procurement decisions were placed before the Board on 29 October 2010, the subject was not listed in the Agenda and was taken up as an unlisted item. Hence the background papers were not circulated among the Directors before the Board met on 29 October 2010. Further, none of the two Government nominee Directors, including the Joint Secretary (ES), and two Permanent Special Invitees was present at that meeting. In their absence, the post-facto approval of the Board for the procurements without the approval of MoD was questionable since procurement from the firm was under examination of the MoD;

[1] *Large value of unusable items, large part of stage payments drawn from customer becoming non-refundable, BGs not en-cashable, likely demand for non-recurring engineering costs due on proving first of the systems, and delay in supply of new systems after development of alternate technology partner, etc.*

[2] *Comment on the issues relating to the purchases following the registration of a case by the CBI had against the former DGOF had been made in Report No 15 of 2010-11 of the Comptroller and Auditor General of India*

- The Central Vigilance Commission had directed (December 2007) all the Public Sector Undertakings (PSUs) to ensure inclusion of suitable Integrity Pacts (IP) in their contracts. Only those vendors/bidders who have entered into such an IP with the buyer would be competent to participate in the bidding. The Defence Procurement Procedure (DPP) 2008 also envisaged the signing of Integrity Pact at the time of submission of tender, a binding agreement between the agency and the bidder for specific contracts in which the purchasing agency agrees that it will not accept bribes during the procurement process and the bidders also agree that they will not offer bribes. At the time of signing of contracts with RAD in December 2009 and March 2010, BEL was yet to adopt IP;

- Though BEL adopted IP for the orders/contracts of value of ₹ 20 crore and above from July 2010, IP with RAD was signed only in October 2010. This Pact required an undertaking from the bidder committing itself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities at any stage. While the format of the IP prescribed in DPP covered all contracts with the Government[1], the pact signed by BEL with RAD made the commitment applicable to only contracts with the Principal (i.e., BEL). On account of this modification[2], BEL was deprived of the advantage of termination of the contract in cases of breaches by RAD of contracts with Government Departments without any liability to itself;

- BEL also extended (March 2011) concession in payment terms by allowing change of irrevocable Letter of Credit (LC) on 'simple invoice and proof of delivery' to LC on 'simple invoice with maturity date of 11 months from invoice date for payment', thus eliminating the proof of delivery clause. By this amendment, BEL accepted RAD's request to enable it to raise funds for project implementation, which in effect amounted to making advance payment as it was de-linked from actual delivery. Moreover, BEL's credit limit came down by ₹ 63.47 crore being the amount of LC opened for RAD which was outstanding even as of November 2012. Further, BEL also conceded (September 2011) the request of RAD for amendment of delivery schedule without Liquidated Damages.

- BEL was unable to encash BGs as the situation of non-supply had not arisen, and BGs were not linked to violation of IP. Being irrevocable, even LCs could not be cancelled unilaterally. As the initial systems were still under integration and evaluation, most of the materials and documents received against the purchase orders became unusable. Hence, BEL's funds of ₹502.31[3] crore had been blocked for indefinite period. Further, it also could not cancel the purchase orders for the outstanding supplies against RAD (November 2012).

[1] *The Bidder further undertakes that he has not given offered or promised...... or having done any act in relation to the obtaining or execution of the contract or any other contract ...... to any person in relation of the contract or any other contract with the Government.*

[2] *The Bidder further undertakes that he has not given offered or promised........... or having done any act in relation to the obtaining or execution of the contract or any other contract with the Principal.............. to any person in relation of the contract or any other contract with the Principal's organisation.*

[3] *BEL held (November 2012) inventory of ₹ 347.84 crore, outstanding Advances of ₹ 91 crore and irrevocable Letters of Credit (LC) for ₹ 63.47 crore with RAD*

Management stated (January 2013) that it had followed all the required procedures, exercised all commercial prudence and obtained necessary approvals keeping in view the time criticality of the project. It further added that it had taken all precautions and safeguards and obtained necessary approvals of the Board and the Government.

The above audit observations disprove the claim of the management. Further, MoD itself had sought (July 2012) explanation from CMD for not safeguarding the financial interests in view of the blacklisting of RAD recommended earlier.

The signing of the contract with a firm, the credibility of which was under examination for alleged corrupt practices and placing purchase orders committing heavy liability was hasty and without adequate assessment of the associated risks. This resulted in blocking of Company funds of ₹ 502.31crore for an indefinite period.

The case was reported to the Ministry in January 2013; their reply was awaited (March 2013).

7.5 Undue benefit to a foreign vendor

BEL showed undue favour to a foreign vendor by not claiming the reimbursement of ₹ 21.08 crore, being 80 *per cent* of customs duty, which the foreign supplier had offered to bear and instead recovered the entire amount from BSF.

The Director General (DG), Border Security Force (BSF) requested (September 2009) Bharat Electronics Limited (BEL) to quote for supply of 6000 Passive Night Vision Weapon Sights (PNVWS) (model PR 1614F) manufactured by M/s Prizmatech, Israel (PT). BSF had accepted the model for induction as this was the only one that fulfilled all the parameters of qualitative requirements, during trial evaluation by the Ministry of Home Affairs. Accordingly, BEL obtained quotation from PT and accepted the negotiated rate of USD 5960 for supply of 3000 fully finished and USD 5810 for supply of 3000 semi knocked down PNVWS. During negotiations (October 2009), PT agreed to bear 80 *per cent* of the Customs Duty (CD) if the purchase orders were placed at negotiated unit rates. BEL, in turn, quoted (October 2009) unit price of ₹ 3,58,537 inclusive of CD but excluding other statutory levies for supply to BSF since BSF had reimbursed CD only on actual basis against proof of payment. DG requested (October 2009) BEL to give the breakup of the price showing the basic price and CD thereon. BEL submitted (November 2009) a revised offer quoting unit price of ₹ 3,29,216 excluding CD. During negotiations (November 2009) BEL revised the unit price to ₹ 3,08,000 excluding CD, which was to be reimbursed on actual basis. BSF revised the quantity to 8109 PNVWS and called for a fresh tender from BEL since there was an upward revision of the quantity. BEL quoted the same basic price (₹ 3,08,000 plus CD). BSF accepted the quote and placed (June 2010) a purchase order for 6000 PNVWS. In July 2010, BSF invited offer from BEL for supply of the remaining quantity of 2109 PNVWS for which BEL offered (October 2010) a discounted rate of ₹ 3,06,500. Accepting this offer, BSF placed (December 2010) an order for the said quantity for supply. BEL supplied the entire quantity by July 2012 and was reimbursed ₹ 26.35 crore paid as CD from BSF.

We noticed in audit (November 2012) that BEL did not ask PT to pay 80 *per cent* of actual CD paid, i.e., ₹ 21.08 crore, although PT had agreed to bear the same. This has resulted in extending an undue benefit to PT, while depriving BSF of the same.

Management stated (January 2013) that the commitment from PT was considered by BEL only as an option for mitigating the business risk in case CD was not reimbursed by BSF and substantial reduction in price had been passed on to the customer.

Management's contention is not acceptable as PT had agreed (October 2009) to bear 80 *per cent* of the CD if the Purchase Orders were placed at negotiated unit prices and the orders on PT were placed at the negotiated prices.

Thus, BEL extended an undue favour to a foreign vendor (PT) and deprived the benefit (₹ 21.08 crore) to its Indian customer (BSF).

The case was reported to the Ministry in January 2013; their reply was awaited (March 2013).

Bharat Electronics Limited and Mazagon Dock Limited

7.6 Excess payment of Performance Related Pay

Inclusion of interest income in the profit for calculation of Performance Related Pay (PRP), in violation of Department of Public Enterprises (DPE) guidelines, resulted in excess payment/ liability of ₹ 49.29 crore towards PRP.

The Department of Public Enterprises (DPE), Ministry of Heavy Industries and Public Enterprises approved (November 2008) payment of a Performance Related Pay (PRP) for each year from January 2007 for Board level and below Board level executives and non-unionised supervisors in the Central Public Sector Enterprises (CPSE). The quantum of PRP was to be directly linked to the profits of the CPSE for the year, the incremental profit over the previous year, and the performance of the executives. For this purpose, each CPSE was required to constitute a Remuneration Committee headed by an Independent Director to decide the annual bonus/variable pay pool and policy for its distribution across the executives, etc. within the prescribed limits. Further, while in the clarification by DPE on the elements of Profit Before Tax (PBT) for computation of PRP, DPE stated (November 2010) that profit of CPSEs is expected to come out from their specified objectives and through normal business core activities and that extraordinary items like valuation of stock, grants, waiver by Government, sale of land, etc (list of items is not exhaustive) will not be included in the calculation of PBT.

Mention has been made in Paragraph 7.2 of Report No.8 of 2012-13 of the Comptroller and Auditor General of India about excess payment of PRP in Hindustan Aeronautics Limited due to the inclusion of interest income in the profit for computation of PRP.

The Board of Directors of Bharat Electronics Limited (BEL) approved (June 2010) the distribution formula of PRP for implementation from 2007-08 and Mazagon Dock Limited (MDL) approved (October 2010) similar payment from 2009-10.

We observed that for the purpose of the calculation of PRP, both the Companies considered the PBT as shown in their certified annual accounts which *inter alia* included interest income on short term deposit of funds received mainly as advances from the Ministry of Defence. This resulted in adoption of a higher base for deciding the quantum of entitlement of PRP. We further observed that in spite of the DPE clarification received after approval of the formula, the Companies did not review their policy of inclusion of such extraordinary income in their PBT and instead paid the PRP as computed by them.

The adoption of a higher base for deciding the quantum of entitlement of PRP resulted in excess payment of PRP by BEL and MDL. As against ₹ 98.82 crore, BEL paid ₹ 122.28 crore (for the years 2007-08 to 2010-11) resulting in excess payment of ₹ 23.46 crore. As aginst ₹ 12.35 crore, MDL paid ₹ 16.90 crore (for 2009-10 to 2010-11) resulting in excess payment of ₹ 4.55 crore. For payment of PRP for the year 2011-12, BEL and MDL had made a provision of ₹ 25.68 crore and ₹ 12.94 crore respectively. The payments were yet to be made as of February 2013. The provision so made has an extra element of ₹ 13.54 crore and ₹ 7.74 crore due to the inclusion of the interest income, in BEL and MDL respectively. Thus the extra payment/commitment on account of improper computation of PRP aggregated to ₹ 49.29 crore.

BEL stated (October 2012) that:

- as per methodology specified for calculation of PRP, the PBT as per audited accounts is to be the basis for calculation of ceiling for PRP and no further segregation was required;
- interest income and dividend income are a part of normal business activity and could not be treated as extraordinary items;
- customer advances form only a part of the corpus of short term deposits; and
- interest earned on customer advance is part of the normal business operations since in absence of advance receipt, an equivalent (if not higher) amount would have been added to the selling price.

MDL stated (October 2012) that:

- Department of Defence Production (DDP) had sought (July 2012) information regarding the issue of idle cash balances and distribution of PRP in Defence CPSEs to which the company replied (August 2012) that considering the long gestation periods of the ship building contracts, the milestone payments received by the company were only during the initial periods of ship building and as such the company would be incurring negative cash flows during the later part of execution of the contract and ultimately would be left with a margin of 7.5 *per cent* of the contract price only; and
- The Remuneration Committee constituted in October 2012 also opined that management of funds was also one of the core activities.

The reply of BEL and MDL is not acceptable since in the past, BEL had not taken into consideration the interest income for computation of profits for payment of Executive Performance Incentive Scheme, and MDL had not considered it for computation of Annual Performance Linked Incentive Scheme. The inadmissibility of PRP on the element of profit accrued from the interest income is also clear from the clarifications given by the DPE in November 2010 that profit of CPSEs is expected to come out from their specified objectives and core activities. Investment of surplus funds on advances received from defence customers is an incidental activity and not a core activity. Income so earned should not have been considered for computation of PRP. Hence, the decision of the Companies to include the interest income in the PBT for calculation of PRP without receipt of final orders of MoD was improper.

The case was reported to the Ministry in November 2012; their reply was awaited (March 2013).

Hindustan Aeronautics Limited

7.7 Delay in development and production of Shakti engine for Advanced Light Helicopter

7.7.1 Introduction

The induction of 40 Advanced Light Helicopters (ALH) valuing ₹1747 crore supplied by Hindustan Aeronautics Limited (HAL), in the Indian Army despite technological gaps, was commented upon in Report No. CA 17 of 2008-09 (paragraph 2.1) of the Comptroller and Auditor General of India. The shortcomings in the ALH were because of the limitation of their engines (B2). HAL had, therefore, undertaken development of a more powerful engine (Shakti) in collaboration with M/s Turbomeca, France (TM) to replace the existing B2 engines. The delay in induction of another 105 ALH, with the Shakti engines, for which the Army had concluded contracts with HAL in 2007 for supply at a cost of ₹ 9490.79 crore, was also commented upon in the Report. The results of a Performance Audit on production and supply of ALH by HAL had been subsequently included in Chapter III of the Report No 10 of 2010-11 of the Comptroller and Auditor General of India. As reported therein, delay in development of Shakti engine for ALH was one of the causes for delay in the supply of ALH.

Further examination of the project of development and production of Shakti engines was conducted during the audit in November-December 2011 to ascertain causes for the delay. The results thereof are discussed in the succeeding paragraphs.

7.7.2 Salient features of the project

HAL signed (August 2000) a Memorandum of Understanding (MOU) with Turbomeca, France (TM) for co-development of high power engine named Ardiden/Shakti[1]. Following the signing of the MOU, HAL signed (January 2003), a Co-operation Agreement (agreement), with TM at a cost of ₹878.08[2] crore for co-development and indigenous production of 320 Shakti engines in five phases (0 to 4) by 2013. Even though the MOU had envisaged a work share of 19 *per cent* for HAL, in the agreement HAL's share was reduced to 11 *per cent.* The agreement also envisaged achievement of the stipulated work share of 11 *per cent* by progressively increasing from 16.7 *per cent* in phase 0 in 2009-10 to 73 *per cent* in phase 4[3]. The assembly kits for various phases were to be supplied by TM at the agreed prices subject to escalation (with 2002 as base year) valid up to the year of delivery. The Joint Airworthiness Authorities (JAA) certification of the co-developed engine was to be completed within 48 months starting from the date of design launch (January 2003).

The objectives of the agreement were as follows:

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[1] ***While Ardiden refers to turboshaft aero engine civil type certified by French Direction Generale de l'Aviation Civile, Shakti refers to turboshaft aero engine manufactured, assembled, tested and type certified in India by the Director General of Civil Aviation (DGCA) and Centre for Military Airworthiness and Certification (CEMILAC)***

[2] ***Technology transfer fee: ₹ 94.46 crore; Development: ₹ 29.06 crore; Capital: ₹ 69.66 crore; Test bed: ₹0.50 crore; DRE: ₹29.25; crore Material: ₹565.65 crore ; Labour: ₹ 89.50 crore.***

[3] ***Phase 1 – 18.85 per cent, Phase 2 – 37.00 per cent, Phase 3 – 46.00 per cent***

- TM would assist HAL in preparation of Shakti production programme, certification of the Shakti engine, supply and updating of technical documentation, technical assistance *in situ*, training at TM and technical assistance through correspondence;
- The profit estimated to accrue to HAL from the project was ₹ 55 crore; and
- Apart from exposure to modern designs and testing techniques, HAL expected added benefits of production of Engine Gear Box and other parts for sale by TM to European customers and offset orders to the extent of 30 *per cent* of the value of the kits during the validity period of the agreement subject to conditions to be mutually agreed with regard to price, delivery and quality.

7.7.3 Audit findings

The extent of achievement of the objectives and accrual of the benefits are discussed in the succeeding paragraphs.

7.7.3.1 Engine development

(a) Delay in initiation of the project

Pursuant to the MOU with TM, the Board sanctioned (January 2001) ₹ 49.56 crore towards HAL's share of 19 *per cent* which included provision for development of dual channel Full Authority Digital Engine Control (FADEC). Even after two years, HAL was not able to firm up the technical specifications for FADEC and therefore anticipated delays in development of the engine with consequential shortfall in delivery of ALH. As a result, in the agreement signed in January 2003, FADEC was deleted from HAL's work share* thereby reducing it to 11 *per cent*. Thus, due to the failure to finalise the FADEC specifications, the visualized objective of acquiring expertise in a critical component of the engine development programme was not achieved.

Management stated (December 2012) that the initial modules of the FADEC with limited qualification were to be made available much before the commencement of the project (December 2006). It added that the time estimated was insufficient and in order to avert cascading effect on timely execution of the project, FADEC development was not taken up.

The reply of the Management is not acceptable as HAL had failed to obtain the technical modules even after a lapse of more than two years, although it was aware of the requirement in August 2000 itself.

(b) Performance Improvement Pack

As part of the work share envisaged in the agreement, TM was to supply a high power engine meeting the specified requirements. However, the engine (Ardiden 1H) supplied (February 2007) by TM did not meet the operational requirements of cold/hot weather at high altitude. TM, therefore, offered (July 2007) to modify it to improve its performance. The offer included changes in High Pressure Turbine (HPT) and development of new software for FADEC, etc. which were entirely under the work share of TM. HAL accepted (October 2007) TM's proposal and signed (June 2008) a Memorandum of

* ***HAL's responsibility was confined to Oil pump, Oil cooling system (OCS), Filter assembly, Oil and air piping and brackets***

Agreement (MoA) with TM for a Performance Improvement Pack (PIP) on Ardiden 1H - Shakti engine entailing an additional liability of ₹ 9.96 crore even though it was entirely the work share of TM.

MoD, while according approval (October 2000) for co-development/production of Shakti (Ardiden 1H) engine had clearly indicated that no additional budgetary support or finance would be offered. Thus, acceptance of the additional development cost of PIP resulted in loss of ₹ 9.96 crore[1] to HAL.

Management stated (December 2012) that there was no additional expenditure beyond the scope of 11 *per cent*, as originally agreed.

The reply is not acceptable as the initial development cost of ₹ 49.56 crore was reduced to ₹ 29.06 crore by deleting FADEC from the work share of HAL. Taking into consideration share of the additional cost on PIP, the development cost increased to ₹39.02 crore (78 *per cent* of the original development cost) without corresponding increase in work share which has resulted in increased dependence on TM.

7.7.3.2 Engine production

(a) Delays in production

According to the tentative output plan included in the Project Report, 320 Shakti engines were to be manufactured in four phases. The phase-wise achievement was as under:

Phases	Tentative output plan as per Project Report			Actual output	
	Year	HAL's share (percentage)	Number of engines	Year	Number of engines
0*	2006-07	16.70	60	2006-07	0
1	2007-08	18.85	40	2007-08	0
2	2008-09	37.00	60	2008-09	0
3	2009-10	46.00	40	2009-10	0
4	2010-13	73.00	120	2010-11	60
-	-	-	-	2011-12	40

**** Supply of completely assembled and tested Ardiden 1H1 (Ardiden 1H including PIP) engines***

Thus, production was behind schedule with there being no output during the first four years.

Our scrutiny revealed the following:

➢ EASA[2] certification for the Ardiden 1H engine due by December 2006 was obtained only in December 2007. Since this did not meet HAL's specifications, TM carried out modifications and obtained EASA certification for the modified version (Ardiden 1H1) in March 2009. Thus, there was a delay of 27 months in EASA certification of engine alone. Further as the Ardiden 1H1 engines failed during the cold soak and start tests (March 2009), there was further delay in

[1] ***1.5 million Euro @₹66.405 per Euro as per the exchange rate prevailed on payment date 05.05.2009***
[2] ***EASA-European Aviation Safety Agency***

certification by the Indian authorities[♣], which was finally completed only in May 2010;

- Besides the delay in supply of engines by TM, the kits and assembly tools supplied by it were also not in conformity with the required drawings. In the course of production (December 2010 to September 2011) HAL/Indian certifying authorities observed deviation in respect of front reduction gear casings, OCS drive shaft failure, oil leakage due to supply of front casings without chamfer (all of which were part of HAL's work share) necessitating rework and resulting in delay in execution. Further, TM supplied many other parts with deviations/concessions. Though HAL took up the matter with TM, on the insistence of RCMA/DGAQA, the latter declined to share the reasons for such deviations/concessions contending that it was solely responsible for those parts and rectified them. Total dependency on TM for these parts resulted in further delay in development of the engine;
- Even though the agreement signed in early 2003 had fixed the planned phases for execution, HAL failed to assess the requirements of raw materials/bought out finished (BOF) items after taking into account its in-house capacity. As a result, HAL had to assign (July 2009) part of its work share to TM, and commenced procurement activity for remaining items of Phase-1 only in December 2010, against the planned schedule of 2006;
- The procurement processes for the next phases were also delayed. As against the scheduled commencement of procurement activity of April 2008, April 2009 and April 2011 for Phase-2, Phase-3 and Phase-4, respectively, the activity commenced in February 2011, June 2012 and October 2012. Thus, HAL could not execute its work share effectively;
- TM's non-adherence to the schedules committed in the agreement for production of engines had a cascading effect on the supply of ALH. On HAL's request (February 2009) MoD had agreed (March 2009) to extend delivery schedule of ALH to 2009-10 onwards (against the original schedule of 2008-09);
- HAL did not adhere even to the revised delivery schedule of ALH and the first batch of 22 helicopters was supplied in 2010-11, the next batch of 16 in 2011-12. For the delayed delivery made up to 2011-12, HAL had already suffered a loss of ₹ 62.36 crore on account of liquidated damages (LD);
- Despite the loss suffered by HAL on account of LD levied by MoD, it relieved TM of the latter's liability to pay LD for delayed supplies and also allowed the benefit compensating for price escalations; and
- Against the estimated profit of ₹ 55 crore from the contract for engines alone, there was already a loss of ₹ 62.36 crore in respect of 76 engines incorporated in 38 ALH delivered out of 159 (with 242 engines) due.

Management stated (December 2012) that (i) the engine failed to start after cold soak for reasons not attributable to deficiencies in engine; (ii) as per EASA Rules it is not mandatory for TM to provide minor concession data to customer and only major

[♣] ***RCMA – Regional Centre for Military Airworthiness***
DGAQA – Director General of Aeronautical Quality Assurance

concession sheets were being provided along with bill of material; (iii) there was no re-assignment of work share and procurement started in 2009 itself after EASA certification; (iv) delay in execution of the project was attributable to changes in the design due to operational requirement of the defence forces; and (v) as regards the recovery of LD, the issue of amendment to the contract had been taken up with the customer.

The reply is not acceptable as (i) cold soak test results (March 2009) indicated that the engines start was aborted due to failure of Display Mission Computer which was rectified after resetting the FADEC which forms part of engine; (ii) by not sharing the details of the concessions, TM establishes its control on the execution of the HAL's work share; (iii) HAL failed to assess the procurement requirements and assigned the procurement to TM, citing delay in obtaining quotes for small quantities under its scope of work; (iv) frequent design changes evidences overdependence on TM as well not freezing the design even when the operational requirement of Shakti engine was already known before signing the MoU; and (v) MoD has categorically stated (March 2009) that the LD clause would be applicable for any further changes even if delay in Shakti engine was not attributable to HAL.

(b) Recovery of price for engine supplied in Phases-1 and 2

The prices indicated in the agreement (January 2003) were at base year 2002 and subject to escalation up to the year of delivery in accordance with the formula provided therein. On TM's request (July 2007) for the reason that some of the cost indices included in the said price variation formula had become obsolete with French Government discontinuing their publication, HAL signed (June 2008) a MoA incorporating a revised escalation formula with base year as 2006. Though HAL had emphasized during the negotiations (October 2007) that the change of formula should not have additional financial implication, this had adversely impacted HAL's financial interests as brought out below.

With the receipt (December 2007) of orders from MoD for supply of 159 ALH fitted with Shakti engines to be supplied from 2008-09 to 2012-16, the number of engines required rose from 320 ordered earlier to 411 (318 engines for 159 ALH, 86 engines as part of Manufacturer's Recommended List of Spares and seven engines to cater to contingencies such as type test, prove out, trial and rejections). HAL placed order on TM in August 2009 for purchase of additional 90 engine kits and 75 raw material kits for Phases-1 and 2 according to the revised price escalation of June 2008. This led to an additional burden of ₹ 33.77 crore on HAL since the contract with MoD was at the rates as agreed in the pre-revised formula. The details are as given in the table below:

(₹ in crore)

Particulars	Procurement cost at revised prices	Price quoted in the contract with MoD	Under-recovery
Engine kit (Phase 1) (15 kits)	47.43	42.48	4.95
Engine kit (Phase 2) (75 kits)	187.47	168.81	18.66
Raw Material kit (Phase 2) (75 kits)	54.12	47.55	6.57
Gear Box kit (60 kits)	20.04	16.45	3.59
Total	**309.06**	**275.29**	**33.77**

Since another 221[1] engines and 216 gear boxes are required for meeting the requirement of the 159 ALH contract, there would be further under-recovery of ₹ 88.10[2] crore (approx), leading to an overall under-recovery of ₹ 121.87 crore, attributable to the acceptance of the revised pricing formula in June 2008.

Further, since the agreement of January 2003 had frozen the escalation formula for 320 or more engines and delay in supplies was wholly attributable to TM, any payment over and above the agreed prices was not justified and resulted in undue benefit to the supplier and loss to HAL. Moreover, the agreement to revisit the escalation formula beyond 2012 would lead to further erosion of profit on engines.

Management stated (December 2012) that considering the life cycle cost of total Shakti engine, the expenditure would be recouped by substantial reduction in in-house manufacturing cost through outsourcing.

The reply is not acceptable since the reasons given by HAL for substantial reduction is hypothetical at this stage.

(c) Availing of additional technical assistance

The agreement (2003) provided for 300 working days of free technical assistance by TM in India to assist HAL to produce, test, use and support the Shakti engine during a period of 10 years from the date of certification. Cost for additional technical assistance, if required, was fixed on the basis of 10,000 Euros per man week for a period up to seven days and at 9,000 Euros per man week beyond seven days, on pro-rata basis.

In the quotation submitted to MoD, HAL had failed to factor in the possible requirement of additional technical assistance. Since HAL had used 264 days (88 *per cent*) of the training by March 2009, i.e., prior to certification and design freeze of the engine and the remaining 36 days between April and December 2009, HAL requested TM for provision of additional 84 man weeks. Although the rate of 10,000 or 9,000 Euros fixed in the agreement was firm with no provision for escalation, TM demanded (June 2009) 11,178 Euros per man week (24.2 *per cent* escalation on 9,000 Euros) i.e., 938,952 Euros for 84 man weeks. However, after negotiations, HAL accepted (April 2010) an additional payment of 917,859.6 Euros (₹ 6.15 crore) besides adjustment of 182,952 Euros against the offset obligation of TM, which was not permissible.

Thus, failure of HAL to utilise the free technical assistance towards the specified activity, resulted in additional expenditure of ₹ 6.15 crore, which was avoidable. Besides, by not factoring the possibility of requirement additional technical assistance HAL had to incur additional cost.

Management stated (December 2012) that the exact requirement of training man days could not be envisaged at the time of preparation of Detailed Project Report (DPR). It further stated that off-set credit of 182,952 Euros was not afforded in favour of TM.

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[1] ***221=411 - 190 (i.e. 60 (direct supply by TM of Phase 0) + 40 (already procured for Phase 1) + 90 (present procurement proposal for Phase 1 and 2)***

[2] ***Under recovery of ₹30.18 crore (₹4.95 crore+₹18.66 crore+₹6.57 crore) for 90 engine kits (Phase 1 and 2); per kit ₹0.34 crore (₹30.18 crore /90); for 221 engines ₹75.14 crore (₹0.34 crore x 221)***
Under recovery for 60 gear box was ₹3.59 crore; per gear box ₹0.06 crore (₹3.59 crore/60); for 216 gear boxes ₹12.96 crore (₹0.06 crorex216)

The reply is not acceptable as the 300 working days of free technical assistance was agreed by HAL in 2003 and no additional requirement was foreseen as evidenced from non-incorporation of this requirement in the quotation submitted to MoD.

(d) Offset obligation not served by TM

The agreement (2003) obligated TM to achieve a level of offset in favour of HAL equal to 30 *per cent* of the value of the kits ordered during its validity period. Accordingly, with reference to orders for 219.44 million Euros placed by HAL as on 15.11.2011, offset obligation for 65.83 million Euros had accrued on TM. Against this, export orders for 0.26 million Euros (0.39 *per cent*) only had been received. There was an unadjusted offset obligation of ₹ 439.21[1] crore.

Management stated (December 2012) that TM had proposed (November 2011) a ramp up plan of export workshop and also proposed high value package to achieve the offset obligation of 4 million USD per annum by 2015.

Reply is not convincing as these orders have not materialized and the offset obligation for ₹ 439.21 crore agreed to by TM remains unfulfilled.

(e) Procurement of additional technical know how

According to the agreement (2003), TM was to transfer technology and know-how to HAL including supply and up-dating of technical documentation, technical assistance on site, through correspondence and training at TM at a cost of ₹ 94.46 crore (including taxes).

We observed that HAL had failed to utilise the documentation for manufacture of certain masters and purchased (May 2009 to June 2010) various items (masters and tools) at a total cost of ₹ 3.93[2] crore from TM for which the technology had already been procured.

Management stated (December 2012) that (i) since the design was not frozen at DPR stage, the requirement of masters/gauges was not analysed; (ii) manufacturing of masters was not envisaged; (iii) for Phase-1 manufacturing master/gauges loaned by TM were utilised. However, for remaining phases the same were purchased.

The reply is not acceptable since, apart from ToT for technical know-how, documentation and technical assistance, masters were also received on loan basis to facilitate indigenous manufacture of the tools during Phase-1. HAL could not assimilate the technology within the loan period. Moreover, the scope of technology transfer did not include 'excluded items' as defined in the agreement of January 2003. Our scrutiny revealed that the items which were separately purchased were already covered under the agreement for ToT. The purchase was therefore irregular and resulted in additional burden of ₹ 3.93 crore.

(f) Failure of Oil Cooling System shafts

During August 2011, the oil cooling system (OCS) shafts in both the engines of one ALH supplied to the Indian Air Force in Phase 0 failed due to fracture/ twist of the shear neck of the shafts. Subsequently, all the helicopters supplied in Phase 0 to MoD were grounded. RCMA, therefore, directed HAL to ask TM for replacement of all OCS shafts of engines supplied in Phase 0 with improved manufacturing and quality standards. TM

[1] ***65.83 Million Euros – 0.26 Million Euros =65.57 Million Euros @ ₹67 per Euro as exchange rate***
[2] ***Total value of purchase orders- ₹1.56+0.96+0.73+0.68 =₹3.93crore***

started replacement from October 2011 which lasted till February 2012. Similar incident had occurred while the endurance test runs were held (January 2011) for the Phase-1 engine and no conclusive cause for the failure had been established so far (September 2012).

Management stated (December 2012) that after the failure of OCS Shaft, TM had suggested to avoid nitriding[1] operation layer on the failure zone of the shaft and accordingly HAL had already implemented the suggested process since June 2009. Management further stated that OCS shafts supplied by TM for Phase 0 were replaced by TM without additional cost.

The reply is not acceptable since even though the suggested process was stated to have been implemented since June 2009, failures in OCS were observed during January 2011 in Phase-1 engines also. These would show that the quality parameters have not been rigidly adhered to.

Conclusion

Even after more than a decade, the self-reliance in manufacture of an engine to suit requirements of ALH has not been achieved as envisaged. The need for variants of engines to operate at different climatic conditions and altitude was not foreseen leading to frequent modifications requiring more investment in terms of time and money. HAL had to bear additional burden due to the failure of TM, indicating undue favours extended to the foreign partner in the development and production of Shakti engines. Failure to ensure compliance to offset obligation by the foreign collaborator has so far denied an opportunity to the Indian industry to contribute towards self-reliance. Acquisition of additional technical know-how without optimal usage of free technical assistance has further contributed to extra cost on the project.

Thus, inability of HAL to absorb the technology and non-assessment of the available in-house capacity to manufacture Shakti engines impacted timely induction of ALH into Defence forces and also resulted in avoidable extra expenditure of ₹ 204.27[2] crore to HAL.

The case was reported to the Ministry in December 2012; their reply was awaited (March 2013).

7.8 Execution of Intermediate Jet Trainer Project

7.8.1 Introduction

Flight training in the Indian Air Force (IAF) is structured in three stages viz., Stage–I Basic, Stage-II Intermediate and Stage-III Advanced. Based on the need projected by Air Headquarters (Air HQ) for induction of an Intermediate Jet Trainer (IJT) during 2004, the Ministry of Defence (MoD) sanctioned in July 1999 design and development of an IJT (HJT-36[3]) by Hindustan Aeronautics Limited (HAL) at a cost of ₹180 crore to be

[1] ***A heat treating process that diffuses nitrogen into the surface of a metal to create a case hardened surface***

[2] ***₹9.96 crore+₹6.15 crore+₹3.93 crore+₹62.36 crore+₹121.87 crore***

[3] ***HJT -36 (Hindustan Jet Trainer) is the name of the Intermediate Jet Trainer designed & developed by HAL.***

completed in 60 months (July 2004). The delay in manufacture and supply of IJT to IAF and its ramifications were mentioned in Paragraph 2.4 of the Report No.CA 18 of 2008-09 of the Comptroller and Auditor General of India. In order to assess the causes for the delay in meeting the timely requirements of IAF, we conducted an audit of the design and development aspects covering development of prototype aircraft and concurrent handling of limited series production (LSP) and series production (SP) in HAL. Our findings are narrated in this Thematic Audit Paragraph.

The development was being carried out at HAL's Aircraft Research and Development Centre (ARDC) headed by a General Manager. The progress of the project was being monitored, by the Board of Directors of HAL, and by an IJT Steering Committee* set up (October 1999) by MoD. Even so, the project slipped the target of July 2004 by nearly a decade and the target for completion was reset as December 2013 by HAL, for which MOD's approval is still awaited (March 2013).

7.8.2 Physical progress

7.8.2.1 Development phase

The physical progress achieved towards project milestones in respect of development stage was as under:

Event/Milestone	Date by which to be achieved	Actual date of achievement of milestone	Additional information
First flight of prototype 1 (PT-1) (with Larzac 04H20 engine)	October 2002	March 2003	Though the process for purchase of engines was initiated in December 1998, order was placed only in December 2000 and one mockup engine was received in September 2001 and roll out of the PT-1 in December 2002, first flight scheduled for October 2002 was achieved in March 2003.
First flight of PT-2 (with Larzac 04H20 engine)	April 2003	March 2004	Engine for PT-2 was received in December 2002 against the scheduled date of January 2003; roll out was in November 2003 and first flight in March 2004.
Completion of 350 flights of PT-1 and PT-2	2006-07	February 2007	PT-1 met with accident due to failure of canopy locking system during Aero India 2007. PT-2 also met with accident in February 2009 due to failure of landing gear during a practice show for Aero India 2009. The Division continued to fly the PT2 aircraft with Larzac engine till December 2009.
Qualification testing/ acceptance testing of AL-55I engine	November 2006	December 2006 December	With engine's life of 100 hours After extension of engine's life to 300

* *Under the chairmanship of Secretary (Defence Production & Supplies) with Financial Adviser (Defence Services), Assistant Chief of Air Staff (ACAS)-Plans, Directorate General of Aeronautical Quality Assurance (DGAQA), and representatives of HAL, etc. as members.*

		2008	hours
Certification of AL-55I engine by RCMA[1]	January 2007	March 2012	Engine was received in January 2009
Integration of PT-1 with AL-55I engine		February 2009	Fitted on retrieved PT-1
Integration of PT-2 with AL-55I engine		August 2010	Fitted on retrieved PT-2
Completion of flight tests of AL 55I engine	June 2007	February 2010	PT 1 met with accident in April 2011; flight tests continued with PT-2 from February 2012
Receipt of Initial Operational Clearance (IOC)	March 2007	IOC not yet obtained (February 2013)	Though target date for IOC was revised to June 2012, ARDC was to project a realistic date for achieving IOC after matching test points with rate of generation of flights. HAL has proposed December 2013 for IOC in the Draft Cabinet Committee on Security note submitted to MoD during September 2012.

The above table indicates that none of the milestones, except the completion of 350 PT flights with Larzac engines, had been met within the stipulated timelines. Even though 350 flights had been completed in February 2007, the accidents on PT-1 & PT-2 caused a set back to the programme. PT-1 aircraft met with an accident (February 2007) wherein it suffered major damage to the wings, empennage, landing gears etc., This resulted in discontinuance of all flights test activities planned on PT-1. Apart from these, failure of the Structural Test Specimen (STS) and CAT-1 accident on PT-1 in April 2011 led to further modification for strengthening the structure of the Aircrafts which also contributed to further delay in achieving of IOC. The project completion period had been extended from July 2004 (60 months) to March 2007 (104 months) and HAL's requests for further extension to December 2011 (149 months) and to June 2012 (155 months) were pending with MoD. HAL's proposal for revised dates of IOC/FOC[2] as December 2013 made in September 2012 was also pending with MoD.

Regarding the delays, Management (HAL) stated (December 2012) that:

- due to various unanticipated factors, incidents/accidents which not only required major design changes but also interrupted the flight testing for long durations, the earlier envisaged dates for certification could not be met;
- in this type of development activities it is anticipated that there would be additions/ specification changes which are to be incorporated in the Standard of Preparation (SOP);
- it was impossible to envisage all the activities with definite timelines in a design and development environment and the problems need to be addressed and alternatives have to be evaluated to find solution to the problems during the design and development implementation; and

[1] ***RCMA- Regional Centre for Military Airworthiness***
[2] ***IOC-Initial Operation Clearance and FOC –Final Operation Clearance by RCMA.***

- taking into account the modifications/design changes as an outcome of the Board of Inquiry into PT-1 accident and pending tasks, the timeline for certification was revised to December 2013 and the proposal forwarded to MoD for approval.

By keeping the development stage open and by not freezing the design, HAL had to accommodate the increasing demands of the customer for incorporation of latest and additional requirements which led to delay in induction of aircraft into IAF for training requirements.

7.8.2.2 Concurrent production

Though the design/development was still in progress, in March 2006, MoD concluded a contract with HAL for concurrent production and supply of 12 IJT aircraft under limited series production (LSP) at a cost of ₹486.81 crore. In March 2010, MoD concluded another contract with HAL for supply of 73 IJT aircraft under series production (SP) at a cost of ₹6180 crore. While the delivery schedule of 2008-2010 for LSP fixed with reference to IOC date of March 2007 was revised (March 2009) to 2009-2011, the delivery schedule of 2012-2017 for SP fixed with reference to IOC target of June 2010 for LSP was yet to be revised. The first flight in respect of LSP-1 and 2 was completed (January 2010 and March 2011) and the remaining LSP aircraft were in the production process as of December 2012. Since IOC for prototype itself had not been obtained, IOC dates for LSP and SP have already been delayed and no single aircraft scheduled for delivery under LSP or SP had been handed over to the IAF (December 2012).

Management while admitting the audit observation stated (December 2012) that on achievement of IOC/FOC, a realistic schedule of delivery would be firmed up and proposal for contract amendment submitted to MoD.

Taking up LSP/SP of IJT even while the prototypes were being flight tested was premature as large number of design problems were encountered during the manufacturing. The conclusion of contracts by MoD with HAL for supply of 12 aircraft under LSP and 73 aircraft under SP when the prototypes were still under flight testing was also untimely.

7.8.2.3 Testing of structural specimen

Fabrication and testing of the structural test specimen (STS) is one of the key tasks of operational clearance. In this test, the basic airframe (without any equipment) is to be tested to 150 *per cent* of the designed load in order to prove the robustness of the design. The schedule of activities of IJT stipulates that STS is to be tested prior to the first flight.

We noticed that the first flight of PT-1 integrated with AL 55I engine took place in May 2009 but STS was conducted only in August 2010. During the test, the specimen fuselage cracked open in the rear region at merely 120 *per cent* of the designed load. After this, all flight testing was stopped till a new STS was fabricated, with identified design modifications and revised drawings, and proof tested. These involved manufacture of detail parts and assembly of fuselage leading to increase in weight of the aircraft. The redesign effort also entailed (i) retro-modification of structure of aircraft already flying/ready i.e., PT-1, PT-2, LSP-1 to LSP-3 and (ii) production standard modifications in all the remaining LSP and SP aircrafts. These were completed (December 2010) incurring additional labour cost. Further, the wings which were earlier strength tested to 150 *per cent* of loads based on earlier estimated weights also required to be re-tested on higher loads due to increase in weight. These called for fabrication of another wing entailing extra expenditure of ₹ 38.78 crore, which was stands included in the revised estimated cost of ₹ 634.23 crore, and also contributed to the overall delay in achieving IOC.

MoD stated (October 2012) that testing of STS was a prerequisite to IOC but not to first flight and that failure of STS at less than 150 *per cent* was not an uncommon event. Subsequently(December 2012), Management stated that the testing of STS and first flight with AL 55I engine had no correlation and considering that IJT fuselage was an all-metal construction of conventional design whose material properties and design parameters were quite well defined in design literature and by HAL's own experience over the past many decades in such constructions, it was decided jointly with CEMILAC[1]/RCMA that the aircraft would be cleared initially for 4g[2] on the basis of the reserves available by analysis and STS testing would be taken up after the structural design was frozen. It added that there was a change in the structural design of LSPs from that of the prototype aircraft and therefore the STS testing was carried out on a sample fuselage to the standard of LSP.

The reply is not acceptable as the Procedure for Design, Development and Production of Military Aircraft and Airborne Stores – 2002 (DDPMAS) issued by the Department of Defence Production stipulates that the structural test analysis is to be conducted before the integration testing at the critical design phase itself in line with safe test analysis. If, as stated, failure of STS was not an uncommon event, it was all the more necessary to have adhered to the prescribed procedures. Moreover, adherence to the prescribed procedure would have saved the extra expenditure and time involved in retro-modification of structure of aircraft already flying/ready i.e., PT-1, PT-2, LSP-1 to LSP-3. More importantly, the flow prescribed in the Schedule of Activities presented to the Steering Committee was not adhered to. In the Steering Committee Meeting held in September 2010, which discussed the failure of STS, the Chairman (ACAS-Plans) observed that setbacks like the STS failure were likely during the design and development process but HAL should have had a professional approach in setting achievable targets and realistic timeliness.

Adherence to DDPMAS would have avoided an extra expenditure of ₹38.78 crore incurred for fabrication of another wing.

7.8.2.4 Refinement of stall characteristics and spin testing

In July 2011, HAL Management brought to the Board's notice that the major activities pending for achieving IOC were refinement of stall characteristics[3] and spin testing. It also brought out that in spite of various modifications carried out by HAL's designers over the past five to six years as per the literature available and other known aircraft, the stall characteristics had not met the acceptable requirements. The Board thereupon

[1] ***Centre for Military Airworthiness and Certification***

[2] ***Refers to the extent of maneuvers, as for example, an observer on board an aircraft performing a turn will see objects falling to the floor at four times the normal acceleration of gravity.***

[3] ***A stall is a condition wherein the angle of attack increases beyond a certain point such that the lift begins to decrease. Different aircraft types have different stalling characteristics. A benign stall is one where the nose drops gently and the wings remain level throughout. Slightly more demanding is a stall in which one wing stalls slightly before the other, causing that wing to drop sharply, with the possibilityof entering a spin. A dangerous stall is one in which the nose rises, pushing the wing deeper into the stalled state and potentially leading to an unrecoverable deep stall.***

authorized the Management to obtain consultancy services from a reputed aircraft design house/expert in the field of stall testing and spin testing on single tender/nomination basis in view of the urgency.

The issue was discussed in the Board meeting held during May 2012 in which it was decided that considering the vast experience in similar testing BAe Systems (UK) be selected as consultant for the entire programme. The Board subsequently approved (December 2012) entering into contract by HAL with BAe for providing consultancy for stall and spin testing of IJT aircraft at a cost of ₹23.59 crore and the work is scheduled for completion by January 2014.

Since the refinement of stall characteristics is to be based on the report/findings of the consultant, the target for obtaining IOC remained indefinite further delaying the indigenisation process.

Management while concurring with our observation stated (December 2012) that the terms and conditions of the contract with BAe Systems had since been approved and that the times projected to MoD for certification also considered the timelines agreed with them.

The delayed action by HAL in their failure to address and rectify a crucial parameter resulted in extra expenditure of ₹23.59 crore, besides adding to the delay in completion of the IOC.

7.8.3 Financial progress

7.8.3.1 The financial progress in respect of Prototype, LSP& SP achieved up to March 2012 was as under:

(₹ in crore)

Particulars	Design & Development of 2 Prototype (PT-1 &2)	Limited Series Production (12 Aircraft)	Series Production (73 Aircraft)
Original Sanction	180.00	487.00	6180.00
Revised Sanction	467.00#@	0.00	0.00
Release of Funds	454.59	443.77	3074.83**
Expenditure	515.89	477.81*	167.72
Expenditure incurred in excess of sanction	48.89	0.00	0.00

 # includes ₹159 crore towards development of higher thrust engine

@ Draft CCS Note was submitted (June 2011) by HAL for revision of cost to ₹644.16 crore against which Adviser (Cost) has recommended ₹634.23 crore for sanction.

*** *Cost of completion estimated at ₹738 crore***

**** *Before adjusting the exchange rate variation (ERV) gain of ₹18.14 crore***

Although an amount of ₹ 3074.83 crore was released by MoD in respect of SP, a substantial amount of ₹ 2907.11 crore (95 *per cent*) remained unutilized; only an amount of ₹ 167.72 crore was spent.

7.8.3.2 Cost overrun

Analysis of the expenditure incurred revealed that in the quotation submitted to IAF, HAL had adopted tentative purchase prices for equipment/components to be procured from other vendors, both within and outside the country. The prices at which such procurement eventually happened significantly exceeded those adopted by HAL in the quotation contributing to the cost overrun. Since the contract was on a fixed and firm price basis, HAL would have to absorb the consequential excess expenditure incurred over the price quoted. A few such cases involving excess expenditure of ₹63.59 crore are detailed in the Annexure-I.

MoD attributed (October 2012) the cost escalation mainly to:

- the increase in exchange rate, labour costs, costs incurred towards customization of Line Replaceable Units (LRUs), additional items not envisaged in the original sanction and development, integration cost of higher thrust engine, viz., AL55I, increase in man hour rates (MHRs) for design and shop due to normal escalation and impact of wage revision from January 2007, escalation on materials and non-labour items and ERV; and
- work relating to some of the items not envisaged in the initial sanction and unanticipated activities taking place during the development process and stated that the revisions sought in cost and time could not be treated as overruns.

Cost overrun of ₹ 48.89 crore has already occurred in design and development of PT. Since HAL has entered into (December 2012) a contract for resolution of issues related to stall characteristics and spin tests the cost overrun is set to increase further by ₹ 23.59 crore being the value of the consultancy contract. Since the IOC is yet to be achieved, there is a likelihood of further increase in the cost overrun. As the overruns occurred due to avoidable deficiencies in the assessment of the engine capacity, change in life of engine after tests/flights and suspension of flight testing for 10 months from April 2011, cost escalation is not wholly attributable to the reasons stated by the management.

7.8.3.3 Release of funds by MoD

The contract for supply of 73 IJT aircraft valuing ₹6180 crore concluded in March 2010 by MoD with HAL mentioned that the delivery schedules specified were with reference to the expected achievement of IOC of LSP by June 2010 and in case of delay in obtaining IOC the delivery schedule would be correspondingly postponed. The contract further mentioned that stage payments for the aircraft for the fourth batch onwards (covering 35 aircraft and 11 reserve engines) would be released subject to IOC. Since the stage payments stipulated in the contract were linked only to commencement of an activity but not to physical progress of the activity and the fact of non-achievement of IOC was not considered while making claims by HAL, releases made by MoD were far in advance of requirement and resulted in undue advantage to HAL. This is borne out by the fact that in terms of the contract executed (March 2010) with HAL for SP, MoD had already released up to August 2012 an aggregate amount of ₹3074.83 crore against the milestones stipulated. Scrutiny of the claims preferred by HAL revealed the following:

(₹ in crore)

Milestone	Date of claim	Amount released	Remarks
For Aircraft			
On signing of the contract (15 *per cent*)	23.03.2010	926.15	Since the design of the engine itself was not finalized, no mobilization efforts were due and hence the release of funds at this stage was premature.
On placement of first purchase order (15 *per cent*)	23.03.2010	926.15	The claim was supported only by a single purchase order for hardware and software worth ₹6.62 crore placed in September 2008, i.e., 18 months before signing of the contract.

Milestone	Date of claim	Amount released	Remarks
For Aircraft			
On commencement of production (30 *per cent*) 6 aircraft 14 aircraft 18 aircraft	 18.02.2011 17.08.2011 14.03.2012	 103.10 240.55 309.28	The total value of purchase orders placed up to February 2011 was only ₹0.94 crore, up to August 2011 ₹1.50 crore and up to March 2012 ₹59.70 crore.
On start of structural assembly (20 *per cent*) 6 aircraft	14.03.2012	68.73	The claim was supported by a certificate issued by the Regional Director, Aeronautical Quality Assurance under DGAQA which referred to six aircraft of IJT-LSP series production having commenced at the Kanpur Division. Since LSP was being handled only at Bengaluru and IOC for the prototype was yet to be obtained, the certificate was incorrect.
For Reserve Engines & Spares			
On release of first payment to vendors (35 *per cent)*	09.03.2011	288.61	These related to supply of Reserve Engines (₹51.80 crore), for Spares/MRLS & STE/SMT, etc. (₹214.20 crore), for APTT & CPTT (₹13.21 crore) and for Training (₹1 crore) and for Technical Literature (₹8.40 crore). All these were required after supply of the aircrafts which was nowhere near reality.
On commencement of scheduled year of delivery(2012-13) (25 *per cent)*	09.06.2011 10.06.2011 12.05.2012	38.25 6.72 81.50	Since this milestone did not take into account the progress of work and items to be delivered were meant for use after supply of the main equipment, the releases were unjustified.
For DRE & Capital			
Final payments in respect of Capital and DRE	Dec. 2011	74.00	Amount drawn by ARDC for DRE
	10.08.2012	5.40	Amount drawn by Kanpur Division for DRE
	10.08.2012	6.39	Amount drawn by Kanpur Division for Capital works
Total		3074.83	**Actual release was ₹3056.69 crore after adjustment of a gain of ₹18.14 crore in exchange rate variation.**

The entire amount of ₹3056.69 crore released by IAF from time to time was initially received by the Kanpur Division. Of this, ₹ 1637.36 crore were transferred to sister Divisions for their portion of work and ₹ 1419.33 crore retained by it. The expenditure reported by all the Divisions aggregated to ₹ 167.72 crore only during 2009-10 to 2012-13 (up to September 2012). Thus, ₹ 2907.11[♥] crore released by IAF remained unutilized.

HAL stated (December 2012) that the amounts were drawn in line with the provisions of the contract.

The reply does not address the audit contention that milestones set for release of funds were without linkage to definite and substantive physical progress and releases were made far in advance of requirement, resulting in blocking of Government funds and undue advantage to HAL.

7.8.4 Experimenting with engine of inadequate thrust

The ASR specified that the All Up Weight (AUW) of the IJT aircraft should not exceed 3500 kg. Accordingly, HAL estimated that the mass of the engine should be between 300 and 400 kg and the engine thrust between 1400 and 1800 kg with a thrust to weight ratio of 4.5. In December 1998, HAL issued Request for Quotation (RFQ) to seven engine

[♥] ***₹3074.83 crore - ₹167.72 crore (excluding ERV gain).***

manufacturers shortlisted, of which four responded. A Technical Evaluation Committee[1] set up (February 1999) by HAL assessed these proposals and found that (May 1999) that M/s Snecma's (France), Larzac 04H20 engine met the criteria for a flight worthy, certified off-the-shelf engine which would enable the IJT to comply with ASR and recommended the same for the project's development phase. These recommendations were considered (July 1999) by the Negotiation Committee[2] but approval was accorded by Chairman of HAL only in July 2000. Meanwhile, HAL had reported (April 2000) to the Steering Committee that the engine was heavier by 150 kg and the diameter was larger by about 50 *per cent* and hence the clean weight requirement would exceed by nearly 500 kg. Further, the IJT Steering Committee also viewed (September 2000) that the current thrust level of Larzac 04H20 engine (1420 kg) would not be adequate and that there was likelihood of a weight increase with consequent requirement of a higher thrust engine and as a result, decided that the option of Russian engines for series production phase was also to be examined.

Despite this, in November 2000, HAL entered into a contract with M/s Snecma for supply of one mock-up engine, three flight test Larzac engines (FTEs) with prototype full authority digital engine control (FADEC) system and associated ground control equipment (GSEs), spare parts, technical assistance, and documentation. The terms and conditions of the contract envisaged payment of advance of two million Euros against which three FTEs were to be loaned free of charge by Snecma up to six years, with an option to buy them at the end of the development programme at a price of 2.94 million Euros (₹ 12.35 crore, to be adjusted against the advance) and if, at the end of the development programme, Larzac engine was not selected for series production, loan charges of 0.9 million Euros (₹ 3.78 crore) (@ 0.3 million Euros per engine) and a compensation of additional amount of 1.1 million Euros (₹ 4.62 crore) were payable by HAL to the supplier. Accordingly, HAL placed (December 2000) a purchase order on Snecma for supply of one mockup and three Larzac engines and also paid the advance of two million Euros (₹8.40 crore) in December 2000. The flight development programme progressed with Larzac engines up to December 2006. Meanwhile, HAL decided to launch the series production programme with AL55I engines of Russian origin. Since the supply of AL55I engines was expected to take some more time, HAL requested Snecma for extending the loan period of Larzac engines beyond December 2006 for continuing the flight programme of the aircraft which was agreed to by Snecma and the contract was subsequently amended in August 2008/November 2009 to cover the extended loan period. In terms of the contract, as amended, loan charges were payable from January 2007 to March 2007 for one engine and from January 2007 to December 2009 for two engines at 12,862.50 Euro (₹ 5.40 lakh) per engine for each quarter.

Accordingly, HAL adjusted (December 2009) ₹ 4.71 crore towards compensation and ₹ 3.69 crore towards lease rent (up to December 2006) from the advance of ₹8.40 crore that had been paid to Snecma in December 2000. HAL was also liable to pay to Snecma the loan charges of ₹ 2.13 crore from January 2007 to December 2009 (charges for the

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[1] *Represented by members from Aircraft design, Engine design and Test Pilots of the Centre for Military Airworthiness and Certification (CEMILAC) and the Regional Centre for Military Airworthiness (RCMA-Engines).*

[2] *Comprising Director (Corporate Planning), Director (Finance), Director (Design & Development), Managing Director (Bangalore Complex), Deputy Chief of Air Staff, and representatives from Design, Commercial & Finance Wings.*

period January to June 2010 were waived), of which it had paid (June and August 2008) ₹ 1.42 crore. After the loan period, the engines were returned to Snecma. The provision for payment of compensation in case of non-use of Larzac engines beyond the developmental phase was against the interests of HAL as it was already aware of the Steering Committee's recommendations on the engine's inadequate thrust.

MoD stated (October 2012) that the off-the-shelf engine was accepted only for starting the development process and payment of hire charges and compensation for discontinuing the use of Larzac engine helped HAL to start the design and development work on IJT programme without delay.

The reply is not acceptable due to the fact that HAL was already aware that the thrust level of Larzac engine would not be adequate and only one standard engine for the whole fleet was required by the customer. Further, the whole process of certification was to be completed for the new engine. For these reasons, the agreement for payment of compensation was also not justified, resulting in delayed development of the aircraft and an avoidable extra expenditure of ₹4.71 crore.

7.8.5 Extra expenditure for increasing life of AL 55I engine

Pursuant to the decision (September 2000) of the Steering Committee to explore a new engine of higher thrust from Russia in addition to continuing discussions with Snecma for growth version of Larzac engines, HAL invited (January 2003) proposals from Rosoboronexport, Russia besides from Snecma for a new engine of higher thrust. The request for quotation (RFQ) called for unlimited total technical life of engines with "on condition" maintenance and the Technical Evaluation Committee found that both the vendors satisfied this parameter. After evaluation/selection process and detailed negotiations, AL55I engine offered by Rosoboronexport was selected (April 2004). Accordingly, HAL signed a contract (June 2005) with Rosoboronexport for development and supply of AL 55I engines and placed (July 2005) an order for five engines (inclusive of two mock up) at a total value of 29.50 million USD (₹132.93 crore).

However, contrary to the requirement of unlimited life specified in the RFQ, the contract entered into by HAL with Rosoboronexport stipulated a limited life of 100 hours each for the three engines for the development phase, which could be extended through complex life extension programme by entering into a separate contract for production phase. The records made available to audit including the Technical Evaluation Report did not mention the reasons for bringing down the life of the engine from "unlimited" to "100 hours".

Under the contract of June 2005, the supplier developed two prototype engines and conducted the qualification tests and flight tests in June-December 2006 during which problems were encountered. Subsequently in October/ November 2007 the supplier made a detailed presentation on the problems encountered. HAL's records show that at this stage the supplier suggested extension of the initial assigned life of engine to 300 hours even for the two prototype engines. Thereafter, with the approval (September 2008) of the Board, HAL entered (October 2008) into a supplementary contract with Rosoboronexport for carrying out works for establishing an initial assigned life of 300 hours at a cost of 26 million USD (₹131 crore). The engines with the modified life were received in January 2009.

Thus, acceptance of a reduced initial life of the engine and failure to negotiate and include a specific clause in the contract entered into (June 2005) with Rosoboronexport for full life extension without any additional cost resulted in avoidable expenditure of ₹131 crore and contributed to further delaying the completion of the project.

MoD stated (October 2012) that the life extension of engines was a time consuming and complex task involving thousands of hours of rig testing, analysis, design modifications and production of a number of components and as the lifing of the engines was achieved progressively as flight testing progresses, the initial assigned life of 100 hours for the AL55I engine would have been sufficient for the prototype stage, but a delay in lifing beyond 100 hours would have adversely affected the LSP which was initiated concurrently and the SP programme which would follow. It also stated that the contractual terms were re-negotiated for extension of life from 100 to 300 hours with a clause that there would be no further cost for further extension of life of the engine.

The reply is not acceptable as HAL, in spite of having invited quotations for unlimited life of engines, entered into a contract accepting 100 hours life with no mention of the financial implication for increasing the same beyond 100 hours.

7.8.6 Change in weight of engine

The technical specifications agreed for the engine with life of 100 hours indicated the engine weight as 320 kg + 1 *per cent* with a note that the mass of first three engines would be marginally more than that figure and the final mass would be mutually agreed. However, in October 2008, enhancement of engines' life from 100 to 300 hours for prototype and LSP was ordered and the weight of the engine supplied (January 2009) became 409 kg with accessories. While discussing (November 2010) plan for reduction of weight of the engine to the final requirement of 320 kg in phases, Rosoboronexport mentioned that reduction of weight to 385 kg would not affect the engine/aircraft interfaces or engine performance but further reduction below that level could entail changes in engine/aircraft interfaces and affect engine performance. In view of a commitment by HAL to deliver SP aircraft from 2012-13 onwards and considering that any change in engine interface could cause considerable rework and delays, the Board approved (July 2011) acceptance of the final weight of the engine to be 385 (+5) kg and for the corresponding revised technical specifications to be coordinated with Rosoboronexport.

Thus, against the requirement of engine weight between 300 and 400 kg, specification of a technically not feasible weight of 320 kg by HAL delayed final fixation of the engine's weight and receipt of supplies.

Management stated (December 2012) that the final weight of 385 kg was agreed to since reduction below that would entail changes in the aircraft engine interfaces as well as engine performance and not because the reduction to 320 kg was not feasible. Management added that it had not caused any delay in receipt of supplies.

This is incorrect as time taken for final fixation of weight had resulted in a delay of about eight months, i.e., from November 2010 to July 2011.

7.8.7 Warranty

The contract* for supply of LSP aircraft stipulated warranty period as 12 months or 240 operational hours from the date of acceptance at stores or date of installation and commissioning whichever was earlier. HAL placed purchase orders for supply of line-replaceable units (LRUs) from October 2007 for the entire LSP production programme with staggered deliveries from March 2008 to March 2010 with warranty covering periods ranging from 18 to 30 months from the date of delivery of the items by the vendors.

HAL received LRUs costing ₹114.76 crore from June 2008 up to March 2012. Thus, although HAL was yet to receive IOC for IJT to start production, warranty for the items received during the period 2008 to 2009 had already expired even before delivery of the aircraft to the customer. According to HAL, in case any item found defective needed to be repaired at HAL's cost, the status would be reviewed after achieving IOC/FOC and the matter referred to MoD for reimbursement as part of the cost revision proposal.

MoD stated (October 2012) that LRU ordering was initiated according to the amended delivery schedule of the aircraft and that HAL made deferred supplies to the maximum extent so that the benefit of warranty would be available at the time of their fitment on the aircraft. It added that in respect of certain LRUs life could be extended while conducting pre-installation check within HAL.

The reply is not acceptable since at the time of placement of the order in June 2007, even IOC scheduled for March 2007 had not been obtained. Moreover, the delivery schedule was amended only in March 2009. Hence the ordering of LRUs far in advance of requirement and building up of time-expired inventory was avoidable.

7.8.8 Impact of delay in supply of IJT aircraft

As of May 2012, HQ Training Command at Bengaluru was in possession of 93 (only 90 in use) Kiran Mk-I and 39 (only 38 in use) Kiran Mk-II aircraft after grounding of 113 HPT-32 aircraft from August 2009. While HPT-32 had been replaced by Kiran for basic flying training, the flying syllabus for that stage had been reduced from 63 to 25 hours per trainee. The flying syllabus for Stage-II (Fighters) had also been reduced from 94:10 to 86:20 hours in Kiran and many exercises of that stage transferred to Stage-III (Fighters) syllabus on Hawk aircraft. The reduction of 46 hours in total flying experience of trainee pilots before their posting to operational commands was partly offset by training on simulators. As against the authorized capacity of 142 pilots for IAF, only 120 to 130 pilots were being accommodated.

Thus, even after release of substantial payments by MoD, the intermediate training to the pilots of IAF continued to be compromised.

Conclusion

The project suffered at every stage of its execution. While the planning went awry with indecisiveness about the weight, thrust and life of the engine at the design stage itself, taking up limited series production and series production simultaneously with the design/development without obtaining initial operational clearance did not serve

* ***Entered into by the Joint Secretary & Acquisition Manager (Air), MoD with HAL on 23 March 2006 for supply of Limited Series Production (LSP) valuing ₹486.81 crore***

the objective of providing the aircraft to IAF which had projected a requirement way back in 1999. With a realistic date for obtaining IOC itself yet to be decided, efforts to attain indigenisation have remained unsuccessful even 13 years after initiation of the project. MoD had also released ₹ 3074.83 crore towards SP, of which ₹ 2907.11 crore (95 *per cent*) remained unutilised.

7.9 Loss in sale of Advanced Light Helicopters

By selling Advanced Light Helicopters to Ecuadorian Air Force at below prime cost, HAL incurred a loss of ₹ 52.64 crore. Besides the delay in supply of ALH also resulted in payment of penalty of ₹ 6.16 crore.

Hindustan Aeronautics Limited (HAL), in response to a tender invitation by Ecuadorean Air Force (FAE), quoted (June 2008) US$ 45.20 million for supply of seven Advanced Light Helicopters (ALH) Mark-II (Dhruv II), including tools and additional equipment, accessories, etc. While approving the price of US$ 45.20 million as a market penetration strategy for export, the Chairman had ordered (May 2008) that the Helicopter Division should plan recoveries of the difference between full cost and price quoted[1] through sale of spares, equipment and services, if the bid was successful. Based on the quoted price, HAL secured the order and concluded a contract (August 2008) with FAE for supply of seven ALH and associated equipment between January 2009 and January 2011 at the quoted price.

HAL supplied five ALH in March 2009 and two ALH in May 2011. As against the billed amount of ₹ 204.32 crore (US$ 44.84 million), HAL received ₹ 155.89 crore (US$ 36.08 million) as of January 2013.

Our scrutiny of the sale revealed the following:

- The Marketing Department of HAL had proposed (May 2008) a sale value of US$5.85 Million per helicopter (excluding optional equipment and others) and the total contract value worked out to US$ 49.360 `million. However, after the proposal was put up to the Chairman for approval, the basic value of the helicopter and the total contract value was modified to US$ 5.30 million and US$ 45.20 million respectively, without assigning any reasons. However, the Chairman had recorded that the price proposal had been reviewed and it was proposed to quote a package price of US$ 45.20 million;
- According to the powers delegated by the Board of Directors of HAL, the Chairman had full authority to offer any sale price which should not be less than the prime cost (direct material plus direct labour). The prime cost of production of the basic helicopter manufactured during 2007-08 for issue to the Ministry of Defence (MoD) was ₹ 29.06 crore and hence the Chairman was not competent to approve the price of ₹ 21.12 crore which was less than the prime cost by ₹ 7.94 crore[2];
- The price of the basic helicopter of US$ 5.85 million proposed by the Marketing Department itself was below the prime cost as the actual prime cost of helicopters

[1] ***Excluded profit and warranty, deferred revenue expenditure, cost of manuals, cost of training and ground/flight risk insurance***

[2] ***₹29.06 crore - ₹21.12 crore= ₹7.94 crore)***

manufactured during 2007-08 was US$ 7.25 million (₹29.06 crore) resulting in under-pricing by US$ 1.95 million per helicopter and US$ 13.65 million for the contract as a whole. The Marketing Department, however, did not bring this fact to the notice of the Chairman;

- The cost quoted to FAE in June 2008 included prime cost of ₹ 21.12 crore as against the actual prime cost of ₹ 29.06 crore[1] incurred in manufacture of basic Helicopters during 2007-08. The under recovery with reference to actual prime cost of ₹ 28.64 crore when the helicopters were delivered during 2008-09, amounted to ₹ 52.64[2] crore;
- The delivery of helicopters had been delayed due to which FAE had recovered ₹6.16 crore towards penalty;
- The contract stipulated integration of nine additional equipments on the Standard ALH Mark II. All the additional equipments were required to be flight-tested and cleared by the Regional Centre for Military Airworthiness (RCMA) under the Ministry of Defence (MoD) before integration. Search and Rescue (SAR) Homer and Traffic Collision Alerting System (TCAS) II were expected to be certified only by December 2012 and August 2013 respectively. None of the helicopters supplied, were fitted with the required additional equipments before delivery; and
- While no export orders from any other customer had been received for ALH, the value of orders received for spares, etc., from FAE during 2010-11 to 2012-13 was only ₹ 23.03 crore, the whole of which was much less than the loss incurred.

Management stated (January 2013) that:

- the figure of ₹ 29.06 crore considered by the Audit was based on full cost of production which included cost of material and labour, deferred revenue expenditure amortisation, warranty provision, sundry direct charges, etc. and that the prime cost in the quote to FAE was estimated at ₹ 23.46 crore and the same was adopted for quoting to FAE which was on par with the unit price and did not necessitate sanction of the Board; and
- it was confident of recovering the cost incurred towards warranty and other elements through the continued supply of spares /product support during the Helicopters' intended operating life of 20 years.

The reply is, however, not acceptable as: (i) the actual average prime cost of ₹ 29.06 crore for each ALH considered by Audit was exclusive of the elements mentioned by the Management; and (ii) considering the low magnitude of orders received for spares, the expectation to recover cost even in the operating life of 20 years seems unrealistic.

Thus, by accepting an unviable price and failure to meet the contractual obligation for timely supply, HAL has incurred a loss of ₹ 58.80[3] crore from the contract as of March 2013.

The case was reported to the Ministry in February 2013; their reply was awaited (March 2013).

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[1] ***Excluding amortization, SDC & Others, warranty & liquidated damages***

[2] ***₹28.64 crore-- ₹21.12 crore= ₹7.52 crore x 7 helicopters= ₹52.64 crore***

[3] ***₹52.64 crore (loss) + ₹6.16 crore (penalty for delay= ₹58.80 crore***

7.10 Irregular payment of incentive

The company paid incentive of ₹ 25.98 crore to its employees without the approval of the Ministry, on perceived success of the inaugural flight of the demonstration model of Light Combat Helicopter which was being designed and developed by it. The payment of incentive lacked rationale since this milestone was achieved after a delay of 18 months and the Initial Operational Clearance which was due in December 2010 had been repeatedly extended.

The Ministry of Defence sanctioned (October 2006) the design and development of a Light Combat Helicopter (LCH) by Hindustan Aeronautics Limited (Company) for the Indian Air Force (IAF), at a total cost not exceeding ₹ 376.67 crore. Till March 2012, the Company had incurred an expenditure of ₹ 303.29 crore on the project, while it had received a total sum of ₹ 271.20 crore from the IAF.

According to the major milestones stipulated by the Ministry, the first flight of Technology Demonstrator (TD)-1 was to be achieved by November 2008, that of TD-2 by March 2009 and the Initial Operational Clearance (IOC) was to be obtained by December 2010. The project was to be completed by December 2010. The progress of the project was, however, slow and the inaugural flight of TD-1 took place only in May 2010, i.e, 18 months behind the schedule. There were 12 snags detected during this first flight. We observed that although the progress of the project was behind schedule and had revealed numerous snags, the Board of Directors of the Company approved (June 2010) payment of a one-time financial incentive, based on the pay scales of workmen and grades of officers, on the occasion of having conducted (May 2010) the inaugural flight to appreciate the efforts of the employees in the accelerated development and building of the first LCH. We further observed that the payment covered not only the employees actually engaged for the LCH project but all others across the Company. The Company paid (August/ September 2010) a total of ₹ 25.98 crore on this account. This was in addition to the payment made to the Executives under Performance Related Pay Scheme and Monthly, Quarterly and Annual incentives paid to the workmen.

According to the Delegation of Powers of the Company (2008-09), the powers of the Board in matters relating to wages, perquisites, bonus, incentive schemes, performance-linked payments and retirement benefits were not absolute but are subject to Government guidelines. The Department of Public Enterprises (DPE) had issued (November 1997) instructions to all Public Sector Undertakings (PSU) which stated that the employees of PSUs would not be paid bonus, *ex gratia*, honorarium, reward and special incentives, *etc.* unless the amount was authorised under a duly approved incentive scheme. The payment of the one-time financial incentive in August/September 2010 was not covered under an approved scheme and was therefore irregular.

On this being pointed out, the Ministry stated (May 2012) that the payment was made after the work was over and was in the nature of appreciation of efforts put in rather than an incentive for improved performance in future. Ministry also stated that the one-time payment went through the regular process of Board approval as required by DPE and which was within the powers reserved for exercise by the Board as a performance linked payment. The Ministry's reply that payment was made after the work was over is not factual as the IOC was not yet obtained (due in September 2014). The reply is also not acceptable as according to the DPE guidelines any payment of such nature should be made only with the approval of the competent authority in accordance with the prescribed procedure and in this case, the approval of the administrative Ministry was required.

In view of the significant delay in achieving the targeted stages of completion, the sanction of incentive by terming the inaugural flight of the LCH in May 2010 as deserving appreciation was unjustified. Moreover, payment of incentive on an ad hoc basis, without a duly approved incentive scheme was irregular.

CHAPTER VIII: DEPARTMENT OF FERTILIZERS

Rashtriya Chemicals and Fertilisers Limited

8.1 Improper estimation of cost in bidding

Improper estimation of cost in bidding for the contract of handling and sale of imported urea resulting in loss of ₹ 44.81 crore

Department of Fertilizers (DoF) appointed (May 2007/November 2007) Rashtriya Chemicals and Fertilisers Limited (the Company) as Handling Agents (HA) for handling of vessels, bagging, standardisation and distribution of imported urea in various States/Union Territories during the year 2007-08 in Kandla, Tuticorin and Dharamtar ports for the years 2007-08 to 2009-10 at ₹ 690 per metric tonne (PMT), ₹ 674 PMT ₹ 960 PMT[♣] at their quoted rate on the basis of Notice Inviting Tender (NIT) issued in April 2007. DoF extended (March 2010) the above contracts for two more years (i.e. up to 31 March 2012) and subsequently (March 2012) for two more months up to 31 May 2012. Apart from the aforesaid lump sum rates, the Company was eligible, as per NIT, to get reimbursement towards port dues, customs duty and inland freight charges. The Company quoted the above rate after estimating various expenses involved and profit of ₹ 50 per MT.

During the period 2007-12, the Company unloaded and handled imported urea from 175 vessels and dispatched/distributed 56.77 lakh MT to various States/Union Territories. For this activity the Company incurred an expenditure of ₹ 4368.05 crore and could claim an amount of ₹ 4323.24 crore only from DoF, resulting in a overall loss of ₹ 44.81 crore against an estimated overall profit of ₹ 28.39 crore (56.77 lakh MT being the quantity sold X ₹ 50).

Audit observed that the estimation prepared by the Company for bidding was deficient as significant elements of cost viz. inland freight charges, finance charges and shortages in handling and transportation were worked out incorrectly without detailed analysis of NIT terms and included in the estimate. The Company, however, made some savings in other elements of cost such as Custom House Agents (CHA) charges which brought down the net loss to ₹ 44.81 crore.

The following three elements mainly contributed under recovery of cost of ₹ 69.14 crore as discussed in succeeding paragraphs:

(A) Even though, the inland freight charges from the ports to districts were reimbursable, the reimbursement was regulated as per the statement, which was enclosed with NIT. The statement provided fixed freight rates for transport of urea from a particular port to different States. Irrespective of internal movements within a State, the reimbursement was allowed at the rate mentioned in the statement for transport of urea from a particular port to a particular State. Thus, the rate given in the statement was

[♣] *Quoted rate ₹966*

expected to cover all the block level destinations in a State. With such a structure of the contract, districts and blocks in proximity to port in a State would be to the benefit to the HA, while districts and blocks away from the port would lead to loss. As actual movements were regulated as per the movement orders of the State and DoF, an amount of ₹ 54.72 crore remained unrecoverable from the DoF.

Management replied (November 2012) that the districts which were far off in the State from the port were to be supplied from the port and this resulted in huge under recovery.

(B) The Company estimated ₹ 6/- PMT towards finance charges to be incurred for opening of Letter of Credit (LCs) in favour of DoF. Even though, the Company considered in the estimate the LC opening charges levied by the State Bank of India, the Company's banker, it did not consider in the estimate the LC negotiation charges which was levied by the State Bank of Patiala, the banker of DoF. Due to this lapse, the Company incurred an avoidable expenditure of ₹ 7.36 crore towards LC negotiation charges. However, after taking in to account the gain on account of LC opening charges as compared to estimate, the net extra expenditure incurred by the Company towards finance charges was ₹ 5.87 crore.

Management accepted (November 2012) that the LC negotiation charges levied by the State Bank of Patiala were not anticipated in the estimate. The extra expenditure of ₹ 5.87 crore could have been avoided had the Company ascertained full details of expenditure involved towards LC or had the Company opened a Bank account with the State Bank of Patiala, Mumbai for LC.

(C) The Company estimated ₹ 9 PMT towards shortages to cover handling and transit loss calculated at 0.25 *per cent* on the urea issue price which was at variance with 0.5 *per cent* allowed by the Company to CHA in their back-to-back contract. The actual shortages (including destination godown storage loss) were 0.81, 0.57, 0.22, 0.50 and 0.44 *per cent* for 2007-08, 2008-09, 2009-10, 2010-11 and 2011-12 respectively. Thus, the norms adopted by the Company for handling and transit losses were unrealistic. In none of these years (except the year 2009-10) the actual shortages were within the estimated norms. The value of shortages in excess of the estimate was ₹ 8.55 crore which had to be absorbed by the Company.

Management stated (November 2012) that they have recovered losses on account of shortages above 0.5 *per cent* from the CHAs, and if percentage of shortages in the contract with CHAs were kept at 0.25 *per cent*, it would have resulted in higher charges levied by them. The above reply of the managements was not supported by any documentary evidence.

The reply of the Management is not acceptable as the Company had not realized the unfavourable terms in NIT and should not have quoted with such thin margins. Further Company should have also ascertained full details of expenditure involved towards LC negotiation charges before making estimates and provision should have been made for recovery of actual shortage of handling of transit loss from CHA through back-to-back contract.

The Company, however, made some savings in other elements of cost such as CHA charges which brought down the net loss to ₹ 44.81 crore. Thus, Company incurred loss of ₹ 44.81 crore mainly due to excess expenditure incurred over estimates made in respect of inland freight charges, finance charges and handling and transit losses.

The matter was reported to the Ministry in December 2012; their reply was awaited. (March 2013).

CHAPTER IX: MINISTRY OF FINANCE

General Insurance Corporation of India

9.1 Avoidable loss on account of imprudent acceptance of reinsurance treaties[1]

Imprudent acceptance of reinsurance treaties to cover 'Rajiv Aarogyasri Community Health Insurance scheme' issued by Star Health-resulted in avoidable loss of ₹ 197.80 crore

Star Health and Allied Insurance Company Limited (Star Health) issued (March 2007) Rajiv Aarogyasri Community Health Insurance Scheme[2] (Scheme) to Aarogyasri Health Care Trust, created by the Government of Andhra Pradesh. Star Health after recovering the incidental expenses for administering the scheme from the annual premium ceded[3] (effected from March 2007) a share of it towards obligatory and voluntary cessions to General Insurance Corporation of India (GIC). For the balance, Star Health sought (February 2007) reinsurance cover from GIC on stop loss basis[4] and the same was provided from 1 April 2007 by issuing five treaties for five phases of the Scheme.

Star Health's retained premium ranged from 87.37 *per cent* to 91.50 *per cent* of Estimated Net Premium Income (ENPI)[5]. As against the premium retained by Star Health, loss retention remained almost static at 80 *per cent* of the ENPI (except for the Underwriting Year 2011 where it was 90 *per cent*). However, GIC's maximum liability ranged from 35 *per cent* to 70 *per cent* of ENPI in excess of loss retention of Star Health,

100 *per cent* minus 8.50 *per cent* and 100 *per cent* minus 12.63 *per*

1 ***An agreement between the ceding company and the reinsurer containing the contractual terms applying to the reinsurance of some class or classes of business, usually for a period of one year.***

2 ***Implemented in the State of Andhra Pradesh from 1 April 2007 covered population who live Below the Poverty Line, as enumerated and photographed on the Health Card/BPL Ration card. Scheme provided cashless coverage for meeting expenses for hospitalization and surgical procedures for the beneficiary members (floater basis to benefit family) up to ₹ 1.50 lakh per family per year in any of the network hospitals.***

3

Reinsurance cession pattern of Star Health:

Gross Premium-----less----> Incidental Expenses ----less----> Obligatory cession to GIC ----less---->Voluntary Quota share cession to GIC

= Estimated Net Premium Income

----less---> Retained by Star Health (ranging from 87.37 to 91.50 *per cent* of ENPI)

=

Balance ENPI to GIC for Stop Loss Cover (ranging from 8.50 to 12.63 *per cent* of ENPI)

4 ***GIC would protect Star Health against an aggregate amount of claims over a period, in excess of a specified percentage of earned premium income.***

5 ***ENPI was the gross annual premium less incidental expenses of Star Health, obligatory and voluntary cessions to GIC***

during the underwriting years 2007 to 2011 for a premium ranging from 8.50 *per cent* to 12.63 *per cent* of ENPI.

The overall performance of the treaties from Underwriting Year 2007 to 2011 showed continuous losses of ₹ 197.80 crore as detailed below:

Net Results and Claim Ratio of all treaties of Rajiv Aarogyashri Community Health Insurance Scheme

Treaty Number of GIC (Date of commencement)	Phase	Districts covered in the Phase	Net Result (Acceptances less cost of further reinsurance and incurred claims)						
				Underwriting Year				(₹ In crore)	
				2007	2008	2009	2010	2011	Grand Total
43788 (01.04.07)	1 and 3	Anantapur, Mahaboobnagar, Sri Kakulam,Medak, YSR(Kadap), Karimnagar,SPS Nellore,Prakasam	**Results**	-3.09	9.24	48.42	-15.75	21.42	**60.24**
			Claim ratio (*per cent*)	No claim	478	588	No claim	188	
45348 (05.12.07)	2	West Godavari,East Godavari,Chittor, Nalgonda, Rangareddy	**Results**	11.15	10.94	19.71	32.30	Not renewed	**74.10**
			Claim ratio ((*per cent*))	209	209	265	253		
45566 (15.04.08)	3 alone	Medak,YSR(Kadap), Karimnagar,SPS Nellore,Prakasam	**Results**	Did not exist	11.46	-13.47	Clubbed with Phase I		**-2.01**
			Claim ratio ((*per cent*))		249	4			
45695 (17.07.08)	4 and 5	Karnool;Adilabad,Hyderabad,Vizianagaram,Vishakhapatnam	**Results**		6.48	14.87	43.35	-10.60	**54.10**
			Claim ratio ((*per cent*))		186	251	352	47	
45698 (17.07.08)	5 alone	Nizamabad,Warrangal,Khammam,Guntur, Krishna districts	**Results**		22.46	-11.09	Clubbed with Phase IV		**11.37**
			Claim ratio ((*per cent*))		335	No claim			
									197.80

Source: SAP BW Reports as on 31.3.2012 Minus indicates profit to GIC and + indicates loss to GIC

The efficacy of underwriting and profitability of treaties was examined and audit observed that: -

- Providing reinsurance cover to Health Insurance Scheme underwritten by Star Health was not obligatory and therefore GIC was free to fix appropriate premium rate as well as terms and conditions.
- The premium to liability ratio of Star Health ranged from 1.09:1 to 1.02:1 as against this, premium to liability ratio of GIC which ranged from 1:4.12 to 1:5.54. The claim ratio♠ of the GIC in three out (2008, 2009 and 2010) of five years exceeded 100 *per cent* of the earned premium and peaked to 588 *per cent* in 2009 which indicated that the liability accepted by GIC was not commensurate with the premium.

♠ ***(GIC's Incurred claims/Premium earned)*100***

- Although, GIC in 2008 worked out a renewal premium rate of 21.73 *per cent* considering the claim ratio @ 104 *per cent*, it had actually charged only 12.63 *per cent*. This had also enhanced the loss ratio. GIC failed to safeguard its interest by charging a higher premium rate.

The *reply of the Ministry (February 2012) was as under:*

- GIC took a decision to accept the business with a long term perspective more so when the subject of coverage was mass health insurance to cover BPL population. It was also stated that Star Health was placing all the business with GIC only and not selectively.
- The observation that GIC should have restricted its liability to the premium, goes against the very basis of insurance practice which was to take risk and not otherwise. Further, such a proposition would lead to the situation of GIC refunding unpaid portion of the premium to the insured which was not the basis of insurance.
- Corrections viz. Inclusion of loss corridor of 5 *per cent* in excess of 95 *per cent* the year 2010-11 and increased to 10 *per cent* from 110 *per cent* to 120 *per cent* in the year 2011-12, were introduced at the time of renewals
- The treaty was underwritten based on their experience with the client and with future outlook. The referred note was only a rough working sheet and had no relevance to the strength of the client, volume of the premium involved and the perpetuity of the scheme.
- The rate charged was workable and attractive was substantiated in the rating of the scheme given to Kalignar Kapittu Thittam of Government of Tamil Nadu where GIC had charged 12.63 *per cent* and made a profit of ₹30.47 crore.

The contention of the Ministry was not acceptable for the following reasons:

- Each risk was required to be evaluated based on its individual merits and demerits. Since reinsurance contracts being annual contracts and renewal is never guaranteed, the contention of underwriting for long term perspective is not valid. Further, considering the results of all five treaties which were overall loss making at various phases, the acceptance was not prudent.
- The original policy issued by Star Health included the condition of refunding the premium in the event of profit. Thus the contention of insurance practice is not valid. The premium to liability ratio was to be in tandem with that of Star Health in the interest of the Company.
- As the scheme was ended in 2011-12, the introduction of loss corridor in 2010-11 was at the end of the scheme. It could reduce the loss only by ₹18.05 crore in the year 2010-11. Further, as against revision of loss corridor from 110 *per cent* to 120 *per cent* in the year 2011-12, GIC increased its share from 90 *per cent* to 100 *per cent*. Hence, it was practically an ineffective measure.
- GIC's contention that the premium rate calculation made as 21.73 *per cent* was a rough work is not valid as the working had a definite basis i.e. said calculations were made considering estimated claim ratio at 104 *per cent*. Moreover, charging premium rate of 12.63 *per cent* for attracting the insurer is an after thought and is

not acceptable especially when there is no competitor for GIC in the domestic insurance market.

- Kalaingar Kapittu Thittam (KKT) was introduced by the Government of Tamil Nadu in the year 2009 was not exactly as the same as Rajiv Aarogyasri Community Health Insurance Scheme introduced in 2007. As already statedeach risk had to be evaluated based on individual merit. Hence KKT was not available for comparison in Underwiriting Year 2007. The loss mitigation efforts during the succeeding years were not adequate as detailed above.

Thus, imprudent acceptance of reinsurance treaties to cover 'Rajiv Aarogyasri Community Health Insurance scheme' issued by Star Health, a private general insurance Company, resulted in avoidable loss of ₹ 197.80 crore.

National Insurance Company Limited, The New India Assurance Company Limited, The Oriental Insurance Company Limited and United India Insurance Company Limited

9.2 Avoidable loss in group health insurance scheme

Four PSU insurers suffered a loss of ₹ 121.81 crore, during the four year period ending June 2012, due to their imprudent decision to enter into a co-insurance agreement with Star Health and Allied Insurance Company.

In November 2007, the Government of Tamil Nadu (GoTN) invited bids from the general insurance companies to provide health cover (Insurance Scheme) to the employees (including their family members) of the government departments, state public sector undertakings, local bodies, state government universities and statutory boards under the control of GoTN.

Star Health and Allied Insurance Company Limited (STAR), in association with ICICI Lombard, quoted (11 February 2008) lowest rate of insurance premium at ₹ 675 per employee per annum. The four public sector insurance companies[1] (NIA, NIC, OIC and UIIC: PSU insurers) had also participated in the bidding by quoting a premium ranging from ₹ 720 to ₹ 780[2] per employee per annum. After further negotiations with GoTN, STAR agreed to a final premium of ₹ 495 per employee per annum.

Even though the premium quoted by the PSU insurers was much higher than finally agreed to by STAR, the four PSU insurers entered into a co-insurance agreement (18 February 2008) with STAR as leader. According to the agreement, the four PSU insurers shared 15 *per cent* each in the Insurance Scheme. The premium, claims and agreed expenses were to be shared in the ratio of 21:19:60 among STAR: ICICI Lombard: the four PSU insurers. Subsequently, STAR issued (June 2008) the Health Insurance Policy covering a period of four years ending June 2012.

Under the scheme, for the period from June 2008 to June 2012, the four PSU insurers received premium of ₹ 137.33 crore and accepted an expenditure of ₹ 259.14 crore

[1] ***(1) The New India Assurance Company Limited (NIA), (2) National Insurance Company Limited (NIC), (3) The Oriental Insurance Company Limited (OIC) and (4) United India Insurance Company Limited (UIIC).***

[2] ***NIC ₹780; NIA ₹730; OIC ₹725 & UIIC ₹720***

towards claims, administrative charges and other expenses. The PSU insurers suffered a total loss of ₹ 121.81 crore on this insurance scheme as per details given below:

Details of actual premium received and claims accepted against 15 *per cent* of agreed share (figures: ₹ in crore)					
	NIA	NIC	OIC	UIIC	Total
A. Share of Premium	34.31	33.62	34.04	35.36	137.33
B. Share of claims honoured & other expenses	64.50	62.87	62.75	69.02	259.14
Loss (A-B)	30.19	29.25	28.71	33.66	121.81

It was also observed in Audit that the PSU insurers agreed to STAR's rate of premium without any recorded reasons and even without having the details regarding number of employees to be covered, composition of age group, previous medical history, morbidity, mortality of the persons to be insured etc. The PSU insurers were not informed of the details of the actual number of employees and their family members to be covered as at the beginning of each policy year, in the absence of which, the adequacy of the premium distributed by STAR could not be verified. It was also noticed in Audit that the co-insurance agreement did not contain any provision for verification of the claims/costs allocated to PSU insurers by STAR and to withdraw from the co-insurance agreement any time during the policy period by mutual consent.

UIIC/ NIA stated (July 2012/January 2013) that the acceptance of lower premium was on account of group discount and coverage of specific diseases only. NIC stated (October 2012) that, as STAR had experience and expertise to manage such large schemes, it was agreed to be a co-insurer at the rate accepted by STAR. OIC stated (September 2012) that, as was the practice, all the PSU insurers signed a common co-insurance agreement with STAR.

The above reply was not acceptable as:

- The decision of the four PSU insurers to undertake the co-insurance with STAR, at abnormally reduced premium compared to their own quotes, was not based on any documented analysis. In fact, they accepted a premium rate which was a negotiated one by STAR only.
- There were no checks in place to ensure that the premium, claims and costs was correctly allocated by STAR to the PSU insurers.
- Although the share of 15 *per cent* was common to each of the four PSU insurers, surprisingly, each PSU insurer had received varying amounts of premium and accepted different amounts of expenditure as indicated in the above table.

In sum, a substantial part of claim was borne by the four PSU insurers, who accepted the co-insurance in spite of low premium and without putting in place appropriate checks and balances to safeguard their financial interests.

The matter was reported to the Ministry in August 2012, their reply was awaited (March 2013).

The Oriental Insurance Company Limited

9.3 Loss due to excess retention of risks in outward placements

The Company suffered a loss of ₹ 17.67 crore due to excess retention of risks in outward placements

Insurance Regulatory & Development Authority of India (IRDA) (General Insurance Reinsurance) Regulations, 2000 govern the reinsurance arrangements in India. Clause 3(4) of IRDA regulation stipulates that the reinsurance programme of every insurer shall commence from the beginning of every financial year and every insurer shall submit it to IRDA. According to the reinsurance programme of The Oriental Insurance Company Limited (the Company), it cedes a specified percentage of the sum insured (obligatory cession) to the Indian reinsurer, which is General Insurance Corporation of India (GIC). Surplus after obligatory cessions may be offered to the Indian insurers (intergroup cessions). Further, surplus after intergroup cessions are ceded in the treaties of the Company. Remaining balance of sum insured is placed facultatively to the individual reinsurers on 'case to case' basis at the time of issuance of policy for each risk as and when the same is underwritten by the Company.

As per IRDA circular on Reinsurance Arrangement – Guidelines for good Corporate Governance (November 2004):

- The authority to approve the reinsurance programme of the insurer shall rest solely with the Board of Directors. Any changes found necessary during the process of placement of the programme or at a subsequent date should be reported immediately to the Board and their prior approval obtained for the changes.
- The management shall not have the authority to increase the net retention of the insurer either through failure to place reinsurance or through placement of reinsurance on terms different from the terms of the original risk, without prior written approval of the Board of Directors.
- An insurer shall 'not go on risk' without the required reinsurance having been fully placed.

During a review of reinsurance operations of the Company, it was observed that the Company suffered loss of ₹ 9.93 crore in one case due to excess retention of risks beyond the limits specified in reinsurance programme and loss of ₹ 8.54 crore in another case due to underwriting the risk on terms different from that given by the reinsurers. The details of these two cases are as under:

(i) The Company issued a special contingency policy to M/s Neo Sports Broadcast Private Limited covering the risk of loss of revenue in broadcasting three live One Day International (ODI) cricket matches between India and Australia held on 17 October 2010 at Kochi, 20 October 2010 at Vizag and 24 October 2010 at Goa. Two claims occurred under the policy due to cancellation of the first and third ODI cricket matches at Kochi and Goa.

Audit observed that the Company did not reinsure the risks as per reinsurance programme for that year. As per reinsurance programme, the net retention of the risk in respect of first ODI cricket match should have been only 28.47 *per cent* while the Company retained 56.24 *per cent* of the risk in its net portfolio resulting in excess retention of risk by 27.77 *per cent* without any recorded justification. Similarly, there was additional retention of risk by 23.33 *per cent* (47.62 *per cent* instead of 24.29 percent) in respect of third ODI cricket match. This additional retention of risk in its account was in violation of IRDA circular on Corporate Governance, 2004 according to which the Company should not have gone on risk without the required reinsurance having been fully placed. This resulted in loss of ₹ 5.60 crore (27.77 *per cent* of claim amount of ₹ 20.17 crore) and ₹ 4.33 crore (23.33 *per cent* of claim amount of ₹ 18.56 crore) in respect of first and third ODI cricket matches, respectively, totaling ₹ 9.93 crore.

Management accepted additional retention which was a result of policies being issued from two different locations due to which accumulation of risk was not noticed at the time of inception of risk and added that to avoid recurrence of such errors, the Company had taken steps to centralise approvals for cricket matches.

(iii) The Company issued a Comprehensive Mega Risk Policy to M/s Krishak Bharti Co-operative Limited for the period 1 April 2006 to 31 March 2007 covering the risk of Material Damage viz. Building, Stock, Plant & Machinery and Loss of Profit of the insured. There were two claims under the policy viz. Material Damage (MD) and Fire Loss of Profit (FLOP) for loss due to 'Flood' and 'Inundation' due to 'Heavy Rains' from 8 August 2006 to 11 August 2006 which were approved by the Company for ₹ 15.87 Crore (January 2009) and ₹ 13.33 Crore (November 2009) respectively.

Audit observed that the Company issued the Policy containing terms that were different from that given by the reinsurer for facultative support. As per 'reinsurance slip' of the reinsurer, the deductible* for MD was ₹ 3.5 Crore and the deductible for FLOP was profit for 21 days. The Company issued the Policy with ₹ 25 lakh as deductible for MD and profit for 14 days as deductible for FLOP. However, no justification for doing so was found recorded. No prior approval of the Board of Directors of the Company was obtained for such deviations which was in violation of IRDA circular on Corporate Governance, 2004.

The Company settled both the claims mentioned above after deducting ₹ 25 lakh and profit for 14 days from MD and FLOP respectively. Thus, the issuance of policy on different terms and conditions of deductibles (MD and FLOP) resulted in loss to the Company amounting to ₹ 3.25 Crore (₹ 3.50 Crore less ₹ 0.25 Crore) in MD claim and ₹ 5.29 Crore (₹ 15.86 Crore, deductible of profit for 21 days as per Reinsurer *less* ₹ 10.57 Crore, deductible of profit for 14 days as per policy issued) in FLOP claim totaling ₹ 8.54 Crore.

Management justified (September 2012) their decision of underwriting the risk with changed terms of deductibles as they had collected an additional premium of ₹ 79.78 lakh, going by the spirit of the guidelines of IRDA dated 28 September 2006 on collecting additional premium commensurate with the additional risk resulting from variation of terms, though no specific guidelines were available at the time of commencement of risk on 1 April 2006.

Reply of Management that there were no specific guidelines, is not acceptable in view of the fact that IRDA had issued the circular on Reinsurance Arrangement- Guidelines for

***** ***Deductible is the amount of expenses that must be paid 'out of pocket' by the insured before an insurer pays any expenses***

Good Corporate Governance in November 2004 i.e. well before commencement of risk. As per this circular, the Management of the Company did not have any authority to increase the net retention of the insurer without prior written approval of the Board. Thus the circular of September 2006, ibid, was subsequent to the policy. It directed the filing of full particulars, of such cases where insurer varied the terms from those quoted by the reinsurer, with IRDA, which was not done. Even after considering additional premium, the Company had suffered a loss of ₹ 7.74 crore in this case.

Thus, the Company suffered loss of ₹ 17.67 crore due to excess retention of risks in outward placements in the two cases.

The matter was reported to the Ministry in November 2012, their reply was awaited (March 2013).

PNB Housing Finance Limited

9.4 Doubtful recovery of loan due to inadequate scrutiny

Recovery of ₹ 24.82 crore has become doubtful due to inadequate scrutiny of a secured asset, relaxing the debt equity norms for sanction, non compliance with pre-disbursement conditions and deficient monitoring of Escrow Accounts.

PNB Housing Finance Limited (the Company) has been in the business of providing housing and non housing loans to individuals and corporate bodies since the last 25 years. During audit of construction finance at Corporate Office two instances of lapses came to notice because of which an amount of ₹ 24.82 crore has become doubtful of recovery:

A. Loan to Aura Infrastructure Private Limited

A term loan of ₹ 16 crore was sanctioned (December 2007) for undertaking the construction of seven blocks of 280 flats (Phase-1) out of a total of 14 Blocks, under the banner "Aura Chimera" at Ghaziabad at an estimated project cost of ₹ 38.60 crore with scheduled completion by March 2009. The loan was disbursed in four instalments between December 2007 and September 2008. The borrower defaulted in repayment of loan instalments from the first instalment itself (due in October 2009) as well as interest payment from May 2010. Project construction came to a standstill in the second half of 2009. As the loan account had become 'NPA' in January 2010, the Company took over possession of the secured asset (project land) in March 2010, but could not sell it because of involvement of third party interests who had filed a case against the borrower for non-delivery of flats booked. Work of construction was not completed till January 2013.

Following deficiencies were observed in this case:

- There was deficiency in assessment of the credit worthiness of borrower company, being recently incorporated (May 2006) at the time of sanction as corroborated by low net worth of ₹ 5.22 crore as compared to the total project cost of ₹ 38.60 crore. Also, the promoters were common to the other four group companies with a liability to complete 14 projects at hand.
- The loan was to be disbursed subject to receipt of the specified amount of promoter's contribution and customer's advances. However, the second, third and fourth instalments of ₹ 4 crore, ₹ 2 crore and ₹ 2 crore respectively were released despite the fact that promoters' contribution including advances from customers

were short of the specified amount by ₹ 14.76 crore, ₹ 13.03 crore and ₹ 7.07 crore respectively in violation of the prescribed condition for disbursements.

- As per special terms and conditions of project loans, 'Debt Equity' ratio was to be maintained within 2:1 during the period of loan. However, Company's treatment of unsecured loans as quasi capital instead of debt in violation of established accounting principles, resulted in sanction of loan at an extremely high debt equity ratio of 4.37:1.
- As per the terms of sanction, an Escrow account was to be opened by the borrower for depositing the sale proceeds of the project, from which only a specified amount was permitted to be withdrawn. However, the Company failed to monitor flow of funds into and withdrawals from the Escrow Account in violation of the sanction terms, which resulted in withdrawal of ₹ 17.32 crore (till October 2009) from the account by the borrower as against permissible limit of ₹ 8.03 crore. The Company did not ensure that the loan disbursed was utilized for the earmarked project. This was revealed during site visit by the officers of the Company (May 2010) for verification that the amount disbursed was utilised on all blocks including those in phase-II, instead of only seven blocks that were financed.

Management stated (July 2012 and September 2012) that:

- The credit worthiness and project evaluation was properly done before sanction.
- Disbursements were in order based on Chartered Accountant's and Architect's Certificates.
- Debt Equity Ratio (including quasi equity) was maintained at 2:1.
- Escrow Account was managed effectively and that the maximum amount of ₹ 15.18 crore was permitted for withdrawal therefrom.

Reply of the Management is not acceptable in view of the following:

- The credit worthiness of the borrower was not properly assessed, as being common promoters, they were burdened with the liability to finish 14 other projects, besides servicing the present loan.
- The project stage completion certification by the Architect (Aug 2008) as 79.4 *per cent* complete was incorrect, as the subsequent technical assessment by the Company (December 2010) revealed that the project was, approximately, 47 *per cent* complete.
- Treatment of unsecured loans as 'equity' was not as per established accounting principles.
- ₹ 15.18 crore was only a projected amount of advance to be received from customers and could not be construed as the maximum permitted amount to be withdrawn from Escrow Account.

B. Loan to AJS Builders:

A term loan of ₹ 4 crore was sanctioned (May 2008) for completion of construction of a residential project which had commenced in November 2005 in the name of "Media

Majestic Towers" at Ghaziabad. The project was to be completed by September 2008. The loan was disbursed in two instalments of ₹ 2 crore each in May 2008 and September 2008 respectively. The borrower defaulted in repayment of first instalment itself (November 2008), as well as in the interest payments from July 2009. The Company took over possession of the project land along with superstructure (July 2010). Aggrieved with the possession order, the flat allottees approached Debt Recovery Tribunal (DRT) (September 2010) in which the Company was made a respondent. DRT vide order dated 7 August 2012 set aside the possession of secured asset by the Company, as being bad in law. Company filed an appeal against the order of DRT as well as a criminal case against the borrower.

Following deficiencies were noticed in this case:

- Loan was advanced in May 2008 whereas construction had come to a halt in April 2007. The Company failed to verify the fact that the builder did not have permission to construct 9th and 10th floor as was revealed during proceedings of DRT (August 2012).
- The Company did not ensure fulfilment of pre-disbursement conditions on receipt of promoters' contribution and customer advances as there was a shortage of ₹ 88.71 lakh at the time of release of first instalment.
- As per the terms of loan sanction, the Company was to monitor the flow of funds into the Escrow Account. Though no deposits were made in the Escrow Account between May and September 2008, the Company released second instalment of ₹ 2 crore in September 2008.
- Though the building was already complete upto 9th floor, the Company failed to verify status of the superstructure and later it was found that individual flats were already mortgaged to other financial institutions (May 2005) by the buyers and taking over of possession of site by the Company under SARFAESI* Act was also quashed by the DRT (August 2012).

Management stated (July 2012) that:

- Disbursements were made after receipt of promoters' contribution.
- No amount was deposited in Escrow Account as payment of subsequent instalments by buyers could not materialise due to dispute between flat buyers and the Builder.
- The member's bookings did not create a mortgage in favour of banks who had given them the credit.

Management's reply is not acceptable in view of the following:

- There was a shortage of ₹ 88.71 lakh at the time of release of first instalment.
- An amount of ₹ 43.57 lakh was received from customers between the two disbursements which were not routed through Escrow Account. The Company overlooked this fact and released the second instalment.

* ***Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act 2002***

- The Company's action of taking over of the possession of the secured asset was quashed by the DRT in respect of the flats already sold due to the fact that it did not receive any title in respect of the same.

Thus, inadequate scrutiny of the secured asset's title, non compliance with pre-disbursement conditions and debt equity norm, deficient monitoring of Escrow Accounts and loan utilisation led to avoidable disbursement of loans of ₹ 24.82 crore (Principal ₹ 19.97[1] crore and interest ₹ 4.85[2] crore) whose recovery is doubtful.

The matter was reported to the Ministry in November 2012, their reply was awaited (March 2013).

SBI Cards and Payment Services Private Limited

9.5 Avoidable loss due to short payment of Service Tax

Avoidable payment of interest of ₹ 23.91 crore on delayed payment of ₹ 61.40 crore towards service tax due to lack of internal control.

SBI Cards and Payment Services Private Limited (the Company) is engaged in provision of Credit card services to the customers in India. The services provided by the Company were brought under the service tax levy from 16 July, 2001. The service tax was to be deposited with Service Tax Authorities on collection basis up to June 2011 and on accrual basis thereafter with the introduction of Point of Taxation Rules, 2011[3]. In accordance with Rule 6 of Service Tax Rules, 1994, the service tax was payable within 5 days of the month (6 days in case of electronic deposit of tax) immediately following the calendar month, in which payments were received for the value of taxable services up to June 2011, and thereafter, in which the service is deemed to be provided in terms of the Point of Taxation Rules. In case of delayed deposit of service tax, interest was payable on delayed deposit at the rate of 18 *per cent* per annum (13 *per cent* p.a. up to March 2011) as per Notification No.14/2011 – Service Tax dated 1 March 2011.

The Company was making payment of service tax amount collected from its non-delinquent customer on receipt basis (till June, 2011) and reversing its income including service tax amount on customer becoming delinquent. The Company on receipt of payment from such delinquent customers was required to deposit the service tax amount payable on such receipts.

The Company, however, failed to deposit service tax amounting to ₹ 36.63 Crore collected from delinquent customers for the period 2008-09 to 2010-11 which was deposited in April 2011 along with interest of ₹ 7.01 crore on delayed deposit of service tax for the period 2008-09 to 2010-11 in May 2011. The Company at the time of remittance of service tax (May 2011)informed the Service Tax Authority that it would investigate its IT system for any short payment of tax for the period 2006-08. The

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[1] ***₹15.97 from Aura Infrastructure and ₹4 crore from AJS Builders.***

[2] ***₹2.86 crore from Aura Infrastructure and ₹1.99 crore from AJS Builders***

[3] ***As per Point of Taxation Rules, 2011 - Point of taxation was:***

(a) ***the time when invoice for the service provided or to be provided was issued or fourteen days from the date of completion of provision of service, whichever is earlier;***

(b) ***in case of receipt of payment by service provider before time specified in (a) above, the time when payment is received.***

Company finally computed its service tax liability for the period 2006-07and2007-08 based on audited financial statements and deposited the differential tax liability of ₹ 24.77 crore in March 2012 along with interest of ₹ 16.90 crore, on delayed payment of differential amount of service tax for the period 2006-07 and 2007-08, in April 2012. Thus the Company incurred avoidable expenditure on payment of interest of ₹ 23.91 crore (₹ 7.01 crore + ₹ 16.90 crore) due to delayed payment of ₹ 61.40 crore (₹ 36.63 crore + ₹ 24.77 crore) towards service tax for the period from 2006-07 to 2010-11.

Management stated (September 2012) that IT systems of the Company deployed for computing service tax were deficient and added (October 2012) that it has duly rectified the process gap in IT systems which had resulted in involuntary short payment and had paid the applicable service tax liability from April 2011, in the normal course.

It was noticed in Audit, however, that the Company failed to take cognizance of continuously increasing trend in outstanding liability towards service tax appearing in the books of accounts (liability on account of service tax was ₹ 2.06 crore as on 31 March 2002 and it stood at ₹ 65.39 crore as on 31 March 2011) and defaulted in payment of statutory dues. Deficiency in IT system, if any, could have been remedied through internal audit of IT system had the Company made any attempt to ascertain the specific reasons for accumulation of liability towards service tax in the books of accounts.

Ministry stated (December 2012) that loss in the form of interest paid to the service tax authorities got compensated as the amount available in the Service Tax Payable Account contributed to the 'working funds' of the Company which resulted in a lesser bank borrowings and interest thereon.

Reply of the Ministry is not tenable as statutory dues are not meant for meeting working capital requirements of the Company.

Thus lack of internal control in ascertaining reasons for huge accumulation of liabilities towards service tax in the books of accounts led to avoidable payment of interest of ₹ 23.91 crore due to delayed payment of service tax of ₹ 61.40 crore for the years 2006-07 to 2010-11.

9.6 Avoidable expenditure on expired cards

Company incurred avoidable expenditure of ₹ 22.13 crore towards processing and management charges on expired cards

SBI Cards and Payment Services Private Limited (the Company) was incorporated as a Joint Venture between State Bank of India (SBI) and General Electric Capital Corporation (GECC) for issuing, sale and marketing of Credit Card products in India, under the brand name and logo of SBI, with 60 *per cent* equity participation of SBI and 40 *per cent* of GECC. The Company's responsibility was to develop a frame-work, strategy and policies for issuing Payment Products in consultation with GE Capital Business Process Management Services Pvt. Ltd. (GECBPMSL), the backend Company, which was formed as a Joint Venture simultaneously by SBI and GECC with 40:60 equity participation to undertake processing activities.

As per pricing agreement (June 2002) between the Company and GECBPMSL, the entire processing activities pertaining to Payment Products were to be exclusively undertaken by GECBPMSL. The Company was to pay a fixed amount per Card in Force (CIF) per annum for specialized credit card processing service charges. In addition, the Company agreed to reimburse business process management service charges on actual basis upto February 2011 and at the rate of ₹ 387 per CIF from March 2011 to March 2012. The pricing agreement was renewed annually.

The Company incurred excess expenditure of ₹ 22.13 crore towards processing and management charges on 1.40 lakh expired cards (1.03 lakh cards expired prior to April 2008, 0.32 lakh cards expired during 2008-09, 0.004 lakh cards expired during 2009-10 and 0.05 lakh cards expired during 2010-11) during 2008-09 to 2011-12 as detailed below:

Avoidable payment of back end charges on expired cards

Particulars/ date of expiry of cards	**Prior to April 2008**	**2008-09**	**2009-10**	**2010-11**
No. of cards	102578	32390	376	4733
Rate of payment (₹) for backend services*	1702.55 (a to f)	1322.77 (b to f)	1035.99 (c to f)	713.64 (d+f)
Total avoidable payment (in ₹)	17,46,44,174	4,28,44,520	3,89,532	33,77,658

Management stated (September 2012) that there was a 'valid up to' date mentioned on Credit Cards issued and as long as the customers continued to pay applicable fees, cards remained active till the date mentioned on the card. Avoidable payment pointed out above, however, is on account of cards whose validity had already expired.

The matter was reported to the Ministry in December 2012, their reply was awaited (March 2013).

The New India Assurance Company Limited

9.7 Settlement of fire claim arising from acceptance of avoidable liability through imprudent risk underwriting

The New India Assurance Company Limited issued a Standard Fire and Special Peril Policy covering the finished goods stock of jute and hessian materials of the insured overlooking a vital requirement that jute godowns should be detached from process block, so essential for deciding on the eventual acceptance of risk, resulting in settlement of an avoidable claim of ₹ 6.91 crore.

Divisional Office – VIII, Kolkata of The New India Assurance Company Limited (NIACL) issued a Standard Fire and Special Peril Policy to M/s Hoogly Mills Company

*

Rate of backend service charges per CIF/Year	2008-09	2009-10	2010-11	2011-12
Specialized card processing excluding Service tax(ST)	338	260	260	260
Business process management excluding ST	-	-	32.25	387
Rate of Service Tax	12.36 *per cent*	10.30 *per cent*	10.30 *per cent*	10.30 *per cent*
Specialized card processing including ST	379.78 (a)	286.78 (b)	286.78 (c)	286.78(d)
Business process management including ST			35.57 (e)	426.86 (f)

Limited (the insured) covering their stock of finished goods (jute and hessian materials) held at Gondalpara Unit for the period from 1 April 2008 to 31 March 2009. A claim was lodged by the insured for damage of finished goods stock held in 'Broad Loom Shed' due to fire on 14 May 2008 which was settled on 17 June 2009 for an amount of ₹ 6.91 crore.

The policy covering stock of finished goods in various godowns and/or sheds within the mill premises for a sum insured value of ₹ 14 crore was issued subject to the stipulation that jute godowns be detached from process block. Add on cover for Spontaneous Combustion was also obtained by the insured under the stated policy.

It was observed in audit that the entire mill was segregated into main mill block, raw material godown, finished goods godown (comprising separate units numbered 8, 9, 17, 18 & 21), yarn shed godown, and broad loom shed cum finished goods godown. The broad loom shed cum finished goods godown was under single common roof with no partition or demarcation. Though all the above godowns were separated from each other, 50 *per cent* of stock of finished goods were being stored in a part of the Broad Loom shed. No demarcation/separation was there for the portion used as looming section installed with looming machinery.

Final Surveyor had opined in his report that the Broad Loom shed was divided into five equal bays out of which two bays were occupied for storage of finished goods and the remaining three bays were installed with (a) conventional looms for weaving Quality Hessian Fabrics and for value added products and (b) precision winding machines for compact winding of yarn. It was also observed by the Surveyor that (a) the fire could have been caused by short-circuiting, (b) in three out of five bays being used for weaving, the fluff which had accumulated in the area had acted as a fuse for the fire to spread fast, and (c) the entire power distribution i.e. Power Cables, Distribution Boards and the Switches were totally damaged by the fire.

Tariff Advisory Committee (TAC) accredited auditor, while calculating the probable maximum loss had observed from the stock position that 50 *per cent* of the total stock of finished goods was kept in the 'Broad Loom Shed' and the remaining 50 *per cent* was stored in the other godowns and that in case of fire, the probable maximum loss of finished goods in the 'Broad Loom Shed' would be about 90 *per cent* whereas in the other seven godowns which were detached from the main mill block it would be around 75 *per cent* of the declared value of stock.

It was also noted that even though the property was previously insured with United India Insurance Company Limited (UIICL), details of premium collected and claims lodged over the last three years were not obtained long before underwriting the risk or settling the claim.

It is thus evident that underwriting of the risk was imprudent on the following grounds:-

(i) the condition imposed in the policy that jute godowns be detached from process block was not capable of being met by the insured given the nature of construction of the 'Broad Loom Shed',

(ii) risk was underwritten (w.e.f.1 April 2008) prior to risk inspection (16 April 2008) being carried out by the Tariff Advisory Committee (TAC) accredited auditor,

(iii) claim experience details from the previous insurer (UIICL) were not obtained,

(iv) even though the risk inspection report mentioned that the probability of loss was higher in the case of finished goods stored in the 'Broad Loom Shed', steps were not taken by the insurer to intimate the insured to ensure removal of the stocks from the 'Broad Loom Shed', thereby minimising the probable risk.

The Management stated (September 2012) that:

- Underwriting of the risk was acceptable as the stocks mentioned in the policy were essentially covered as they were stored within the premises of the jute mills which further establishes that godowns, irrespective of whether being attached to or detached from process blocks, are covered under the policy for which a rate of ₹3.15 per mille was charged pursuant to Risk Code 111 of Section 4 of the Company's Internal Guide Rates (applicable w. e. f. 01.01.2008).
- Even if audit observed some godowns as attached, acceptance of the risk was not rendered incorrect since the rate charged was adequate for stocks located within the compound of the mills.

The reply of the Management is not acceptable in view of the following:

- Vital factors, i.e. specific stipulation in the policy regarding detachment of jute godowns from process blocks, timely conduct of risk inspection and consideration of past claim experience were totally ignored prior to underwriting the risk.
- The rate charged coupled with the rider provided in the form of detachment of jute mills from process blocks did not in any manner establish that godowns irrespective of whether being attached to or detached from process blocks, were covered under the Policy as contended by the management.

Thus, imprudent underwriting by NIACL without considering the related risk factors resulted in settlement of a fire claim for ₹ 6.91 crore, which could have been avoided had the policy not been underwritten, given the layout of the 'Broad Loom Shed'.

The matter was reported to the Ministry in October 2012, their reply was awaited (March 2013).

CHAPTER X: MINISTRY OF PETROLEUM AND NATURAL GAS

GAIL (India) Limited and Indian Oil Corporation Limited

10.1 Abandoned E&P Projects

10.1.1 Introduction

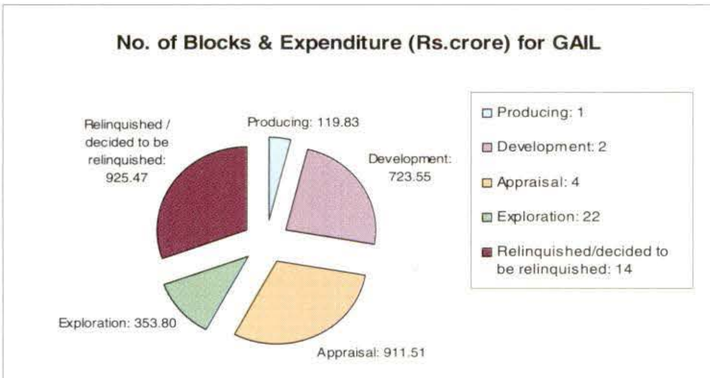
Oil and Gas industry comprises two sectors viz. 'upstream' i.e. Exploration & Production (E&P) of oil & gas fields/blocks and 'downstream' i.e. refining and processing of crude oil and natural gas, their distribution and marketing of petroleum products.

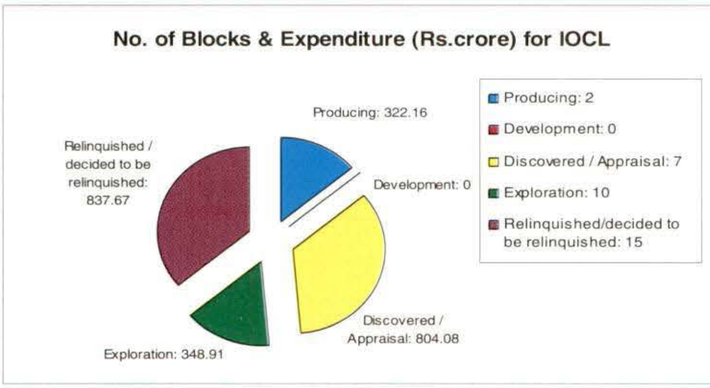
Govt. of India (GOI), till 1999, had been awarding E&P blocks only to National Oil Companies (NOCs) viz. Oil and Natural Gas Corporation Limited (ONGC) and Oil India Limited (OIL) on nomination basis or to foreign and domestic private companies through competitive bidding with 30 *per cent* interest of NOCs.

After award of Navratna status (1997) and introduction of New Exploration Licensing Policy (NELP) in 1999, IOCL and GAIL entered into E&P activities (1999) and started investing in domestic/overseas E&P projects either by way of acquiring Participating Interest (PI) in existing E&P blocks through farm-in* or by participating in bidding rounds for E&P blocks. IOCL and GAIL had acquired 77 E&P blocks (GAIL 43 and IOCL 34) involving an expenditure of ₹ 5346.98 crore till 28 February 2013 (**Annexure-II & III**) out of which, the companies were operator/joint-operator in five blocks and non-operator in the remaining blocks. The companies were having five E&P blocks under development & production, 43 under exploration/appraisal and 29 blocks had either been relinquished or decided to be relinquished on account of non-discovery of hydrocarbon as shown in table/graph below:

Status	No. of blocks			Amount (₹ in crore)		
	GAIL	IOCL	Total	GAIL	IOCL	Total
Producing	1	2	3	119.83	322.16	441.99
Under Development	2	-	2	723.55	-	723.55
Discovered / Appraisal	4	7	11	911.51	804.08	1715.59
Under Exploration	22	10	32	353.80	348.91	702.71
Relinquished / decided to be relinquished	14	15	29	925.47	837.67	1763.14
Total	**43**	**34**	**77**	**3034.16**	**2312.82**	**5346.98**

* *An arrangement whereby one E&P Company "buys in" or acquires an interest in an existing E&P asset or lease or concession owned by another party.*





10.1.2 Audit objectives, scope & methodology

Audit of "Abandoned E&P Projects" of GAIL and IOCL was conducted to assess the adequacy of systems followed by these companies for identification, appraisal and evaluation of investment opportunities and internal control mechanism in these companies as non-operator. Audit covered the period April 2006 to February 2013.

Audit examined records of all 26 E&P blocks relinquished / decided to be relinquished (during the period covered by audit) by these companies after incurring an expenditure of ₹ 1760.41 crore out of a total investment of ₹ 5346.98 crore. Though the focus of Audit was on abandoned assets of GAIL and IOCL, views of ONGC and OIL have also been obtained and incorporated in respect of Blocks where these companies were lead players.

In order to benchmark the audit findings with standard practices followed by other E&P companies for acquisition of E&P blocks, Shri P.K. Chandra, former Vice Chairman and Advisor to ONGC, was engaged as technical expert for expert opinion on audit observations.

10.1.3 Audit Findings

Though IOCL and GAIL made an investment of ₹ 5346.98 crore (till February 2013) in E&P assets, these Companies neither had a defined/documented policy nor laid down procedure for their E&P activities. However, GAIL formulated "Criteria for evaluation of E&P opportunities' in 2006 only for preliminary selection of E&P opportunities but it is silent about the detailed due diligence of selected E&P opportunities or revalidation of reservations/limitations expressed, if any, by in-house/outside consultants on block's prospectivity. IOCL specifies year-wise benchmark hurdle rates of IRR for E&P

investment proposals but it is silent about the evaluation of E&P opportunities before participation.

Irregularities noticed in 11 relinquished blocks (inclusive of three blocks common for IOCL and GAIL) are discussed in succeeding paragraphs:

10.1.3.1 Loss of ₹473.57 crore on account of avoidable exposure to risk – GAIL

Consortium of GAIL and Gazprom was awarded Block 26 (NEC-OSN-97/1) in Bengal offshore with equal PI (50 *per cent* each) under NELP-I round for which Production Sharing Contract (PSC) was signed in October 2000.

Audit observed that in order to participate in NELP, Board of Directors (Board) of GAIL in its 136^{th} meeting had decided (February 1999) to acquire a moderate eight to 10 *per cent* PI in selective E&P blocks by participating with reputed E&P partners. Pursuant to 48 E&P blocks being offered (January 1999) under NELP, GAIL's in-house team visited (March 1999) DGH's data room for carrying out a preliminary evaluation of offered blocks and recommended six E&P blocks for bidding which did not include Block 26 (NEC-OSN-97/1). However, as a follow-up action of Fifth Session of Indo Russian Working Group on Cooperation in Oil & Gas Sector and meeting of Petroleum Minister with vice Chairman of Gazprom in Moscow (October 1998), Board of Directors of GAIL accorded approval (July 1999) for submission of joint bid for two blocks (Block no. 25 and 26) with Gazprom with equal PI of 50 *per cent* initially and also decided that GAIL would offload 30 to 35 *per cent* of its PI to third party in the event of winning the bid. The consortium succeeded in getting one block i.e. Block 26.

Audit examination also revealed that:

- Gazprom, in first Management Committee (MC) meeting, assigned operatorship to its subsidiary Zarubezhneftegaz (ZNG);
- ZNG did not have exploration / operatorship expertise and largely depended upon Gazprom;
- GAIL failed to make use of control mechanism stipulated in Joint Operating Agreement (JOA) as majority of decisions were taken unilaterally by ZNG at Moscow and GAIL was intimated through circular resolutions;
- GAIL did not off-load a part of its PI to third party which was in contravention of Board's approval;
- Against Minimum Work Programme (MWP) of drilling one well in Phase-II, ZNG drilled two wells. The MWP of Phase-I and II was completed with delay of 9 and 11 months respectively due to various operational problems and Company's share in MWP expenditure increased drastically from ₹ 81.65 crore to ₹ 473.57 crore.

As hydrocarbon was not discovered in two drilled wells and MWP of Phase-II was completed, GAIL decided (October 2007) not to enter into Phase-III and exited from the block. Thus, due to non-adherence to Board's directive to offload a part of its stake to third party and participate with an experienced partner, GAIL had to suffer a loss of ₹ 473.57 crore.

GAIL replied (December 2011 and January 2013) that the need to off-load part of its PI was not felt as the block was perceived to be gas prone. Ministry endorsed (September

2012) the reply of GAIL adding that the Management wanted to make gas discovery in the block before farming out[1].

GAIL/Ministry's replies are not acceptable as no other E&P player had submitted a bid for this block indicating that the block was not prospective. Further, decision of not off-loading part of PI in view of prospectivity is also not acceptable being against own approved strategy of holding a moderate PI of eight to 10 *per cent.*

Our technical expert opined that being a new entrant in E&P business, GAIL should have restricted its participation. Further, ZNG was new in the Indian domain and also not a big operator.

10.1.3.2 Loss of ₹37.22 crore due to non-revalidation of data - GAIL

Daewoo International Corporation (DIC) offered (July 2008) 20:10:10 farm-out PI out of its 100 *per cent* stake in Block AD-7, Myanmar to ONGC Videsh Limited (OVL), GAIL and Korean Gas Corporation respectively being its JV partners in Blocks A-1 & A-3, Myanmar.

Audit observed that despite reservation of GAIL's in-house team regarding geological risk in the block in view of unproven G-7 sand in adjoining blocks A-1 & A-3, Board of Directors accorded approval (October 2008) for acquisition of 10 *per cent* PI with an investment upto US$ 8,926,825 (equivalent to ₹ 40.17 crore @ ₹ 45 per US$) including 'past costs'[2].

Further, before participating in this block, GAIL had not carried out due diligence at its end and had relied on OVL's decision of acquiring 20 *per cent* stake in this block which itself was deficient in view of the fact that there was a difference of opinion between two technical teams of OVL on block's prospectivity. OVL's technical team of geoscientists had assessed (11 August 2008) potential reserves of 6.53 Trillion Cubic Feet (TCF) while G&G Group of OVL had opined (18 August 2008) that sands considered for reserve estimates had shaled out in major part of A1/A3 block as a result of which established pools were not expected to be present and reserves evaluated by the technical team were based on untested and un-established sand and on thin study. This was also pointed out in Performance Audit Report No.28 of 2010-11 on "Joint Venture Operations of ONGC Videsh Limited". However, while informing its decision of acquiring stake in this asset, OVL did not share the above reservations with GAIL.

Operator drilled two wells and decided to relinquish the block in view of 'no discovery'. Accordingly, GAIL also decided (January 2009) to relinquish the block. Thus, due to non-revalidation of data and dependence on OVL, GAIL had to suffer a loss of ₹ 37.22 crore.

GAIL replied (September 2010, December 2011 and January 2013) that it did not think it necessary to carry out its own due diligence as OVL was having significant experience in this field and was under the same Ministry. It had strategically taken the risk as block AD-7 was adjacent to A-1 & A-3 blocks and in case of even a small discovery, it could have been developed in tandem with these blocks thereby improving the economics of the block. Ministry endorsed (September 2012) the reply of GAIL.

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[1] ***The assignment of a part or all of an oil, natural gas or mineral interest to a third party.***

[2] ***It refers to the cost which has already been incurred by the existing owner(s) and is intended to be passed on to the subsequent buyer.***

GAIL/Ministry's view point is not acceptable as GAIL is an independent entity with its own corporate strategy for E&P activities. The fact that OVL did not share information about difference in views of its two technical teams on prospectivity of the block also underlines the importance of independent evaluation by GAIL.

Our technical expert also opined that in case of high risk perceptions, the Company's own or third party assessment was more important which was not done in this case.

10.1.3.3 Wasteful expenditure of ₹47.37 crore due to non-revalidation of data- GAIL

Ministry of Oil & Gas, Sultanate of Oman had announced acreage opportunity for five E&P blocks (i.e. Block No. 54, 55, 56, 57 and 58). GAIL submitted joint bid (January 2006) for Blocks 56 & 58 with 25 *per cent* PI along with OILEX (as operator), Videocon (both with PI of 25 *per cent*) and HPCL/BPCL (both with PI of 12.5 *per cent*). However, the consortium was awarded only Block 56.

Audit observed that after reviewing the data of offered blocks (i.e. Block No. 54, 55, 56, 57 and 58), GAIL's advisor had ranked Blocks 57and58 higher than other blocks in terms of prospectivity. On the other hand, OILEX through its consultant M/s Saitta Petroleum Consultants Pvt. Ltd. (SPCPL) evaluated Block 56 as more prospective than other blocks adopting non-conventional[1] geological model. However, after discussion with SPCPL/OILEX, GAIL's advisor concluded that data of earlier drilled four wells in Block 56 did not substantiate SPCPL's hypothesis. Despite this, GAIL, instead of going for revalidation of SPCPL's hypothesis from an outside technical consultant, submitted joint bid with aggressive bidding strategy[2] and heavy work commitment (i.e. drilling of 11 wells in initial exploration period).

Operator drilled seven wells and succeeded in discovering oil only in two wells. After analyzing data of drilled wells and quality of oil, it was concluded that main reservoir was absent, oil was of heavy quality and the discovery was considered commercially unviable. The consortium decided (March 2010) to relinquish the block and GAIL also relinquished (June 2010) the block. Revalidation of data would have prevented wasteful expenditure of ₹ 47.37 crore.

GAIL replied (December 2011 and January 2013) that opinions on the block had already been obtained by OILEX and Videocon from two reputed consultants and therefore the need for another opinion was not felt. Ministry endorsed (September 2012) GAIL's reply.

GAIL/Ministry's replies are not acceptable as GAIL should have gone in for revalidation of SPCPL's hypothesis from an independent technical consultant instead of relying upon OILEX's evaluation especially when its advisor had already cautioned that data of earlier drilled four wells did not substantiate OILEX's hypothesis about block's prospectivity.

Our technical consultant opined that high risks should give high return whereas this block carried high risk with moderate returns and yet GAIL went ahead with aggressive bidding. GAIL, being new entrant in E&P, should have gone in for conventional model instead of non-conventional geological model. Moreover, in high risk blocks especially

[1] ***Conventional model evaluates the presence of individual elements quality and quantity based on presence of all the five elements (Source, Reservoir, Seal, Entrapment and Migration) which complete a 'Petroleum System'. Non-conventional geological model means that any of the above elements is not considered for prospectivity evaluation or deviation from generally acceptable principles.***

[2] ***It is an investment strategy characterized by willingness to accept above-average risk in pursuit of above-average returns.***

when initial assessment was not favorable, GAIL should have sought an independent assessment before venturing in the block.

10.1.3.4 Loss of ₹182.88 crore due to farm-in in risky block – IOCL

Block CR-ON-90/1, located in Cachar basin, lower Assam was awarded (1998) to consortium of Essar Oil (55 *per cent* PI with operatorship), HOEC (20 *per cent* PI) and Tullow Oil (25 *per cent* PI) prior to NELP. Later on, Premier Oil acquired (July 2002) 84 *per cent* PI along with 'carry finance'* of Essar Oil's PI of 16 *per cent*. Subsequently, Premier Oil offered (February 2003) 35 *per cent* PI along with proportionate carry finance share of Essar Oil including 'past costs' to IOCL. Board of Directors of IOCL accorded approval (January 2004) to acquisition of stake at a cost of US$ 16.01 million (including Essar Oil's carry finance share of US$ 2.56 million) and agreement for the same was entered into in April 2004.

Audit observed that till 1980, wells numbering seven (five by Burmah Oil and two by ONGC) had been drilled in the same structure but none was completed due to 'overpressure'. However, while obtaining Board's approval (January 2004) for 'farm-in', the Board was informed about Premier Oil's offer, block's prospectivity, cost estimates and obligations etc. but was not apprised about the 'overpressure' problem and earlier drilling failures. The operator did not acquire adequate seismic data even after a lapse of six years (1998 to 2004) before the 'farm-in' (2004) and was also not able to properly image the complex structures or identify a robust prospect for drilling in Phase-II.

The operator drilled one well but could not discover hydrocarbons and decided to withdraw from the block. Accordingly, IOCL also decided (December 2007) to relinquish the block. Thus, due to inadequate due diligence, IOCL had to suffer a loss of ₹ 182.88 crore.

IOCL replied (January 2012) that before farming-in, it had appointed M/s PGS Reservoir Consultants (UK) and decision for 'farm-in' was based on prospectivity of block as advised by consultant as well as its own geoscientists.

Ministry endorsed (September 2012) IOCL's reply.

IOCL/Ministry's replies are not acceptable as IOCL had not considered the overpressure problem prevailing in the block and was aware that operator did not have adequate seismic data.

Our technical expert opined that due diligence was lacking in view of the fact that commercial gas/oil possibility did not exist at such high 'mud pressure' and also stated that results of previous exploration of the block by ONGC were not encouraging.

10.1.3.5 Loss of ₹54.76 crore due to over-reliance on operator – OIL, ONGC, GAIL & IOCL.

Consortium of OIL (40 *per cent* PI with operatorship) and ONGC, GAIL & IOCL (20 *per cent* PI each) was awarded (July 2001) block MN-ONN-2000/1 located in Mahanadi

* ***Carry finance is an arrangement in which one party (carrying party) agrees to pay for a portion or all of exploration and development expenditure of another party (carried party) on a property. Carrying party would be able to recover specified amount of costs only in the event of production from the property.***

basin, Orissa under NELP-II round. Subsequently, OIL offloaded 15 *per cent* share to M/s Suntera Resources Limited and retained only 25 *per cent* stake in the block.

Audit observed that this block had been explored by OIL during late eighties and was relinquished in view of low prospectivity. Further, this block was under Category-III i.e. un-prospective basin for hydrocarbon discovery and economic analysis of the block indicated that the prospects were not economically viable. OIL also could not map the identified structural leads with confidence due to poor quality of seismic data.

The above facts clearly indicated that the block was highly risky and needed detailed evaluation before participation especially in view of withdrawal of IOCL's JV partner i.e. Premier Oil before bidding (March 2001) on the grounds that this block was not attractive enough. Despite this, C&MD approved (March 2001) submission of bid without detailed technical evaluation of prospectivity and project economics. Further, while obtaining Board's ex-post facto approval (May 2001) for submission of bid, the Company did not apprise the said facts except indicative techno-economic analysis and withdrawal of Premier Oil.

GAIL also submitted joint bids with approval (March 2001) of C&MD for this block without going in for detailed due diligence at its end despite the fact that its team of geoscientists had reviewed the data of 25 offered blocks but had not recommended the block for bidding. Further, while obtaining Board's ex-post facto approval (April 2001) for submission of bid, the Company did not apprise the said facts except that it had participated on the basis of offer of ONGC and OIL.

The block had to be relinquished (January 2009) due to non-discovery of hydrocarbons. An expenditure of ₹ 13.85 crore, ₹ 10.44 crore, ₹ 16.62 crore and ₹ 13.85 crore was incurred by IOCL, GAIL, OIL and ONGC respectively.

Both GAIL and IOCL replied that they had relied upon expertise of OIL. Ministry endorsed (September 2012) replies of GAIL and IOCL.

GAIL/IOCL/Ministry's replies are not acceptable as revalidation of data from outside technical consultant was essential rather than relying on experience of the operator especially in view of no discovery in previous exploration efforts in the block.

OIL replied (September 2012) that earlier drilling efforts had shown hydrocarbon indications and development of structural and stratigraphic traps were also expected in the block. Further, new generation data recorded and processed with latest technology was expected to reveal the best prospects.

OIL's reply is not acceptable as its consultant had categorized (May 2005) the probability of success of two reservoirs under 'condemned' category, three reservoirs under 'very poor' and one reservoir under 'poor' category. Further, OIL did not ensure application of stated better technology in capturing of 2D seismic survey and its interpretation.

Our technical expert opined that though OIL had experience, it was not prudent for GAIL and IOCL to rely upon their assessment without an independent assessment.

10.1.3.6 Infructuous expenditure of ₹279.93 crore apart from LD of ₹30.07 crore – ONGC & IOCL.

Block MB-OSN-2000/1, located in Mumbai basin was awarded (July 2001) under NELP-II round to consortium of ONGC (as operator), IOCL and Gujarat State Petroleum Corporation (GSPC) with PI of 75 *per cent*, 15 *per cent* & 10 *per cent* respectively.

Audit observed that previously (1972 to 1995) ONGC had explored this block and drilled eight wells. Test results of four wells had shown marginal indications of hydrocarbon prospectivity and the block was relinquished due to lack of prospectivity. However, ONGC acquired the block again presuming presence of source rocks and development of good reservoirs based on earlier drilling results instead of revalidation of the same from outside technical consultant. IOCL relied upon ONGC's assessment which was based on old data and did not go in for detailed due diligence at its end. Approval from C&MD was obtained (March 2001) for submission of joint bid without evaluating project economics. Further, above facts were also not apprised to the Board while obtaining its ex-post facto approval (May 2001) for submission of bids.

The operator drilled only three wells as against a commitment of five wells in Phase-I. DGH imposed LD of USD 74,25,386 (equivalent to ₹ 33.41 crore) in which share of IOCL and ONGC worked out to ₹ 30.07 crore. After obtaining extension, the operator drilled remaining wells but due to 'no discovery' of hydrocarbon in any of the drilled wells; the consortium decided (August 2008) to relinquish the block resulting in infructuous expenditure of ₹ 45.74 crore and ₹ 234.19 crore by IOCL and ONGC, respectively, apart from LD payment of ₹ 30.07 crore.

IOCL replied (January 2012) that normally investment decision was based on recommendation of lead partner, represented in all cases by an experienced upstream player and did not think it necessary to carry out independent due diligence. Ministry endorsed (September 2012) IOCL's reply.

IOCL/Ministry's replies are not acceptable as ONGC's assessment was based on old data and the block was relinquished earlier due to lack of prospectivity.

ONGC replied (January 2013) that though earlier drilling efforts had not yielded success, it indicated presence of source rocks and development of good/excellent reservoirs.

ONGC's reply is not acceptable as the test results of four of earlier drilled eight wells had not shown significant indication of hydrocarbons prospectivity. Our technical expert also opined that absence of hydrocarbons in the basin due to 'no mature source rock' should have been concluded much earlier when ONGC had data of earlier drilled eight wells in the region.

10.1.3.7 Infructuous expenditure of ₹ 74.64 crore on acquisition of a risky block having no history of hydrocarbon discovery – ONGC & IOCL.

ONGC (70 *per cent* PI with operatorship) and IOCL (30 *per cent* PI) were awarded (April 2001) block GV-ONN-97/1 in Ganga Valley, Uttar Pradesh by Govt. of India under NELP-I round.

Audit observed that this block had already been explored by ONGC (1962 to 1992) and five wells had been drilled but no discovery could be made. Further, ONGC and IOCL were aware that the Ganga Valley Basin had not shown any indication of oil despite having been explored for the last 40 years. Ganga Valley basin data was analyzed

(November 2000) by IOCL's technical team which had also concluded the above facts apart from mentioning that each stratigraphic unit needed to be mapped in detail throughout the area. However, IOCL relied upon ONGC's assessment and did not go in for detailed due diligence.

Audit also observed that the operator decided to enter into Phase-III, without completing the drilling of first well in Phase-II, which entailed drilling of one more well in Phase-III thereby increasing commitment cost that too without appraising the drilling results of the first well. Due to 'no discovery of hydrocarbon', the block had to be relinquished (July 2008) rendering wasteful an expenditure of ₹ 22.01 crore and ₹ 52.63 crore by IOCL and ONGC respectively.

IOCL replied (January 2012) that normally its investment decision was based on recommendation of lead partner, represented in all cases by an experienced upstream player. Ministry endorsed (September 2012) IOCL's reply.

IOCL/Ministry's reply is not acceptable as conducting proper due diligence was imperative in view especially of poor history of hydrocarbon discovery in the area.

ONGC replied (January 2013) that indications of oil as well as gas in earlier drilled wells strengthened the belief of presence of petroleum system in this play [♠]of Ganga Basin. ONGC as a National Oil Company had the dual role of carrying out profitable business as well as venturing into high risk frontier areas like Ganga Valley.

ONGC's reply is not acceptable as it had drawn two different conclusions on the same data. Further, indications of oil and gas in earlier drilled wells were not such as to justify bidding for this block.

Our technical expert opined that during initial years, IOCL should have obtained proper expert advice before venturing into such risky blocks and IOCL should have been more prudent to safeguard public money.

10.1.3.8 Infructuous expenditure of ₹ 276.87 crore (Blocks MB-OSN-2004/1 & MB-OSN-2004/2) – IOCL & GAIL

Consortium of IOCL, GAIL, GSPC, Petrogas and HPCL with equal PI i.e. 20 *per cent* each was awarded (2007) two blocks viz. MB-OSN-2004/1 and MB-OSN-2004/2, located in Mumbai Basin under NELP-VI round, with operatorship to GSPC and Petrogas respectively.

Audit observed that:

- initially (August 2006) IOCL had formed consortium with Medco International Petroleum Limited (lead partner), Kuwait Energy KCS and Kuwait Foreign Petroleum Exploration Company for submitting joint bids. Accordingly, it purchased basin and well data dockets and engaged Gaffney, Cline & Associates (GCA) for detailed technical evaluation;
- GCA pointed out that many parts of the basin had earlier been explored intensely but no hydrocarbon discoveries had been made except for some indications of hydrocarbon; prospects identified were considered 'high risk' as it was difficult to

[♠] ***An area in which hydrocarbon accumulations or prospects of a given type occur.***

identify stratigraphic prospects from existing 2D seismic data and no zones had been tested so far;

- Medco, after studying GCA's findings, informed (August 2006) block-wise reservations to IOCL and expressed its inability to participate in any of these blocks. Therefore, it withdrew from the consortium along with other partners.

In view of the withdrawal of its initial consortium partners, IOCL, without disclosing Medco's reservations, approached (September 2006) GAIL for joint participation in blocks MB-OSN-2004/1 & MB-OSN-2004/2 and formed a new consortium with GAIL, GSPC, Petrogas and HPCL. IOCL, while obtaining Board's approval (February 2007) for signing of PSC for these blocks, had not apprised the latter about the risks/limitations expressed by its consultant GCA or its earlier lead partner (i.e. M/s Medco).

GAIL had engaged M/s Exploration Consultants Limited (ECL) as consultant for preliminary study of the blocks offered under NELP-VI. ECL short-listed the above-said blocks but recommended detailed evaluation of these blocks before bidding. However, instead of conducting the same it relied on study carried out by IOCL through GCA but without revalidating the reservations as expressed by GCA and acceded to IOCL's belated/hurried request for joint participation.

Consortium drilled three wells in each block but did not discover hydrocarbons and decided (March 2012) to relinquish the blocks. Accordingly, IOCL & GAIL decided to relinquish the blocks rendering an expenditure of ₹139.12 crore (₹ 68.09 crore and ₹ 71.03 crore) by IOCL and ₹ 137.75 crore (₹ 66.43 crore and ₹ 71.32 crore) by GAIL wasteful.

IOCL replied (November 2012) that it had not shared Medco's reservations with its new consortium partners as the same would have prejudiced/biased their independent technical opinion. GAIL replied (November 2012) that it had considered the studies carried out by IOCL and did not go in for separate study in order to save time and cost on the second stage detailed evaluation study.

Replies of both IOCL and GAIL are not acceptable as not parting with crucial information by IOCL restricted GAIL from taking an informed decision. GAIL should have conducted detailed evaluation instead of relying on studies carried out by IOCL.

10.1.3.9 Non-revalidation of data

(a) National Oil Corporation of Libya invited bids (2004) for 15 E&P blocks from International Oil Companies. For participating in the bid, IOCL formed consortium with OIL (as operator) with equal PI (i.e. 50 *per cent* each). M/s. ECL was engaged by the consortium for pre-acquisition detailed technical study of short-listed eight blocks. Accordingly IOCL submitted a joint bid with OIL and succeeded in award of one block i.e. Block-86.

Audit observed that 12 wells were drilled earlier in the area but no major oil shows had been recorded on the Uaddan platform, the only exception being 'shows in good porosity/low permeability' in the B1-10 well of Area 86. M/s ECL had also pointed out a number of exploration risks i.e. limited charge volume from the kitchen; prospectivity limited to extreme eastern portion of the area; probably minor source rock kitchen area and possibility that shallower reservoirs on the Uaddan Platform were flushed with meteoric waters. However, IOCL participated in this block without revalidating these risks/limitations at its end and also, while obtaining ex-post facto approval from the Board, had apprised only about submission of bid, technical evaluation as carried out by ECL but did not apprise the Board about the reservations expressed by ECL.

Operator drilled two wells and found no hydrocarbon. The block was relinquished rendering infructuous the expenditure of ₹ 91.68 crore and ₹ 96.31 crore by IOCL and OIL respectively.

(b) 43 E&P blocks were offered (2005) by National Oil Corporation of Libya under second round of EPSA-IV bidding. IOCL and its consortium partner viz. OIL, after reviewing the available geological information, short-listed 10 blocks and engaged ECL for detailed technical evaluation. ECL recommended six blocks for bidding. However, IOCL, submitted joint bids with OIL (as operator) with equal PI (i.e. 50 *per cent* each) for two blocks viz. Block 102/4 & Block 81/2 and succeeded (October 2005) in one Block i.e. 102/4.

Audit observed that previously (1963 & 1984) two wells were drilled in the area apart from drilling (1975 and 1981) of two wells nearby. Due to 'no discovery' of hydrocarbon, all these were plugged and abandoned. Further, M/s ECL had pointed out several exploration risks i.e. biodegradation and flushing risk, shallow structures with possibility of loss of charge due to breaching, or flushing by meteoric waters and 'suspect' top seal. ECL had also expressed the possibility that shallower reservoirs on the Uaddan platform edge in North of the block may have been flushed with meteoric waters.

While obtaining Board's ex-post facto approval (October 2005) for submission of bids, the Company informed about the biddable parameters and financial analysis but did not inform about the reservations / limitations expressed by ECL.

Operator drilled one well but due to no discovery of hydrocarbon, relinquished the block rendering wasteful the expenditure of ₹ 56.83 crore and ₹ 57.59 crore by IOCL and OIL respectively.

IOCL replied (September 2011 and January 2012) that certain risks were always associated with any exploration opportunity and the same could be validated only after drilling a well. Further, normally investment decision was based on the recommendation of lead partner, represented in all cases by an experienced upstream player. Ministry endorsed (September 2012) IOCL's reply.

OIL replied (September 2012) that exploration risks envisaged by ECL were taken into cognizance considering it as 'under explored exploration venture', Despite exploration risks, blocks were considered prospective in view of positive factors such as world class petroleum basin, high regional prospectivity with well defined generation, migration and entrapment elements and it was expected that all potential elements for oil and gas generation would be present viz. source kitchen generation cum migration, reservoir, seal and trap elements.

Reply is not acceptable as OIL did not go in for recapturing data and / or revalidation of the limitations expressed by ECL. Reasons given for acquiring the block were also not based on realistic grounds as ECL had specifically mentioned in its evaluation report that the blocks carried limitations/reservations. Moreover, the positive points highlighted by OIL did not justify participation in the bids as the same basically centred around concepts which had universal application and which were generally evaluated prior to participation in the bids. Where IOCL was concerned, it had not gone for revalidation of the reservations expressed by ECL, but had relied on OIL. As E&P business is risky and capital intensive, IOCL should have got an independent evaluation carried out before investing in the assets.

10.1.3.10 Internal Control System

(a) Lack of proper monitoring of E&P activities

E&P activities require constant monitoring of the progress of E&P blocks due to the nature of complexity and risks involved in this business. Hence, it was essential for GAIL and IOCL to regularly monitor the progress of E&P blocks in order to safeguard their financial interests especially in view of their being non-operator in most of the E&P blocks.

Audit observed that IOCL had not devised any system to apprise the progress of E&P activities to its Board till April 2008 after which it started submitting Quarterly Progress Reports for information of the Board.

GAIL did not have any system of apprising its Board about the progress of E&P activities other than circulating Monthly Progress Reports on physical progress of E&P blocks only to its C&MD and functional directors.

(b) Non-exercise of partners' audit rights

As IOCL and GAIL are non-operators in majority of E&P assets, it was essential to ensure that the decisions taken by operators were based on adequate technical and economic justification and the assets acquired through JVs were secured. Therefore, the rights, powers and periodicity of partners' audit as defined in the Joint Operating Agreements should have been timely and effectively exercised by the former. Deficiencies noticed in this regard are mentioned below:

(i) IOCL and GAIL did not have any fixed periodicity for conducting non-operator's audit and had also not conducted partner's audit at all in 13 out of 40 E&P assets and 18 out of 32 assets respectively. Further, there was a delay of two to six years in conducting non-operators' audit in six E&P assets by GAIL and two to nine years in ten E&P assets by IOCL.

(ii) Review of non-operator's audit of block MB-OSN-2004/2 carried out by GAIL revealed that cash calls of ₹ 68.30 crore remained idle with operator as GAIL had released the funds without ascertaining due date/schedule date for payment to ensure proper utilization of the same.

(iii) IOCL had carried out its first non-operator's audit covering the period April 2008 to March 2011 for block MB-OSN-2004/1 only in 2011 and observed that operator had not deducted LD of ₹ 4.73 crore in two cases and also released an excess payment of ₹ 4.56 crore in violation of respective contractual clause.

GAIL replied (October 2012) that non-operator's audit of E&P blocks was carried out periodically after considering the risk profile of the blocks giving priority, among other things, to E&P blocks with private operators.

Reply is not acceptable as GAIL had not fixed specific periodicity/time-frame for non-operator's audit of E&P blocks acquired by it resulting in non/delayed detection of irregularities in operator's decisions.

Conclusion

Even after spending more than a decade in this business, both IOCL and GAIL neither had defined/documented policy nor prescribed procedure for E&P activities. GAIL and IOCL had acquired E&P assets mainly by relying on technical assessment by other JV partners instead of detailed due diligence or revalidation of reservations/limitations (expressed by consultants) at their end which was imperative as the Companies are separate business entities having own investment philosophies and lead partners do not always share critical information regarding blocks' prospectivity. Further, these Companies in most of the cases had not apprised their Board of Directors about the known risks/limitations before acquiring the respective block. As a result, the Companies had to relinquish 29 E&P blocks. Thus, inadequate analysis and interpretation of data and non-revalidation of reservations/limitations expressed by advisors resulted in infructuous expenditure of ₹ 1258.46 crore (excluding investment of ONGC and OIL). Despite having adequate provisions in Joint Operating Agreement, GAIL and IOCL had not conducted non-operator's audit at all in 13 out of 40 E&P assets and 18 out of 32 E&P assets respectively.

Recommendations

Based on the audit findings as discussed above, the following recommendations are made. The Companies may:

- ***formulate a documented policy/procedure for E&P activities;***
- ***apprise the Board of Directors about risks/limitations expressed by in-house experts/technical consultants before acquisition of stake in respective E&P blocks for making an informed decision; and***
- ***strengthen internal audit and control system and put in place a time bound action plan for audit of JVs in view of significant investment as non-operator.***

Hindustan Petroleum Corporation Limited

10.2 Investment by Hindustan Petroleum Corporation Limited in wholly owned subsidiary HPCL Biofuels Limited

10.2.1 Introduction

In October 2009, Hindustan Petroleum Corporation Limited (HPCL) invested in a wholly owned subsidiary, HPCL Biofuels Limited (HBL), to establish and operate integrated sugar, ethanol and co-gen plants at Sugauli and Lauriya in the State of Bihar.

HPCL owned 100 *per cent* equity stake in HBL, with a total investment of ₹ 205.52 crore as on 31 March 2012 which included an amount of ₹ 49.17 crore towards pre-incorporation and preliminary expenses incurred directly by the HPCL before incorporation of HBL. The net worth of HBL as on March 2012 was ₹ 152 crore. The financial statements of HBL (as on 31 March 2012) indicates long term borrowings of ₹ 434 crore (of which ₹ 80 crore was a bridge loan from HPCL) and short term loans amounting to ₹ 142 crore (of which ₹ 107 crore was another bridge loan from HPCL). HBL initiated its production in December 2011 and had a turnover of ₹ 4.87 crore. The financial statements of 2011-12 depicted a loss of ₹43.60 crore which was under-stated by ₹ 12.57 crore due to non-accountal of net Deferred Tax Liability.

The decision making process in HPCL leading up to such significant investment in an entirely new line of business was examined in audit with a view to:

(i) assessing the rationale for investment in the venture; and

(ii) verifying whether the intended objectives of these investments have been achieved or are likely to be fruitful.

10.2.2 Audit Findings

Relevant records at Project & Pipelines Department, Secretarial Department and Joint Venture Department of the HPCL at Mumbai and records of HBL at Sugauli were test checked. The minutes of the Board meetings of the HPCL and HBL and replies furnished by the Management to the various requisitions were also scrutinized. Audit findings are enumerated in the succeeding paragraphs.

10.2.2.1 Hasty management decision without considering alternatives

Government of Bihar (GoB) issued (in November 2007) a 'Request for Qualifications' (RFQ) offering 15 closed sugar mills for sale belonging to Bihar State Sugar Corporation Limited. The Patna Regional Office of the HPCL purchased the RFQ documents and intimated the corporate office of such purchase referring to a communication (e-mail dated 29 November 2007) between Industry Development Commissioner, GoB and Chairman and Managing Director of the HPCL. The intimation was received by the Company only on 3 December, 2007, 17 days before closing of the bid (bid closed on 20 December 2007). The HPCL decided to bid for four mills (Hathua (Gopalganj), Motipur (Muzaffarpur), Sugauli (East Champaran), Lauriya (West Champaran) for setting up integrated sugar, ethanol and cogen plants in Bihar by 18 December 2007. Thus, within a span of 15 days (3 to 18 December), the HPCL took a decision to enter a new un-planned business line.

It was noticed that the HPCL had appointed IDBI (10 December 2007) for carrying out financial, technical and legal due diligence for seven mills initially shortlisted. IDBI was allowed less than seven days to carry out its assessment. It was also noted that GoB did not provide any documents or data to IDBI for analysis and the IDBI report was based on the viability reports prepared by SBI Caps for GoB. The HPCL took the decision to bid for the four mills (18 December 2007) based on this report.

SBI Caps Limited appointed as consultant to GoB had stated that sugar industry in Bihar has been on a decline due to lack of sufficient quantity of sugarcane on account of lack of infrastructure such as main and village link, lack of irrigation facilities, non-availability of power, water logging problems in the absence of drainage etc. and non-availability of good sugarcane varieties on a regular basis. Besides, IDBI, a pre-bid consultant to HPCL, had pointed out to the company that it was not feasible to operate the existing mills under offer and that the successful bidder would have to set up a completely new manufacturing facility. It was also stated by IDBI that a successful bid would only result in acquiring land in interior Bihar having a set of serious infrastructure constraints for ethanol production.

Considering that this was a new line of business for the HPCL, a more comprehensive planning exercise with more detailed original analysis by the consultant and evaluating alternatives would have been prudent. Besides, integrated sugar, ethanol and co-gen plants were not an intended area of investment as seen in the HPCL's investment plans under 11[th] Plan outlay (2007-2012) and hence the desirability of proper due diligence before foraying into this new area.

The Management replied (December 2012) that all seven sites were extensively surveyed, discussions held with concerned people and various parameters were assessed in the due diligence exercise.

Reply of the Management needs to be viewed in the context of the facts that (a) there was no survey report, presentation and record of discussions available with HPCL in support of sites surveyed or selected for bidding in the records produced to audit; (b) selection of the sites was done within a short span of seven days available with the consultant for conducting due diligence on seven mills at different locations and (c) disclaimer of the consultant that they relied on the viability and legal reports prepared by SBI Caps for GoB. IDBI also stated in the report that they have not carried out any independent verification of the information even though they conducted limited surveys.

10.2.2.2 Selection of non-viable option without the approval of the Board

Following declaration of the HPCL as the successful bidder for Sugauli and Lauriya sugar mills, HPCL appointed M/s MITCON (September 2008) for preparing a configuration study to evaluate possible options of implementing integrated sugar, ethanol and co-gen power plants so as to maximize ethanol production and ensure economic viability. M/s MITCON, in its report, put forward three options:

Option-I: Conventional integrated projects with sugarcane crushing capacity of 3500 Tons per Day (TCD) where 100 *per cent* sugarcane juice would be used for manufacturing sugar with 45 Kilo litre per day (KLPD) capacity Ethanol plants based on own/procured molasses and 20 Mega Watts (MW) capacity co-gen power plants;

Option-II: Integrated projects with 3500 TCD sugarcane crushing capacity where 100 *per cent* sugarcane juice would be used for ethanol production along with 120 KLPD capacity Ethanol plants and 20 MW capacity co-gen power plants;

Option-III: Integrated projects with 3500 TCD sugarcane crushing capacity with 50 *per cent* sugarcane juice going to Ethanol production and 50 *per cent* for sugar production along with 60 KLPD capacity Ethanol plants and 20 MW capacity Co-gen plants.

Internal Rate of Return (IRR), debt equity ratio, payback period and debt service coverage ratio for each option were as under:

Sl. No.	Parameters	Option I (100 *per cent* juice for sugar)	Option II (100 *per cent* juice for ethanol)	Option III (50 *per cent* juice for sugar 50 *per cent* juice for ethanol)
1	Internal Rate of Return (*per cent*)	16.04	7.46	10.25
2	Debt Equity Ratio	1:1	1:1	1:1
3	Payback Period (years)	6-7	10-11	9-10
4	Debt Service	1.88 (Avg.)	1.28 (Avg.)	1.47 (Avg.)

	Coverage Ratio (DCSR)	2.93 (Max.) 138 (Min.)	1.92 (Max.) 0.95 (Min.)	2.22 (Max.) 1.09 (Min.)

The Configuration Study Report (CSR) of MITCON and the three possible options were not presented to the Board. Audit observed that Option III was selected for preparation of Detailed Feasibility Reports (DFRs) for the two mills, even though IRR for the selected option was not the optimum *i.e.* only 10.25 *per cent.*

The Management replied (December 2012) that a detailed presentation was made by the consultants on 30 October 2008 to the Functional Directors along with officials of MOPNG. The decision to pursue Option III was taken at this meeting.

Despite repeated requests, the HPCL failed to make available the minutes of the said meeting. Besides, the reply did not address as to why the Board was not allowed the opportunity to select the most desirable from among the three options presented by the consultant. Besides, on implementation, the selected option was found to be actually non-viable leading to a reversion to Option–I in August 2012 (utilization of 100 *per cent* sugarcane juice for sugar production).

10.2.2.3 Understated cost and optimistic revenue assumptions projecting apparent viability

M/s. MITCON prepared Detailed Feasibility Reports (DFRs) in February 2009 for two sugar mills to be installed at Sugauli and Lauriya as per the selected option. While preparing DFRs, M/s. MITCON made various optimistic assumptions in respect of working capacity, number of crushing days, rate of sugar recovery, sources of finance, revenue and expenditure which helped to project a higher viability of the projects. It was noticed that the sale price of power was assumed to be higher in the DFR as compared to the CSR by assigning reason which was not justified. In addition, a subsidy on ethanol was assumed which was not actually available. These factors contributed to a higher viability (IRR of 15.57 for Sugauli and 15.79 for Lauriya) as compared to the CSR which projected an IRR of 10.25 *per cent.* The reasonableness of these and other assumptions made in the DFR are discussed in the succeeding paragraphs.

(a) Unrealistic assumption of working capacity in initial years

DFRs prepared by MITCON assumed a working capacity of 95 *per cent* for both the sugar mills in the first year of operation and 100 *per cent* working capacity in subsequent years. However, Audit observed that In Bihar, intensity of sugarcane production is not as high as compared to other sugarcane producing states in north India. For such a high working capacity, adequate supply of sugarcane would be essential which is unlikely as the intensity of cane in Bihar is low. Of the total cultivable area in Bihar, a sizeable portion is low-lying, which, in the absence of drainage facilities, is not suitable for cultivation of sugarcane. Hence, the assumption of working capacity for both the new sugar plants at 95 *per cent* in first year itself and 100 *per cent* from second year onwards was over optimistic.

The Management replied (December 2012) that GoB had highly supportive policies for development of sugarcane in the State in 2006-07 and there had been perceptible improvement made by GoB in the drainage and irrigation facilities in north Bihar to stimulate the cultivation of the sugarcane in the area. Therefore, by taking up extensive cane development programme the sugarcane crushing up to 90 *per cent* capacity in first year and achieving 95-100 *per cent* thereafter is possible. The Management also agreed that the utilisation level was optimistic although not over optimistic.

The reply does not consider that at both the locations the existing sugar factories had been closed for a number of years resulting in farmers having shifted to crops other than sugarcane and that substantial efforts were necessary to inculcate sugarcane farming culture again within the command areas which were expected to take a longer period of 3-5 years as had been stated in the CSR report prepared by M/s MITCON. Hence, envisaging 100 *per cent* capacity utilisation in the second year of production was over optimistic.

(b) Assumption of higher number of crushing days

The number of crushing days was assumed to be 130 days per year from the first year onwards at both the sugar plants. Audit noticed that the crushing seasons in Bihar had reduced to only 81- 82 days in the years 2003-04 and 2004-05 (as pointed out in the viability report of M/s SBI Caps Ltd.). Coupled with the uncertainty of cane availability (pointed out at 10.2.2.1 above) it indicates that the projection of 130 days crushing days from the first year of operation was also over optimistic.

The Management replied (December 2012) that sugarcane is a cyclic crop and there is a dip of sugarcane availability for 2 years within a 7 year cycle. The assumption of 130 average season days at both the locations was based on the potential and committed cane development program of HBL, as well as, the average crushing days of 134 days of some of the good adjoining sugar factories.

The reply is not acceptable the cyclicality of sugarcane availability had not been considered in the DFRs which assumed a fixed 130 season days every year. Besides, adopting the crushing days of adjoining well-established sugar factories as benchmark for new sugar factories in the initial years was not justified. It was also noticed that the HBL Management itself sought approval of the Board for 70 days of crushing in its MOU targets for the year 2012-13 citing that the average crushing in Bihar for the last few years had been around 70-75 days.

(c) Optimistic sugar recovery rate

The sugar recovery rate was assumed as 10 *per cent* every year. However, the same report of M/s MITCON presented performance parameters of operating sugar factories in Bihar indicating an average sugar recovery rate of 9.55 *per cent*, 9.47 *per cent* and 8.66 *per cent* during 2004-05, 2005-06 and 2006-07 respectively. Besides being lower than the 10 *per cent* assumption, the sugar recovery rate also showed a declining trend.

The Management replied (December 2012) that recovery of sugar depends on a large number of factors including the varieties of sugarcane grown as well as the operating performance of the sugar factories in terms of juice extraction efficiency, sugar losses in bagasse, molasses and unaccounted losses. Further, the latest cane preparation and diffuser technology employed by HBL is unique which gives juice extraction efficiencies of 98 *per cent*, compared to 95 to 96 *per cent* for conventional milling technology. The adjoining private sugar factories have achieved over 10 *per cent* sugar recovery on a number of occasions. Considering this, the assumption of average 10 *per cent* sugar recovery in the DFRs is justified.

Reply is not acceptable as the HBL Management had itself sought approval of the Board for a recovery rate of 9 *per cent* for its MOU targets for the year 2012-13 citing the sugar recovery trends in Bihar. Moreover, as per the viability report prepared by M/s. SBI Caps Limited for GoB, the recovery rate in Bihar since 1997-98 onwards had never been 10 *per cent*. For 2003-04 and 2004-05 (the two immediately preceding years for preparation of DPRs), the recovery rate had been 9.33 and 9.58 *per cent* respectively. Further, the HBL Management had submitted to the Board (meeting held on 13 March 2012) that the HPCL (HBL) had achieved a sugar recovery of only 8.25 *per cent* in Sugauli plant and 7.08 *per cent* in Lauriya plant.

(d) Unfounded Revenue Projections

The DFRs considered escalated sale price of ethanol at ₹ 23 per litre as against the then existing sale price of ₹ 21.50 per litre. Similarly, the sale price of surplus power (from the captive power plants) was considered to be ₹ 5 per KWh (Unit) as against the then prevailing rate of ₹ 3.02 per Unit.

The Management replied (December 2012) that the promotional policy scheme from GoB for sugar, co-gen power and ethanol sector, announced in 2006-07 had clearly specified the subsidy of ₹ 1.50 per litre for ethanol production. Hence, consideration of the same for ethanol rate at ₹ 23 per litre was justified.

As regards escalated rate for power, the Management contended that Central Electricity Regulatory Commission's Tariff Orders of November, 2009 stipulated a tariff of ₹ 5.14 per Unit for all the States including Bihar and, hence, consideration of the tariff of ₹ 5 per Unit at the DFR stage was justified.

Reply of the Management is not acceptable as there was no specific mention of subsidy of ₹ 1.50/ litre for ethanol in the policy of GoB for sugar, co-gen power and ethanol sectors. The consultant assumed a higher ethanol price in the DFRs stating that such a subsidy was 'likely' to be provided by GoB.

Tariff Orders of CERC are not binding on the State Electricity Boards. As such, consideration of much higher rate of ₹ 5 per Unit in DFRs for power sale as against the then existing rate of ₹ 3.02 per Unit without any commitment from the Bihar State Electricity Board in writing, was not justifiable. Moreover, the latest power purchase agreement entered into by HBL with Bihar State Electricity Board provides for sale of electricity at the rate of ₹ 4.57 per Unit only.

(e) Assumption of higher quasi equity loan

In DFRs, M/s MITCON had assumed a quasi equity loan of ₹ 41.57 crore for ethanol plant from Sugar Development Fund (SDF), Ministry of Consumer Affairs and Public Distribution, GoI, New Delhi. The loan carries a subsidised interest rate of 4 *per cent*, thereby lowering the cost of capital of the project. However as per eligibility conditions, such quasi equity loan is available for ethanol plants only in respect of production of ethanol from molasses. As the intention, as per selected option, was to use 50 *per cent* sugarcane juice for ethanol plants, the entire ethanol plant was not eligible for SDF quasi equity loan. Considering the SDF quasi equity loan for the entire production of ethanol without proper analysis of eligibility conditions was incorrect and raises question on the envisaged internal rate of return of the project.

The Management replied (December 2012) that SDF guidelines do not indicate whether SDF loan for ethanol projects is for juice to ethanol or only for molasses as the feedstock.

Audit, however, noticed that Clause 22(1)(c) of Chapter XI of SDF Rules, 1983 (as amended in 2004) clearly specified that a sugar factory would be eligible to apply for a loan from the Fund under this rule if the sugar factory having an installed capacity of 2500 Tonnes crush per day or higher was implementing a project appraised by a Financial Institution or a Scheduled Bank, 'for the production of anhydrous alcohol or ethanol *from molasses*' and had been approved financial assistance by the said Financial Institution or Scheduled Bank. This has been further confirmed from communication received from SDF authorities in October 2011 stating that only an amount of ₹ 22.88 crore was under consideration of the Standing Committee as SDF loan for ethanol plants of the subsidiary company.

(f) Assumption of higher Carbon credit

M/s MITCON considered an amount of ₹ 283.78 crore towards revenue from sale of Emission reductions for a duration of 15 years in DFRs (February 2009). However, as per the Clean Development Mechanism (CDM) guidelines, the benefits from sale of emission reductions can be availed for a period of *10 years* only.

The Management replied (December 2012) that the CDM Authorities have most of the times extended the period from 10 years to next 10 years and the scenario in the international market for CDM fluctuates widely.

The reply of Management is not acceptable as it goes against common prudence, given that the guidelines prescribe a shorter period of benefit of 10 years only. It is also pertinent to mention that M/s. MITCON in the CSR (October 2008) had considered period of 10 years only for CDM benefits. The assumption of a longer duration translated to an additional amount of ₹ 95.60 crore towards sale of emission reductions in DFR (February 2009).

(g) Under estimated cost of EPCC Contracts

Audit observed that the actual value of Purchase Orders (PO) awarded to three Engineering Procurement Construction and Commissioning (EPCC) Contractors were higher than the estimated value of EPCC Contracts projected by consultant M/s. MITCON by ₹ 73.33 crore (i.e. 15.22 *per cent*) as shown below:

Particulars	Sugauli			Lauriya			Total
	Sugar	Ethanol	Cogen	Sugar	Ethanol	Cogen	
Projected value of EPCC Contracts by M/s. MITCON (₹ in crore)	101.59	47.72	89.13	106.03	47.86	89.35	481.68
Actual value of EPCC Contracts awarded (₹ in crore)	112.24	59.85	103.28	115.15	59.85	104.64	555.01
Percentage by which actual PO value was higher	10.48	25.42	15.88	8.60	25.05	17.11	15.22

The Management replied (December 2012) that the DFR figures were an estimate and there is bound to be a difference in the actual tendered amounts vis-à-vis DFR. Further, the tenders were floated and purchase orders were finalized after a substantial gap of time from preparation of DFR and, hence, there is a natural tendency for variance in the rates.

Reply is not acceptable as the time gap between DFR (February 2009) and opening of tender (September 2009) was only 7 months and such a high variation in the range of 8 *per cent* to 25 *per cent* cannot solely be attributed to time gap.

Thus, assuming over-optimistic revenues and understating costs (as at para 10.2.2.3 (a) to (g)), the DFR depicted a better viability for the project than actual. The projected IRR in the DFRs for Sugauli and Lauriya sugar mills were 15.57 and 15.79 respectively, considerably higher than the earlier CSR estimate of 10.25 per cent. This apparent project viability informed the investment decision. As the underlying assumptions were faulty, the actual profitability of the venture was much lower than projections leading to an injudicious investment decision.

10.2.2.4 Irregularities in implementation

The proposal of the Management for investment of ₹ 613.54 crore in the project was approved by the Board in June 2009. Afterwards, on 16 October 2009, based on approval of the Committee of Functional Directors (CFD), HPCL Biofuels Limited (HBL) a wholly owned subsidiary company of Hindustan Petroleum Corporation Limited was incorporated. The Board approved advance against equity of HBL in January 2010.

(a) Approval of Board despite non-compliance of its directives

While seeking approval for initial pre-project investment, the HPCL had informed the Board (May 2008) that the mechanism for implementation of the project, *i.e.* through SBU/ subsidiary/ JV would be firmed up after the DFR was ready. The DFR was ready by February 2009. The Board enquired about the implementation mechanism with particular regard to aspects like control, transfer pricing of ethanol, taxation and other related issues in April 2009 when the proposal (based on DFR) for setting up integrated sugar, ethanol, co-gen power plants was submitted to it for approval. However, no such details were provided to the Board. The Board, however, approved the proposal in its next meeting (June 2009) without having been apprised of the cost benefit analysis of different implementation modes prior to entering a new business line (Ethanol Production).

The Management's reply (December 2012) is silent in this regard.

(b) Formation of subsidiary without approval of the Board

Various financial and administrative powers had been delegated to the officers of the HPCL by the Board through 'Limits of Authority Manual' (LAM). As per General Notes to the LAM, "*Any item which is not covered in the manual and is outside the policy, shall require approval of Board, unless otherwise specified*". Incorporation of new subsidiary was neither covered in the LAM nor does the HPCL have a policy in this regard. Hence, incorporation of the subsidiary viz. HBL should have been with prior approval of the Board.

Audit noticed that the proposal for formation of a subsidiary HPCL (HBL) was not submitted to the Board. Instead, the proposal was approved by the Committee of Functional Directors (CFD) (meeting of 14 September 2009). The CFD is only one of the subcommittees of the Board and does not have the authority for the said approval. It was noticed that the minutes of the CFD meeting was also not submitted to the Board.

The Management replied (December 2012) that the HPCL's Memorandum before amendment suitably covered clauses relating to undertaking any new activity. The reply is not relevant as the audit observation relates to the approval accorded by a sub-committee of the Board without having specific authority in this regard.

(c) Misleading information to Board

The Management approached the Board in January 2010 for advance to HBL against equity. While responding to a query from the Board regarding formation of HBL, the Management informed that the Board had approved, interalia, formation of the subsidiary HPCL, HBL, in June 2009. This, however was incorrect as in June 2009 the Management had sought approval of the Board for setting up integrated Sugar, Ethanol, Co-gen plants at Sugauli and Lauriya and not for formation of a subsidiary. As pointed out earlier, the formation of the subsidiary company HBL, did not have the approval of the HPCL Board. Thus, the approval of the Board for advance against equity to HBL in January 2010 was based on erroneous information. In fact, even now, no approval of the Board for formation of HBL is available on the records.

The Management's reply (December 2012) is once again silent with regard to the above audit observation.

(d) Management decision against modular implementation

The DFRs had recommended that the HPCL should proceed with implementation of one of the projects out of the two selected (Sugauli and Lauriya). The second project could be taken up later after gaining suitable experience. However, the Management decided to implement both the projects simultaneously even though this was a new line of business and consequent lack of experience and understanding for the HPCL.

The Management replied (December 2012) that as per RFQ and the lease agreement the plants were to be commissioned within 3 years from the date of take over failing which Bank Guarantee would have been encashed by GoB. Moreover, there was cost benefit due to commonness of the establishment/mobilization cost for the bidders.

The reply is not acceptable. Even though the RFQ (November 2007) mentioned that the bidder would commence operations within 3 years from signing of the transfer agreement, this requirement was changed while signing the lease agreement. As per clause 2 of Part-II of terms and conditions of the lease agreement (January 2009), only necessary effective steps within the period of 3 years were required to be taken to establish the industry. In case construction activities commenced on the factory sites within 3 years, question of breach of terms and conditions of lease agreement would not arise.

Keeping in view the terms and conditions of the lease agreement signed in January 2009, it was logical that the consultant in its DFRs of February 2009 recommended implementation of the projects in phased manner. Moreover, while seeking approval in June 2009 from the Board, the Management itself had stated that construction/commissioning of one of the projects may be phased out by a year, if found necessary.

(e) Waiver of interest

The payment terms in the RFQ documents specified that "GoB shall transfer the unit free from all encumbrances to the successful bidder within three months from the date of award of the unit and the initial payment received by GoB failing which GoB will have to pay an interest of 15 *per cent* per annum for next three months on the amount received from the investor". However, GoB could not handover the units within three months from the initial payment (31March 2008). GoB requested (25 August 2008) the HPCL not to insist on payment of interest with effect from the date of award and instead consider the period as three months after signing the lease agreement. The Committee of Functional Directors (CFD) agreed to GoB's request. This led to HPCL forgoing interest of ₹ 35.63 lakh as of June 2008 which was against the financial interest of the HPCL.

The Management replied (December 2012) that because of the goodwill generated with GoB it was successful in getting a waiver of registration and stamp duty of ₹ 950 lakh on registration of leases which was higher than the interest foregone.

Reply is not acceptable as the HPCL was eligible for the exemption on stamp duty and registration fees as a part of the general policy of GoB for sugar industry in Bihar.

10.2.2.5 Non-achievement of objective and resultant additional expenditure

(a) The objective of the HPCL in this project was to increase availability of ethanol for internal consumption by in house production. HBL commenced operation of both the projects in December 2011. After barely two and half months of operations, the Management of HBL submitted (13 March 2012) to its Board that both the projects were operating on a negative gross margin. The reasons attributed to the negative gross margin included, inter-alia, over ambitious assumption in the DFRs as (i) actual average cane crushing season in Bihar was for 80 days against 130 days assumed in the DFR and (ii) ten *per cent* cane trash (bagasse) assumed to be used in the co-gen power plants was not actually available from the sugarcane, and bridging the gap in supply attracted additional expenditure.

(b) In the first year of operation itself, the selected option (50 *per cent* juice to sugar and 50 *per cent* to ethanol) was found to be financially unviable. The HBL Board asked (March 2012) M/s. MITCON to study the ethanol plant design and submit its recommendations.

(c) In its report (April 2012) M/s MITCON pointed out shortfalls in the plant design, planning, implementation and operation responsible for unsatisfactory performance of the projects. The reasons for shortfall, included:

(i) Negative contribution of juice to ethanol route;

(ii) No. of season days assumed as 130 days whereas crushing season in Bihar lasts for about 100 days;

(iii) Sugar recovery at 10 *per cent* assumed in the DFRs as against actual recovery of 8.6 *per cent* in Sugauli and 7.11 *per cent* in Lauriya project;

(v) Off season days assumed as 170 with captive bagasse while captive bagasse from the projects was insufficient to run the captive co-gen power plant; and

(vi) Non-availability of cane trash for procurement as it was used as a fuel in Bihar.

It is pertinent to note that M/s MITCON did not mention any reasons as to why these aspects were not considered by them in the DFRs of February 2009, as the same were not dependant on actual performance of the project and pertained to facts that were already ascertainable at the stage of DFRs.

(d) Based on the recommendation of M/s MITCON, HBL Board approved (August 2012) proposal of the Management to utilize 100 *per cent* sugarcane juice for sugar production. This was, in fact, the most viable option as had been earlier projected in the CSR and had been rejected in favour of the less profitable selected option.

(e) In order to utilize 100 *per cent* juice for sugar production, the boiler capacity in the sugar plants had to be enhanced. Accordingly, the HBL issued purchase orders worth ₹ 54.28 crore during September 2012 to February 2013 for expanding the boiler capacity from 1750 TCD to 3500 TCD at both the plants. As of March 2013, placing of purchase orders for ₹ 3.43 crore was in process. The decision of HBL Management to utilize 100 *per cent* juice for sugar production also led to idle capacity of 15 KLPD for ethanol plants at both the locations resulting in unfruitful expenditure of ₹ 28.45 crore. Selection of unviable option (option III of CSR) thus necessitated subsequent changes leading to additional expenditure, idle capacity and impairment of intended objective of higher ethanol production. As of 31.3.2012, HBL had invested funds to the tune of ₹ 715.21 crore in establishment of the two Integrated sugar-ethanol-cogen power plants.

The Management replied (December 2012) that even with routing of 100 *per cent* juice to sugar, there would be molasses generated during the process which will be used for producing ethanol. HBL had taken up the issue with GoB for allotment of additional molasses for utilization of the balance capacity to meet the growing demand of ethanol, since private sugar mills in Bihar were not venturing into ethanol production on a significant scale. The Management also stated that the expenditure for boiler capacity expansion was to improve the financial viability of HBL.

Reply is not acceptable the option of 100 *per cent* juice to manufacture sugar had not been selected by the Management earlier since ethanol production through this option would be lower, considering that the primary objective of the investment was backward integration increasing in house ethanol production. The statement that private sugar mills in Bihar are not venturing into ethanol production on a significant scale also indicates that ethanol production from molasses is not a commercially viable activity.

The matter was reported to the Ministry in December 2012; reply was awaited (March 2013).

Conclusions

(i) **HPCL demonstrated undue haste in pursuing the investment proposal for setting up two integrated sugar, ethanol and co-gen power plants in Bihar (subsequently implemented through wholly owned subsidiary viz. HPCL Biofuels Limited). The estimated financials of the projects which formed basis of the investment decision were based on a set of unlikely optimistic assumptions projected higher project viability than actual. Simultaneous implementation of both the projects in contrast to the modular approach suggested by the consultant also pre-empted subsequent corrective action.**

(ii) **The first year of operations, itself, demonstrated that the route adopted for maximising production of ethanol was not financially viable. Hence a decision was taken to adopt an earlier discarded option leading to additional capital investment for sugar plant and likely idle capacity of ethanol plant.**

(iii) Besides undue haste on part of the Management, audit noticed serious internal control failures leading to undermining of the authority of the Board.

Recommendation

- ***The investment proposals of the HPCL, particularly those relating to non-core areas need to be implemented after appropriate due diligence based on realistic assumptions. Prior approvals of competent authorities should be on record to ensure that the financial interest of the HPCL is secured.***

The matter was reported to the Ministry in December 2012, their reply was awaited (March 2013).

Indian Oil Corporation Limited

10.3 Avoidable extra expenditure due to non-synchronization of conversion of Gas Turbines with the Dadri Panipat Spur Pipe Line at Panipat Refinery

Failure of the management to synchronize conversion of Gas Turbines to use RLNG with the Dadri Panipat Spur Pipe Line at Panipat Refinery resulted in avoidable expenditure of ₹ 135.81 crore.

Panipat refinery of Indian Oil Corporation Ltd. (the Company) has a Captive Power Plant (CPP) consisting of 5 Gas Turbines (GT) and 3 Turbo Generators having a power generation capacity of 227.77 MW. These power utilities were originally designed to operate using Naphtha/ High Speed Diesel (HSD).

Panipat Naphtha Cracker Project (PNCP) of the Company was scheduled for commissioning by November 2009. To fulfill the fuel requirement of PNCP, work of Dadri Panipat Spur Pipeline (DPPL) was also taken up by Company, to supply re-liquefied Natural Gas (RLNG), with scheduled commissioning by December 2008. It was also estimated by the Company that with the commissioning of Naphtha Cracker Unit, there would be shortage of Naphtha for the Cracker Unit and the Company decided to replace Naphtha in five GTs with RLNG, so as to utilize the surplus Naphtha as feed for the Cracker Unit.

A proposal was sent to Refineries Division (April 2008) for conversion of all the 5 GTs. The Company, however, decided (July 2008), to convert only one GT (GT no. 5) out of the 5 GTs to RLNG mode on the ground of uncertainty in availability of RLNG. Conversion of GT 5 scheduled for completion by November 2009 was completed in September 2010.

Board of Directors approved (October 2009) the proposal for conversion of remaining four GTs to RLNG mode by October 2011. The conversion of these GTs was completed between December 2011 and May 2012.

It was observed that the Company failed to synchronize, the conversion of all five GTs with commissioning of DPPL (July 2010). The refinery could not, therefore, use RLNG as fuel for generation of power in its CPP and consumed Naphtha for CPP till May 2012 which was costlier than RLNG, resulting in avoidable extra expenditure on fuel of ₹ 135.81 crore as detailed below:

Particulars	2010-11 (From August 2010)	2011-12
1) Cost of Naphtha in generation of power at Refinery (₹/ KWH)	5.43	5.92
2) Cost of RLNG in generation of power (₹/ KWH)	2.54	3.85
3) Difference (1 - 2)	2.89	2.07
4) Power generated at PR in 2010-11 from August 2010 to March 2011 and for 2011-12 by using Naphtha (in crore KWH)	35.72	55.25
5) Extra fuel cost (3 X 4) (₹ in crore).	**103.20**	**114.35**
6) Extra expenditure due to non-conversion of GTs to RLNG mode (₹ in crore)		**217.55**
7) In case of non-availability of RLNG, cost of Spot RLNG in generation of power (₹/ KWH)	3.04	5.00
8) Difference (1 - 7)	2.39	0.92
9) Extra fuel cost in worst scenario of non-availability of RLNG (₹ in crore) (4*8)	**85.22**	**50.59**
10) Extra expenditure due to non-conversion of GTs to gas mode (₹ in crore) (on the basis of Spot gas price)		**135.81**

Management stated (October 2012) that the proposal for conversion of Naphtha fuel to RLNG fuel in GTs of Refinery was put up to Planning & Project Committee (Board of Directors) in June 2008 for synchronizing the conversion of GTs with PNCP. Though the proposal was economically very attractive, due to uncertainty in the availability of gas, it was decided to initially go in for conversion of only one GT in the first phase as the company had got assurance of 1.5 mmscmd[1] (+10 *per cent* over drawal) from GAIL in which only 0.2 mmscmd was to be allocated to the Refinery for operation of one GT.

Management's reply is not acceptable as the fact remains that the Refinery received and consumed 0.53 mmscmd (RLNG-0.53 mmscmd and Spot gas - nil) to 3.47 mmscmd (RLNG 1.28 mmscmd and Spot gas 2.19 mmscmd) of gas during August 2010 to September 2012 as per requirement. This shows that the Company had got the gas as per requirement either through RLNG contract or from purchase of Spot cargo. Further, the Company was well aware of the shortage of Naphtha arising after commissioning of PNCP. Hence, keeping in view the envisaged benefits, non-acceptance of the proposal made in April 2008 for conversion of all five GTs to RLNG mode on the ground of uncertainty in availability of gas was not justified.

The Company while approving the proposal in July 2008 for only one GT considered IRR of 61 *per cent* based on last one year average rate of gas at $ 17.41 per mmbtu[2]. The rates of Spot gas during the period August 2010 to September 2012, however, ranged between $ 9 and $ 17.44 per mmbtu.

Thus, due to non-synchronization of conversion of five GTs with the commissioning of DPPL project, the Company incurred avoidable extra expenditure on fuel to the tune of

[1] ***Milliion metric standard cubic metre per day***
[2] ***Million Metric british thermal unit***

₹ 135.81crore on account of costlier fuel for generation of captive power during August 2010 to March 2012.

The matter was reported to the Ministry in January 2013; their reply was awaited (March 2013).

10.4 Avoidable loss due to not ensuring captive consumption of wind power generated

Failure to maximize captive consumption of wind power generated resulted avoidable loss of ₹ 21.44 crore to the Company between January 2009 and November 2012.

Indian Oil Corporation Limited (Company) decided (July 2008) to set up a wind power project with an installed capacity of 21 MW in the State of Gujarat at a cost of ₹ 131.66 crore. The power generated from this project was to be injected into the State grid. The local energy distribution companies (DISCOMs) would then wheel the power to the identified 'recipient units' of the Company for captive use.

The Project Appraisal Note prepared (June 1998) by the Company had highlighted that viability of the project depended critically on 100 *per cent* captive consumption of the entire power generated and projected an Internal Rate of Return (IRR) of 12.98 *per cent* for the project as against the approved benchmark IRR of 16 *per cent* for non-core projects. The Company considered captive consumption of entire power generated in order to maximize the project benefit. One of the justifications for implementing the project was the rate of ₹ 5.48 per Unit charged for grid power which was expected to go up in future.

The Company commissioned 14 (Nos.) Wind Turbine Generators (WTGs) of 1.5 Mega Watts each in December 2008/January 2009. While entering into (April 2009) agreements with DISCOMs of Gujarat State for wheeling of power with an arrangement for captive power consumption, the Company grouped the WTGs in three groups, signed a separate agreement for each group and attached only five 'recipient units' (*i.e.* locations) for captive consumption out of nine pipeline and 12 marketing locations in the Gujarat State.

As per the agreements with DISCOMs, any surplus power after set-off against monthly consumption at recipient units was considered as sale to DISCOMs. The agreed rate for sale of such surplus wind power was ₹ 2.86 per Unit.

Audit observed that:

- Right from commissioning of the WTGs, the five locations identified by the Company and designated as recipient units under the agreements were unable to consume the entire power generated by the WTGs between January 2009 to November 2012, leaving a surplus of 5,51,04,577 units which had to be treated as sale to DISCOMs as per provisions of the agreements.
- The Company was realizing only ₹ 2.86 per Unit from the DISCOMs for surplus power sold whereas it paid the DISCOMs at an average rate of ₹ 6.75 per Unit during the same period for the power consumed by its other pipeline locations which had not been designated as recipient units under the wheeling of power agreements. This resulted in net loss of ₹ 21.44 crore [5,51,04,577 Units x (₹ 6.75

minus ₹2.86)] to the Company on account of sale of surplus 5,51,04,577 Units of power to DISCOMs that could not be captively consumed.

- The Company had additional 16 locations in Gujarat State whose average monthly consumption of power was around 15 lakh Units as against an average monthly surplus of 11.72 lakh Units sold to DISCOMs. This confirms that entire power generated by the WTGs could have been captively consumed and sale of surplus power to DISCOMs and resultant loss avoided.
- It was imperative for the Company to judiciously identify the locations to maximize the recipient units for ensuring 100 *per cent* captive consumption of power. The Company failed to review and identify locations which could have been designated as recipient units for captive consumption under the wheeling of power arrangement to ensure that no surplus remained for sale to DISCOMs at un-remunerative rate.

In reply, the Management (September 2012) agreed that the intent was to captively consume the entire power generated by the WTGs and highlighted the following issues:

- While signing the agreements, Gujarat Energy Transmission Corporation Limited (GETCO) allowed attachment of only two locations per WTG group. Accordingly, five locations with maximum power consumption were selected and attached with the WTGs. The estimated annual power consumption of the five locations was 4,33,77,588 Units as against the estimated average annual generation of 4,04,71,200 Units by WTGs and, hence, these locations could consume the entire power generated, though not uniformly in all months due to wide variation in power generation over the year.
- Captive consumption of the entire power generated by the WTGs was not possible as the peak generation from WTGs was of the order of 72 lakh Units whereas peak demand of all locations of Pipelines and Marketing Divisions in Gujarat was of the order of 51 lakh Units.
- The Company had already taken up the matter with GETCO in writing on 01 January 2011, 06 January 2012, 15 May 2012 and 27 August 2012, seeking permission to attach more locations per WTG group but no response was received and that the Company was contemplating filing of a petition before Gujarat Electricity Regulatory Commission in the matter.
- During the first year (2009-10) of commissioning of WTGs, total captive power consumption was 50 *per cent*, which increased to 77 *per cent* in 2011-12 and that in 2011-12 (8 months), the entire power generated by WTGs was fully consumed in the five locations attached to the WTGs.

Reply of the Management is not acceptable in view of the following:

- The contention that the five attached locations were sufficient to draw the entire power generated does not hold good as data indicated that there was substantial sale of wind power from January 2009 to November 2012.
- The contention that captive consumption of the entire power generated was not feasible needs to be viewed in the light of the fact that feasibility of the WTGs depended critically on 100 *per cent* captive consumption of power. The feasibility report had indicated the commissioning of all WTGs would have IRR of 12.98 *per cent*, much lower than the benchmark of 16 *per cent* when 100 *per cent* captive consumption was assumed. In the proposal put up to the Board for

approval, the expected IRR was lowered to 10.33 *per cent* with expected net annual generation of 4,01,75,714 Units and 100 *per cent* captive consumption. However, actual generation of power during 2010-11 and 2011-12 was much lower (3,48,16,586 - 3,38,26,779 Units respectively) compared to estimates, except marginal higher generation during 2009-10 (4,12,39,435 Units). Despite this, the Company failed to consume the entire power generated captively and had to sell the power as surplus to DISCOMs at un-remunerative rate. This could have been avoided had the Company attached recipient units commensurate with the power generated.

- The Management's contention that the entire power generated in 2011-12 (8 months), had been fully consumed in the five locations needs to be viewed in the light of the fact that 76,95,763 units (~23 *per cent* of the total generation) were sold in the year 2011-12. The sale had increased to 34 *per cent* (87,58,685 units) in the subsequent year 2012-13 (By November 2012).

The matter was reported to the Ministry in December 2012; reply was awaited (March 2013).

10.5 Extra expenditure due to underutilisation of cheaper source of power

Panipat refinery incurred an avoidable expenditure of ₹ 12.02 crore due to drawing energy from its Captive Power Plant instead of utilising cheaper source of energy from Uttar Haryana Bijli Vitran Nigam Limited.

In order to ensure uninterrupted power supply, Panipat refinery of Indian Oil Corporation Limited (the Company) installed a Captive Power Plant (CPP) comprising 5 Gas Turbines and 3 Turbo Generators having generation capacity of 227.77 MW. Uttar Haryana Bijli Vitran Nigam Limited (UHBVNL) erstwhile Haryana State Electricity Board also sanctioned (October 1996) contract demand for permanent power supply of 10 MVA (8500KW/10000 KVA) through a 132/11 KV line. As per the contract the refinery could draw a maximum of 744.60 lakh KWH per annum assuming 8,760 hours (365x24) of operation per year.

It was observed in audit that the variable cost of power generation in own CPP was higher than the cost of power drawn from UHBVNL by the company during the last four years i.e. 2008-09 to 2011-12. The tariff of power supplied by UHBVNL (excluding fixed charges) was ₹ 4.41 per KWH (2008-09 and 2009-10), ₹ 4.32 per KWH (2010-11 and 2011-12) and ₹ 4.91 per KWH from April to December 2012 whereas variable cost of power generation in CPP was ₹ 7.12 Per KWH in 2008-09, ₹ 6.33 per KWH in 2009-10, ₹ 6.92 per KWH in 2010-11 and ₹ 8.33 per KWH in 2011-12[♣].

The Company did not draw power from UHBVNL at optimum level despite availability of the same below the variable cost of power generated from its CPP and continued to feed even its non essential services like township and construction activities from CPP. The power consumption from UHBVNL ranged between 0.01 lakh KWH per month (April 2011) and 19.70 lakh KWH per month (September 2011) against the maximum available power of 62.05 lakh KWH per month. The company failed to draw optimum quantity of power from the cheaper source which resulted in extra expenditure of ₹ 12.02

[♣] ***Variable cost of power generation in CPP per KWH for the period April 12 to December 12 was not available as cost records for the period were yet to be prepared.***

crore from April 2008 to December 2012 being the difference between the variable cost of power drawn from UHBVNL and power generated in CPP.

Management in its reply (September 2012) stated that to draw some amount of grid supply on continuous basis, it was required to segregate essential and non-essential loads of the refinery and feed non essential load separately from State Grid Supply. Management also stated that it was identified that the refinery township and construction supply for project jobs are such loads which can be fed from UHBVNL supply. Segregation of township supply and provision of UHBVNL grid supply to feed township separately could be made available in June 2011 and thereafter township supply was fed from UHBVNL supply.

Management's reply is not acceptable as identification of non-essential services could have been done in 1998 itself (setting up of Refinery) and UHBVNL supply could be utilised in such services as it was more cost effective. Thus the Company failed to avail grid power upto the level of full requirement even for non essential services such as township, and construction activities etc which resulted in extra expenditure to the tune of ₹ 12.02 crore from April 2008 to December 2012 (including ₹ 4.44 crore for the period June 2011 to December 2012) and non-utilisation of full sanctioned load of UHBVNL.

Further, despite the reply of the Management that segregation of township supply and provision to feed township separately was made possible in June 2011, it was noticed in Audit that the company was still not drawing maximum power as required from UHBVNL for using in non-essential services even during 2012-13 as drawal of power from UHBVNL was 48.58 lakh KWH only against the actual usage for non-essential services of 150.53 lakh KWH upto December 2012.

The matter was reported to the Ministry in December 2012; their reply was awaited (March 2013).

10.6 Loss of revenue

Company's failure to share ATF pipeline with other OMCs resulted in a recurring loss of revenue which amounted to ₹ 8.86 crore for the period from November 2008 to June 2012, besides adverse impact on the environment.

Indian Oil Corporation Limited (Company), Bharat Petroleum Corporation Limited (BPCL) and Hindustan Petroleum Corporation Limited (HPCL) have their terminals at Devangonthi, Bangalore. These companies transport Aviation Turbine Fuel (ATF) for the aircrafts operated at Bangalore Airport by trucks from their respective terminals. Consequent on formation of Bangalore International Airport Limited (BIAL), the airport operations were to be shifted in 2008 to the new airport at Devanahalli, which is about 36 KM from the terminals.

The Company, therefore, proposed in June 2006 to construct a pipeline project with a installed capacity of 0.66 MMTPA[♠] from its terminal at Devongonthi to BIAL in order to reduce quality control activities while loading/unloading, eliminate chances of contamination/pilferage, and effect economy in transportation by earning revenue by sharing the facility with other Companies.

[♠] *Million Metric tons per annum*

The pipeline was commissioned in October 2008 at a cost of ₹ 27.29 crore and was put to operation from November 2008. Contrary to the projection made in the proposal, the Company failed to share the facility with BPCL and HPCL. On completion of the project, the Company demanded charges of ₹ 260 per KL which was not accepted by BPCL and HPCL on grounds that they incurred only ₹ 126 and ₹ 177 per KL respectively for transportation of ATF through hired trucks. Belatedly, BPCL and HPCL agreed to a rate of ₹ 260 per KL in June 2011 and January 2013 respectively. However, the work on hook up facility to transport the fuel from BPCL and HPCL terminals to IOCL pipeline was yet to start (March 2013).

During the period from November 2008 to June 2012, the Company transported 585048 MT of ATF through the pipeline and the capacity utilisation ranged between 18 *per cent* in 2009-10 and 32 *per cent* in 2011-12. During the same period, BPCL and HPCL transported 265124 KL and 75836 KL of ATF respectively from their terminals to Fuel Farm Facility by incurring a truck transportation cost of ₹ 4.70 crore.

Thus, Company's failure to share the infrastructure among the PSUs, under the same Ministry, resulted in recurring revenue loss apart from adverse effect on the environment. The revenue foregone by the Company during November 2008 to June 2012, as per the rates of ₹ 260 per KL worked to ₹ 8.86 crore.

The Company, while agreeing with audit on the adverse impact on the environment, stated (August 2012) that they were prepared to share the pipeline with the two OMCs but HPCL had initially not agreed to the rate of ₹ 260 per KL. Though BPCL agreed to the rate in June 2011, they requested for detailed engineering/estimation for hook up facilities from their terminals to IOCL pipeline which had been approved only in August 2012 to enable them share the pipeline. The Company further stated that the rate of ₹ 260 per KL quoted by it was reasonable as besides the truck transportation charges, the transportation by truck involves a number of additional cost element like contracting, loading/unloading, transit loss, manpower cost etc.

The fact remained that there was avoidable delay in sharing the pipeline which led to loss of revenue and adverse impact on environment. The modalities for sharing the pipeline could have been finalized during project planning and its implementation, particularly when the project's economic viability envisaged the revenue from sharing of pipeline with other OMCs. The differences on the issue of rate of transportation could have been sorted out by OMCs through their Administrative Ministry.

The matter was reported to the Ministry in October 2012; their reply was awaited (March 2013).

Oil and Natural Gas Corporation Limited

10.7 Avoidable hiring of rig in deviation from standard tendering procedure

Oil and Natural Gas Corporation Limited (Company) hired rig 'Actinia' from Reliance Industries Limited (RIL) for six months on assignment basis in deviation of standard tendering procedure citing requirement to drill at three locations. Actual deployment of the rig indicated that hiring of the rig was not necessary for drilling at any of the three identified locations. The entire expenditure ₹ 146.71 crore on hiring of the rig from February 2009 to July 2009 was, thus, avoidable. The rig idled

for want of materials which resulted in unfruitful expenditure of ₹ 4.64 crore during February 2009.

Oil and Natural Gas Corporation Limited (Company) received (November 2008) an offer from Reliance Industries Limited (RIL) for sharing latter's hired rig 'Actinia' along with additional services/equipment on assignment basis for a period upto 1 July 2009. The rig had a capacity to drill wells upto a water depth of 600 meters. RIL had hired the rig at an Operating Day Rate (ODR) of US$ 190,000 from Transocean Offshore International Venture Limited (TOIVL) for a firm duration of 1,020 days ending 01 July 2009 or for drilling 14 firm wells subject to completion of well in progress then, whichever is later.

On receipt of the offer of RIL, the Company, evaluated its work commitments and availability of rigs and assessed (December 2008) that there was a need for hiring Actinia rig for drilling three wells in nomination blocks at the following locations:

(a) KD-12-AA (302 m) to be drilled before 31 January 2009;

(b) GDP-3 (600 m) to be drilled by 14 May 2009; and

(c) Vashishtha S-1 (244 m).

Accordingly, the Company hired the rig Actinia from RIL in January 2009 at an Operating Day Rate (ODR) of US$ 190,000/day on assignment basis for a period of six months at the same terms and conditions that RIL had agreed with TOIVL. A tripartite assignment agreement (TPA) was entered (signed in August 2009) among the Company, RIL and TOIVL. The rig reached the Company's site on 12 February 2009.

Audit observed that:

(a) As against drilling of three wells at three locations identified by the Company to justify hiring of the rig, the rig was deployed at only one location viz. KD-12-AA upto July 2009. Drilling of well at second location (GDP-3) was carried out by rig 'Discoverer Seven Seas' while drilling of well at the third location(S-1) was commenced much later by another rig (Nobel Duchess) in August 2012.

(b) Even for location KD-12-AA at which rig Actinia was deployed, the Company, before receipt of offer from RIL, had originally decided (March 2008) to deploy rig 'Energy Driller'. However, the Company, diverted rig Energy Driller to KK-OSN-2001/2 and KK-OSN-2001/3 blocks in Kerala Konkan basin for drilling from 17 December 2008 instead of deploying it at location KD-12- AA. This was despite the fact that the Ministry of Petroleum and Natural Gas (MOPNG) had already directed (October 2008) the Company to relinquish both the blocks (KK-OSN-2001/2 and KK-OSN-2001/3) and pay for the unfinished work programme.

(c) Rig Actinia was hired without calling for competitive bids. Hiring of rig was not justified as the rig was not necessary for drilling any of the three identified locations. The entire expenditure of ₹ 146.71 crore on hiring of the rig and deviation from the standard tendering procedure was, thus, avoidable.

(d) Rig Actinia idled from 12.00 hours on 16 February 2009 to 17.00 hours on 22 February 2009 for want of material supply. During this period, standby day rate with crew was payable for the rig, which resulted in unfruitful expenditure of ₹ 4.64 crore*.

The Management replied (September 2012) that:

- Though the location KD-12-AA was released for drilling in January 2008, the same could not be taken up for drilling due to non availability of a rig at that point of time and, hence, the Company decided to hire rig Actinia in November 2008, three months before the expiry of PEL cycle of the block *i.e.* January 2009.
- The rig idling from 16 February 2009 to 22 February 2009 was due to non availability of 'subsea wellhead' which had to be arranged from RIL. During the above period, preparatory jobs were carried out for spudding the well.

Reply of Management is not tenable in view of the following:

- The Company, in March 2008, itself planned to drill a well at KD-12-AA location as a first location by rig Energy Driller which, however, was not done. In fact, the rig Energy Driller planned originally for this location was used during the same period (when rig Actinia was deployed on KD-12-AA) for drilling in blocks which the MOPNG had directed to surrender.
- The rig was waiting for 119.75 hours during February 2009 for want of materials, for which stand-by rates were paid by the Company.

The matter was reported to the Ministry in October 2012; their reply was awaited (March 2013).

10.8 Loss due to award of contract to an incompetent party based on forged documents

ONGC awarded a contract on the basis of forged documents submitted by the bidder. The contract was terminated four years later owing to inability of the contractor to implement the project leading to a loss of ₹ 114.78 crore to ONGC.

Oil and Natural Gas Corporation Limited (ONGC) awarded a contract in November 2007 to M/s NaftoGaz India (P) Limited (NaftoGaz India, the contractor) at a lumpsum price of Euro 129.69 million (₹ 724.84 crore) for Offshore Grid Interconnectivity Power to Electrical Submersible Pump Project (OGI Project)♥ in western offshore. The project was scheduled to be completed in March 2010. As per contract conditions, ONGC obtained from the contractor a Performance Bank Guarantee (PBG) of Euro 12.969 million, being 10 *per cent* of the contract value.

As per the Bid Evaluation Criteria (BEC) of the tender, offers of those bidders, who themselves did not meet the experience and financial capability criteria as stipulated in the BEC, could also be considered, provided the bidder was a 100 *per cent* subsidiary company of the parent company only if the parent company itself met the experience and financial capability criteria stipulated in the BEC. NaftoGaz India qualified as an eligible

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* ***For 119.75 hours*US$ 186,000 per day*119.75 hours/24 hours. ₹50=US$.***

♥ ***Installation of Electrical Submersible Pumps for sustained production of oil for which an integrated power network from process platform to a group of well platforms was required to be laid down using submarine composite cable for electric power and communication.***

bidder on the strength of M/s. NaftoGaz of Ukraine (NaftoGaz Ukraine) of which the former claimed to be a 100 *per cent* subsidiary.

Since award of the work, there were persistent delays by NaftoGaz India in project execution due to its poor project management and financial constraints. ONGC made references during October 2008 to November 2009 to NaftoGaz Ukraine and the Consulate General of Ukraine to seek its help in motivating Naftogaz Ukraine for providing financial assistance and project management support to NaftoGaz India, being a wholly owned subsidiary of the Ukraine based company as per documents. NaftoGaz Ukraine informed (February 2010) ONGC that NaftoGaz India was not its subsidiary. A subsequent corporate search instituted by ONGC brought to light (corporate search report of March 2010) that the documents submitted with the tender by NaftoGaz India claiming its incorporation on 14 June 2005 with the Registrar of Companies (ROC), Delhi and Haryana were forged. It was also confirmed that NaftoGaz India was never incorporated as a wholly owned subsidiary of NaftoGaz, Ukraine.

The contract was, thus, awarded by ONGC to NaftoGaz India based on forged documents submitted by the former. Subsequent to the discovery that the documents submitted by NaftoGaz India were forged, ONGC constituted a High Level Committee[1] (HLC) in September 2010 to examine technical, financial and legal issues and recommend the way forward. HLC in its report (11 November 2010) recommended that a final chance be given to NaftoGaz India by extending the contract provisionally upto May 2011 subject to fulfilment of a set of conditions by NaftoGaz India including (i) opening of a separate Escrow Account for this contract to be operated as per the instructions of ONGC, (ii) investment/financing of ₹ 50 crore to the Escrow Account with SBI for funding of the project to help payment to sub-vendors/sub-contractors within 15 days from the date of issue of extension, (iii) submission of additional PBG of Euro 6.5 million to ONGC within 21 days from the date of issue of extension, (iv) opening of Letter of Credit within 21 days, (v) mobilization of resources (men, materials, and barges) within 30 days from the issue of extension letter by ONGC, failing which the contract would be terminated and PBG of the contractor forfeited. As NaftoGaz India failed to fulfil these conditions, the contract was terminated on 24 February, 2011. At the time of termination of contract, 56 *per cent* of the project was completed and ONGC had released payment of ₹ 239.14 crore. Following termination, the tender was re-invited and the work was awarded (March 2012) to another contractor, with scheduled completion by May 2013.

Termination of contract resulted in a net loss of ₹114.78 crore[2] to ONGC considering the cash paid during the period April 2008 to February 2010 against the assets created by the contractor. Besides, the OGI Project was for providing power to the Electrical Submersible Pump (ESP) Project. The completion of the OGI Project was vital for enhancing the production from western offshore. Due to termination and subsequent award of fresh contract (March 2012), there would be a delay in completion of project by three years.

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[1] ***An internal Committee - comprising of Executive Director (Asset Manager Mumbai High Asset) as Head of Committee; Executive Director (Chief Offshore Engineering Services) as Convener; Group General Manager (Chief Offshore Engineering Services), Group General Manager (Finance and Accounts) and General Manager (Material Management- Offshore Logistics Group) as Members.***

[2] ***After forfeiture of 10 per cent PBG worth ₹80.76 crore in February 2011.***

The Management stated (August 2012) that:

- The contract was awarded to NaftoGaz India based on technical experience and financial strength of the parent company *i.e.* NaftoGaz, Ukraine. As a guarantor, NaftoGaz of Ukraine had submitted to NaftoGaz India MOU and a parent company guarantee to provide project management, financial and technical support to NaftoGaz India to discharge its obligation as per contract.
- As per the BEC, the bidder fulfilled all the criteria, *viz.*, technical, commercial and financial criteria considered necessary for award of work. The contract was awarded after due diligence and on bidder meeting all the criteria *i.e.* technical, commercial and financial criteria necessary for award of work.
- The Management further stated that the contract was terminated due to non-fulfilment of the conditions/milestones and transgression of Integrity Pact[◊]. The fact that there was of no shareholding of NaftoGaz Ukraine beyond 2005 was never informed to ONGC either at the time of tender or thereafter till March 2010.
- While confirming the net loss of ₹114.78 crore incurred due to termination of the contract, ONGC stated (August 2012) that the Company in consultation with its Legal Section has taken up the issue of recovery of losses from NaftoGaz India.

Reply is not acceptable in view of the fact that:

- ONGC awarded the contract to NaftoGaz India without carrying out the requisite due diligence through an independent verification of the genuineness of the documents submitted by the latter claiming to be a wholly owned subsidiary of a foreign company which was vital to ensure that the bidder qualified as per the criteria. ONGC also failed to verify the correctness of the parent company's shareholding in the subsidiary company as on the date of award of the contract. Thus, as a prudent Corporate, ONGC failed in safeguarding its financial interest and awarding the contract to a competent party.
- BEC of the tender also did not contain a clause reserving the right of ONGC to conduct independent verification of documents to ascertain authenticity of the documents submitted by the bidders so as to serve as a deterrent. The fact that the said bidder had submitted forged documents to secure award of the contract was revealed only in March 2010. This indicated that ONGC did not have a system of proper verification of the documents of the bidders.
- Despite having sustained a substantial loss in the instant case as a result of fraudulent act on the part of NaftoGaz India, ONGC had neither reported the matter to its Board of Directors nor filed any First Information Report with the Police so far (December 2012) for investigation of what appears to be a criminal matter.
- The whole situation arose because ONGC instead of carrying out verification of the documents furnished by the bidders in regard to their fulfilling qualifying

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[◊] ***An instrument signed between the Principal and the bidder for ensuring greater public oversight over possible corruption in government organisation and to bring in transparency and integrity in the bidding process.***

criteria i.e. experience and financial capability at the initial stage, relied upon the face value of the documents after obtaining MOU and a Corporate Guarantee signed by the bidder and its parent company wherein the parent company undertook obligations of the subsidiary towards providing Project Management, Financial and Technical Support to the subsidiary for successful accomplishment of the contract. Secondly, the documents submitted initially by NaftoGaz India at the time of bidding ought to have been verified before award of the contract. These were verified by reference to the parent company *viz.* NaftoGaz Ukraine after award of the contract to NaftoGaz India in November 2007. The verification, however, revealed that the documents submitted by the India based company claiming to be a wholly owned subsidiary of the foreign company were forged.

The matter was reported to the Ministry in August 2012; their reply was awaited (March 2013).

10.9 Non-receipt of credit and loss of interest due to delay in installation of ABT meters

Delay in installation of the ABT compatible meters by Oil and Natural Gas Corporation Limited led to non-receipt of credit of ₹ 72.83 crore from power distribution companies of Gujarat State towards power wheeled to 'recipient units' and consequential loss of interest ₹ 23.12 crore.

Oil and Natural Gas Corporation Limited (Company) was operating Co-gen Captive Power Plants (CCPPs) at Ankleshwar Asset and Hazira Gas Processing Plant (HGPP), Surat. The power generated in these CCPPs was utilized for the plant operations and the surplus was supplied to nine[1] 'recipient units' for consumption as open access users under wheeling of power agreement signed[2] by the Company with Gujarat Energy Transmission Corporation Limited (GETCO). All the 'recipient units' drew power for consumption from Uttar Gujarat Vij Company Limited (UGVCL) – power distribution company, except one viz. Ankleshwar LPG Plant which drew from another distribution company–Dakshin Gujarat Vij Company Limited. The power tariff was related to change in power frequency by 0.5 Hz and the meters recorded the power transmitted/consumed with change in frequency by 0.5 Hz within a 30 minutes time block.

In August 2006, Gujarat Electricity Regulatory Commission (GERC) issued an Order stipulating that all intra-State open access users should have Availability Based Tariff (ABT) compatible inter face meters. The purpose was to measure the net power transmitted/consumed in each 15 minutes time block of real time alongwith change in average frequency by 0.2 Hz. The tariff for power transmitted/consumed was proposed to be revised accordingly. Accordingly, UGVCL intimated (February 2008) the Company[3]

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[1] ***Six 'recipient units' from CCPP Ankleshwar and three from HGPP:***

Ankleshwar : ***1. Central Tank Farm (CTF) Navagam, 2. CTF Kalol (Ahmedabad), 3. Santhal Insitu Phase I (Mehsana), 4. Balol Insitu Phase I (Mehsana), 5. Group Gathering Station (GGS) cum CTF South Santhal (Mehsana) and 6. Ankleshwar LPG Plant; and.***

HPGG : ***1. CTF Mehsana, 2. Balol Insitu Main (Mehsana) and 3. Santhal Insitu Main (Mehsana).***

[2] ***From June, 2002 in respect of HGPP and from November 2000 onwards in respect of Ankleshwar CCPP.***

[3] ***Ahmedabad Asset.***

the methodology to be adopted for billing by power distribution companies in case of open access and requested the Company to install ABT compatible meters so as to start billing based on demand recorded. However, no action was initiated by the Company despite two reminders issued by UGVCL in April 2008 and May 2008. UGVCL again reminded and directed the Company in January 2010 to install the meters within two months. On 1 April 2010, GERC issued another Order, with amendment to the Order of August 2006, for implementation of its previous Order issued in August 2006 and stipulated that the intra-State ABT with all its commercial aspects would be fully implemented in Gujarat from 5 April 2010.

The Company did not comply with the instructions of UGVCL till 5 April 2010. On 3 May 2010, UGVCL intimated the Company that credit for sale of surplus power under the wheeling of power agreement would not be afforded due to Company's inaction towards installation of the said meters at the premises of its recipient units.

Due to non-installation of ABT compatible meters, UGVCL and DGVCL stopped giving credit adjustment facility[1] against the wheeled power in respect of all 'recipient units' from 5 April 2010. As of March 2012, the Company had not received credit of ₹ 122.86 crore from UGVCL/DGVCL for the period 5 April 2010 till installation of ABT meters at the recipient units.

The Company took up the matter with Gujarat Urja Vikas Nigam Limited (GUVNL) - the holding company of UGVCL and DGVCL in July 2010 referring to inability expressed by GETCO in May 2010 in installing the meters for want of stock along with GETCO's suggestion for the distribution companies for purchase of such meters as per required specifications. The Company requested for an interim arrangement for credit adjustment pending installation of meters. In August 2010, UGVCL reiterated its earlier stand and stated that the Company had to procure and provide ABT compatible meters for installation at its recipient units and declined to afford credit till such meters were installed.

The Company initiated action for procurement of meters in December 2010 and the meters were installed much later[2]. Following repeated correspondence on the subject, a meeting between GUVNL and the Company was held in March 2012. It was decided in the meeting that from April 2010 till installation of ABT meters, UGVCL would pay the Company for the power wheeled at the rate (₹ 2.25 per Unit) at which GUVNL purchased surplus power from the Company, instead of anticipated average rate of ₹ 5.49 per Unit for the power wheeled during this period. By November 2012, the Company had received ₹ 50.03 crore from UGVCL at the rate of ₹ 2.25 per Unit for the power sold under the arrangement. Though the Company had initially protested against the lower applicable rates, it was not followed up with UGVCL. The balance amount of ₹ 72.83 crore had not been realized by the Company till March 2013.

Thus, delay in complying with the GERC Regulations/Orders and instructions of the power distribution company resulted in short receipt of ₹ 72.83 crore with consequent

[1] *The credit towards power wheeled from the power plant of Oil and Natural Gas Corporation Limited would be adjusted from the total amount payable by the recipient units for consumption of power for the respective month.*

[2] *At four recipient units under Mehsana Asset in August 2011; two recipient units under Ahmedabad Asset in December 2011, January 2012; LPG Plant under Ankleshwar Asset in August 2012. Two installations ceased to be recipient units.*

loss of interest of ₹ 23.12 crore over the period May 2010 to March 2013. No credit adjustment had been received till March 2013 in respect of Ankleshwar LPG plant.

The Management replied (September 2012) that:

- Implementation of ABT regime was under fluid state till implementation of GERC's final Order of April 2010 and that as per GERC's Order of August 2006, implementation of intra-State ABT system was on trial run (as a mock exercise);
- GERC Order of August 2006 did not cover Open Access Users and applicability of the Order extended to such users on issuance of GERC Order of April 2010 which amended the previous Order;
- Letters dating back to 2008 from UGVCL had not been received by the Company and UGVCL was informed of this on 15 March 2010. GERC in its Order of April 2010 stipulated that the ABT meters would be provided by State Transmission Utility viz. GETCO. In May 2010, UGVCL had shown its inability to install the ABT meters; technical details for the meters were intimated to the Company only in October 2010. GETCO in its letter of 27 May 2010 had requested to take further necessary action of replacing ABT meters at 8 locations; and
- Set off/adjustment against power wheeling has been in the range of 65-70 *per cent* on an average and not 100 *per cent* as assumed by Audit and, therefore, the financial implication of funds blocked and interest loss would be less than the projected figures.

Reply of the Management is not acceptable in view of the following:

1. The contention that Intra-State ABT was to be operated initially on trial run (as a mock exercise), is not acceptable as clause 20 of GERC Order No. 3 of 2006 stipulated that the intra state ABT was to be operated as a 'trial run' only for a period of three months (upto 30 November 2006). GERC's resolve/decision to implement the Intra-State ABT compatible meters was already recorded in the Order of August 2006. The Order of April 2010 was only to clarify/streamline certain provisions of the earlier Order and to decide its actual implementation. Hence, as a prudent Open Access User, the Company should have taken necessary steps to install the meters in response to GERC Order of August 2006. The Company initiated necessary action to liaise with the State Power Utilities for procurement of the meters only after UGVCL stopped credit for wheeled power from 5 April 2010.
2. As per clause 14(a) of the GERC's Order of August 2006, all the Open Access Users specified under clause 8 and 9 of the Order included Open Access Users and were required to provide ABT compatible interface meters according to the Central Electricity Authority (Installation and Operation of Meters) Regulations 2006. Clause 16(f)(iii) of the said Order stipulated that since energy accounting under ABT/Unscheduled Interchange (UI) mechanism would be for each block of 15 minutes, such open access consumer's demand would be worked out based on 15 minutes integrated period. Thus, Open Access Users were covered under GERC's Order of August 2006 and was a sufficient cause for the Company to initiate action for procurement/installation of the meters right from August 2006,

although a specific mention of the category was made in Annexure I to GERC's Order of April 2010 as an amendment to the Order of August 2006.

3. Though GERC's Order issued in April 2010 stipulated that inter face ABT compatible meters of requisite specification would be provided by the STU at the periphery of all intra-State entities (including the open access users) in lieu of expenses to be reimbursed to the STU by the entity/consumer concerned, it was in the interest of the Company to initiate action for procurement/installation of the requisite meters in response to directions of UGVCL before such an amendment was issued by GERC in April 2010. The Company did not take the desired action between August 2006 and April 2010. Even if the Company's contention based on GERC's Order of April 2010 that it was responsibility of the STU to install the meters at the premises of the recipient units is considered valid, the Company on issuance of GERC's Order of August 2006 and should have proactively processed the matter with the respective distribution company as:

   (a) affording of credit for the power injected into the State grid by the generating units and consumption of power by the recipient units under wheeling of power arrangement were inter-related issues; and

   (b) timely installation of the meters for recording the exact units of power consumed by the recipient units under the ABT tariff system was in the overall interest of the Company to ensure that it gets timely credit for the power sold to the State Power Utilities under the arrangement.

4. The outstanding amount was calculated by the respective profit centers towards power wheeling amount receivable and recognized in the Accounts for the relevant period. This amount was calculated by the respective generating units after allowing the wheeling loss and other issues applicable under the ABT billing system.

The matter was reported to the Ministry in January 2013; their reply was awaited (March 2013).

CHAPTER XI: MINISTRY OF POWER

Damodar Valley Corporation

11.1 Ash Management in Thermal Power Stations

11.1.1 Introduction

Ash is the residue after combustion of coal for generation of power in coal-based thermal power stations. A part of the ash, around 20 *per cent*, is collected as 'Bottom ash' at the bottom of the furnace. The other part is collected as 'Fly ash' in the Electrostatic Precipitators (ESP[1]). This has to be collected and disposed of without letting it out in the atmosphere.

There are two ways of disposal of ash - the dry system and the wet system. Bottom ash is disposed of by using the wet system i.e, in the form of slurry whereas fly ash is collected/ disposed of by using either 'the wet' or 'the dry' system. Dry fly ash is collected by means of dry fly ash collection system (DFACS[2]) and conveyed/transported from buffer hoppers to the storage silos located outside the plant boundary.

Dry fly ash is a valuable resource/raw material for cement, concrete and many other valuable high value added applications. Utilization of fly ash as part substitution of cement in concrete/mortar etc necessitate setting up of a system of dry fly ash collection which is the most efficient system in utilization of ash in a most economic, effective and eco-friendly manner.

Ash Management in thermal power plants indicates limiting ash generation by reducing the ash content of coal used in power generation and also enhancing utilization of ash so generated.

11.1.2 Scope of Audit

A review on "Ash Management in Damodar Valley Corporation (Corporation)" covering the period from 1997-98 to 2001-02 was incorporated in the Audit Report of the Corporation for the year 2002-03. Similarly, a long paragraph on "Ash Management of DVC Thermal Power Plants" was included in the Audit Report of the Corporation for the year 2008-09. The significant issues highlighted in the above reports were:

- High generation of ash due to non-usage of blended coal and use of coal with high ash content:
- Poor Ash Handling system;
- Inadequate evacuation and disposal of ash;
- Violation of pollution control norms.

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[1] ***Precipitators (ESP) is a device that removes suspended dust particles from a gas or exhaust by applying a high-voltage electrostatic charge and collecting the particles on charged plates.***

[2] ***A dry fly ash collection system ensures collection of ash from the ESP and transportation of the same to the storage silos located outside the plant boundary.***

The Action Taken Note on these issues has not been received so far (January 2013). In the meantime, with the increased generation of power in the thermal power stations of DVC, the generation of ash has increased substantially. In the above backdrop, a follow up audit on Ash Management system in four thermal power stations (MTPS, DTPS, CTPS and BTPS[1]) of the Corporation was undertaken which covered a period of three years (2009-10 to 2011-12).

11.1.3 Audit Objectives

The Theme Audit was carried out to assess whether:

- the generation of ash was regulated and managed efficiently as per norms set by Ministry of Environment and Forest (MoEF);
- an efficient mechanism was in place to evacuate ash;
- ash evacuated was utilised effectively in accordance with the guidelines of MoEF and the Corporation;
- an efficient and environmental friendly mechanism was in place for disposal of ash.

11.1.4 Audit Criteria

The criteria for assessing the effectiveness of ash management were derived from:

- norms fixed by Central Electricity Authority(CEA) for blending of coal;
- norms fixed by MoEF/ MoP/ TIFAC/ CPCB/S PCB[2];
- estimated and actual generation of ash;
- industry best practice.

11.1.5 Audit findings

11.1.5.1 Generation of Ash

The Corporation with an installed thermal capacity of 4210 MW (June 2012) generated 16.86 MTPA of ash and disposed of 14.74 MTPA of ash during the period from 2009-10 to 2011-12 as detailed below:

Total Ash generation and Utilization
(Figures in millon ton per annum)

Power Station	2009-10			2010-11			2011-12		
	Average *per cent* of ash content in coal consumed	Generation	Utilization	Average *per cent* of ash content in coal consumed	Generation	Utilization	Average *per cent* of ash content in coal consumed	Generation	Utilization
BTPS'B'	45.7	1.81	1.80	49.29	1.45	1.45	48.87	1.49	1.79

[1] *Mejia Thermal Power Station (MTPS), Durgapur Thermal Power Station (DTPS), Chandrapura Thermal Power Station (CTPS), Bokaro Thermal Power Station (BTPS).*

[2] *Ministry of Environment and Forests/Ministry of Power/Technology Information, Forecasting and Assessment Council/Central Pollution Control Board/State Pollution Control Board.*

CTPS	45.33	0.61	0.62	48.57	0.83	0.39	50.79	1.17	0.76
DTPS	42.62	0.64	0.86	43.15	0.56	0.86	45.55	0.72	0.50
MTPS	38.5	1.65	1.81	43.63	2.64	1.70	45.49	3.29	2.20
Total		**4.71**	**5.09**		**5.48**	**4.40**		**6.67**	**5.25**

It was observed that except for the year 2009-10[1], ash generated was not fully utilized.

Management stated (December 2012) that utilisation of ash in its power plants (87.28 percent) was better in comparison to other power utilities of the country. Audit however, observed that the ash so utilised was mostly dumped in the ash ponds in slurry form (89 *per cent* of total utilization) for subsequent utilisation in mine filling by incurring transportation cost instead of utilizing the same in an eco-friendly manner.

11.1.5.2 Non-usage of beneficiated and blended coal

(a) **Coal beneficiation:** It is a process by which the quality of raw coal is improved either by reducing the extraneous matter from the mined coal or by reducing the associated ash or both. It is a broader term used to describe the complete process of sizing, handling and washing of the run-of-mill coal. Use of beneficiated coal leads to various improvements in the performance of thermal power plants, which contribute towards reduced carbon dioxide emission and hence allowed as credit under Clean Development Mechanism[2] (CDM). The Environment (Protection) Act, 1986 under which the MOEF notifications are issued, empowers the Government to impose penalty for contraventions of the rules, directions etc. As per the MoEF notifications (1997, 1998 and 2001), any thermal power station falling under a critically polluted area should use beneficiated coal with an ash content not exceeding 34 *per cent.* CEA identified BTPS and DTPS of DVC which were among the 39 thermal power stations requiring the use of blended/beneficiated coal.

(b) Thus, non-usage of beneficiated coal in the above two power stations was not only in violation of the MoEF norms but also resulted in loss of opportunity to save the cost of generation during the period from 2009-10 to 2011-12 in those TPSs.

Management replied (December 2012) that it had taken up with the coal companies for supply of beneficiated coal but had no choice but to accept the quality of coal supplied by them. This is not acceptable in view of the fact that the Corporation should have explored the possibility of setting up of washeries of their own.

(c) **Blending of coal:** It is also an important tool of ash management since it entails mixing of low ash content imported coal with high ash content indigenous coal to ensure the required heat value and to generate lesser amount of ash in flue gas. Boiler tube leakages due to ash erosion can also be avoided by lowering generation of ash. The committee constituted by the Corporation for studying/analysing the infrastructural

[1] ***During the year 2009-10 the utilisation of ash was more than ash generated in CTPS, DTPS and MTPS due to clearance of accumulated balance of ash generated in the previous years.***

[2] ***The Clean Development Mechanism (CDM) is a flexible arrangement under the Kyoto Protocol for international cooperation in reducing green house gas emissions. CDM allows emission-reduction projects in developing countries to earn certified emission reduction (CER) credits, each equivalent to one ton of CO_2. CERs can be traded and sold and used by industrialised countries to meet a part of their targets for reducing emission.***

facilities available at Badarpur Power Station of NTPC for blending of imported coal recommended (June 2008) various measures like installation of high pressure fire hydrant, revamping of in-motion railway bridge, blending by dozer operation etc. Audit observed that there were no blending facilities installed in the four power stations of the Corporation under review. There were instances of boiler tube leakages (15717.5 hours) in the power stations during the period from 2009-10 to 2011-12 on account of ash erosion resulting in generation loss of 2407.28 MU. This loss could have been avoided by blending of imported coal with indigenous coal.

Management accepted (December 2012) that blending of coal could not be done due to infrastructural shortcomings of the plants.

It was further observed that due to high ash content in coal in DTPS, the performance of its ESP was affected resulting in emission of black smoke. The emission exceeded from 439.59 mg/Nm^3 (10 September 2009) to a maximum of 5403.45 mg/Nm^3 (20th December 2010) against the norm of 150 mg/Nm3. Consequently, the West Bengal Pollution Control Board (WBPCB) imposed (September 2011) a pollution cost/penalty of ₹ 20 lakh on DTPS and ordered to submit a bank guarantee of similar amount as an assurance to comply with the environmental norms. The Corporation paid (October 2011) the penalty and submitted the bank guarantee to WBPCB.

11.1.5.3 Absence of initiatives on Clean Development Mechanism

The power stations need to adopt methodologies which increase efficiency of generation and improve the overall plant heat rates. Use of fly ash in construction of bricks and cement, installation of DFACS and ash water recirculation system are included in CDM qualified projects. Keeping in view the above benefits and requirements, the Corporation decided (September 2007) taking up CDM projects and expression of interests for the above projects was invited. Although some parties responded, the management neither took any further action nor apprised the Board. The Board also did not monitor this issue further.

Management in its reply (December 2012) did not mention any reason for not taking any initiative on CDM.

11.1.5.4 Absence of a comprehensive Ash Management Policy

MoEF directed (September 1999) to gradually phase out dumping of fly ash on land. It was observed that after a lapse of 10 years, the Corporation formulated (June 2009) a policy for dry fly ash utilization. The salient feature of this policy was centered on the utilisation of ash in dry form by cement industries so that the Corporation could save transportation cost to the tune of 80 *per cent* on account of ash evacuation and to comply with the environmental norms set by MoEF as well. The MoEF through its notification (November 2009) mandated the thermal power plants to allocate dry fly ash to all manufacturers/agencies/entrepreneurs. The Corporation, however, took nearly two years (September 2011) to include other manufacturers and agencies for utilization of ash.

(a) Dry Fly Ash Collection System

It was envisaged in the policy of June 2009 that 80 percent of the total ash generated in the power stations could be collected through DFACS for supply to user agencies. The status of installation/commissioning of DFACS in the units is given below:

TPS	Unit	Target Date	Present position
BTPS	1, 2 & 3	April to July 2009	Unit 2- commissioned but lying inoperative
			Unit -1 & 3 not yet commissioned
CTPS	1, 2 & 3	Dec-10	Tendering stage
DTPS	3 & 4	Dec-10	Construction stage
MTPS	1 to 6		Units 1 to 3-Silo already connected to LIL
			Silo of Unit 4, 5 & 6 operational

Due to non-installation of DFACS, the Corporation had to evacuate ash from the ash ponds and dump the same into the open cast mines by incurring transportation cost. It was observed that during the year 2009-10 to 2011-12 the Corporation had to incur ₹ 219.40 crore on transportation of ash (142.67 lakh cubic metre) and therefore lost the opportunity to save ₹ 175.50 crore (80 percent of ₹ 219.40 crore). The above transportation expenditure is recurring in nature and not reimbursable through tariff.

Management stated (December 2012) that the Corporation had already installed DFACS in all its new units and initiated action for installation of the same in old units. It was observed that DFACS had not been commissioned in one of the new units (unit # 7) of CTPS. It was further observed that the DFACS had not been installed in the old units (December 2012).

Management's contention that there was no loss due to non-installation of DFACS was not acceptable as the savings in transportation cost was envisaged by the management itself while framing the policy in June 2009.

(b) Ash disposal initiatives

There was poor off-take of ash from the Corporation's premises. The reasons for poor off-take in MTPS, the station equipped with DFACS, were non- availability of operators at the dry fly ash silo, congestion as well as time restrictions at the gate of MTPS. The Corporation did not take suitable action to remove the above bottlenecks.

The contention of the management (December 2012) that due to non-availability of fly ash takers the ash had to be dumped in ash ponds was not acceptable as poor off-take of ash was due to non-availability of infrastructural facilities for supply of ash to the prospective ash takers.

(c) Undue contractual benefit to the user agency

As per the MoEF notification, the thermal power stations should facilitate the ash user agencies by making them available land, electricity etc and provide access to the ash lifting area for promoting and setting up of ash-based production units in the proximity of the area where ash is generated. The Corporation entered into an agreement (April 2005) with Lafarge India Private Limited (LIL) for collection of dry fly ash for an estimated quantity of 1200 tonnes (+/- 25 *per cent*) per day (TPD) free of cost from the three units of MTPS (U # 1, 2 and 3) for its cement factory which was to be set up at MTPS premises. As per the agreement, the Corporation leased out 78 acres of land at MTPS on a long term basis for 30 years, agreed to share 66 percent of the initial capital cost incurred by LIL for installation of collection, classification, storage and transportation system for fly ash within the power plant and 60 percent of the operation and maintenance (O&M) cost of the above system to be incurred by LIL. The Corporation also allowed LIL to share common infrastructure facilities like its lone captive railway line for bringing the coal at MTPS.

It was observed that the terms and conditions of the above agreement with LIL were prejudicial to the financial interests of the Corporation on the following grounds:

- Sharing of initial capital cost incurred by LIL in respect of collection, classification, storage and transportation system for fly ash within the power plant is not financially prudent since there is no stake of the Corporation in LIL;
- The cement plant is operated by LIL exclusively without any profit sharing clause in the agreement. Thus, sharing of O&M expenditure by the Corporation during the entire period of agreement (30 years) lacks commercial justification.
- Allowing LIL to use the dedicated lone captive railway of MTPS has been frequently hindering the inward coal rake movement leading to loss of generation of power. During November 2011, Unit 7 of MTPS could not generate power due to such hindrances and suffered contribution loss of ₹ 3.28 crore.
- Extending such undue facility to LIL was not in line with the MoEF directives.

On commissioning of the cement plant (April 2009), LIL submitted its claim for reimbursement of ₹ 16.36 crore of Corporation's share (capital expenditure of ₹ 12.22 crore and O & M cost of ₹ 4.14 crore). Another claim amounting to ₹ 1.12 crore had been submitted by LIL towards relocation of its plant at MTPS. These claims were under scrutiny of the Corporation (September 2012).

Management has accepted (December 2012) the audit observation.

Audit further observed that the agreements entered into by NTPC with the user agencies for supply of ash from its power stations did not contain any clause for sharing of capital and O&M cost.

11.1.5.5 Evacuation of Ash

(a) Under performance of the Electro Static Precipitator and Ash Handling Plant

Electro Static Precipitator (ESP) is installed in thermal power plants to entrap the flying ash emerging from the boiler and flush out the same through the hopper forming part of the Ash Handling Plant (AHP). As per the Technical Audit Report of the power stations, functioning of ESPs in BTPS, MTPS and DTPS were affected due to poor ash evacuation from the AHP hoppers. Thus, inadequate evacuation of ash by ESP and AHP resulted in load restriction and consequent generation loss of 402.3 MU in the three thermal power plants during the period from 2009-10 to 2011-12 and the Corporation had to suffer contribution loss of ₹ 64.96 crore.

Management stated (December 2012) that ESPs' performance of BTPS & DTPS was hampered due to high ash content of coal. The reply of management is not acceptable as the generation loss could have been avoided by regular maintenance of ESP and AHP.

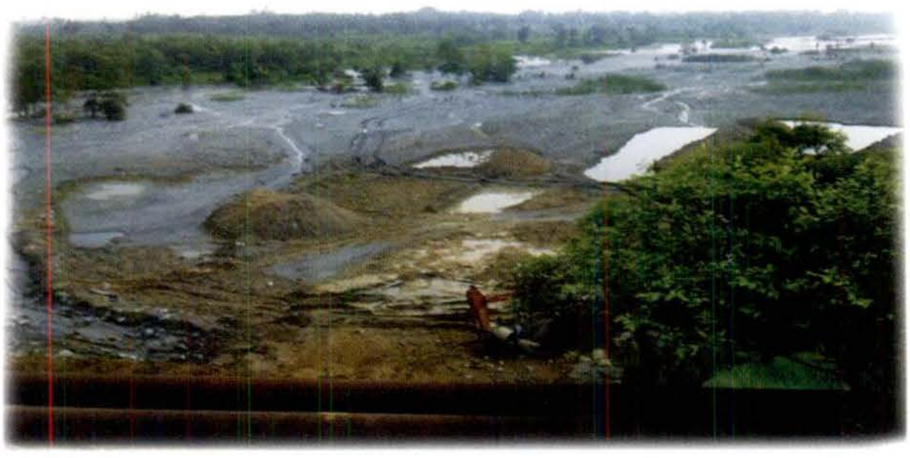
(b) Limited Ash Pond Capacity

Of the four thermal power stations, the Corporation has limited ash pond capacity in BTPS and MTPS. In BTPS, both bottom ash and dry fly ash of BTPS 'B' (3X210 MW) are discharged into the existing ash pond near river Konar. The area of the ash pond is

12.07 hectares which is not sufficient to accommodate the ash generated. Continuous evacuation of such ash from ponds to the abandoned mines is, therefore, required. It was observed that based on the Jharkhand High Court order (July 2006), the Jharkhand State Pollution Control Board (JSPCB) was directed to take appropriate action against BTPS-B or order closure of the unit for causing pollution to river Konar and other tributaries including river Damodar. BTPS committed (January 2007) to construct a new ash pond at a distant place with zero discharge system and abandon the existing ash pond. The work for construction of the new ash pond at Noorinagar in Govindpur area (about 4 KM away from BTPS) was awarded (November 2008) to Hindustan Steelworks Construction Limited (HSCL) at a cost of ₹ 48.50 crore with scheduled date of completion of 18 months i.e. March 2010. The scope of work was subsequently revised (November 2011) which resulted delay in completion of work. The cost of work increased to ₹ 76 crore and the completion period extended upto June 2012. However, the work was not completed (December 2012). Thus, the effluents continued causing pollution and sedimentation in the rivers. In the meantime, JSPCB issued notice (December 2009) to close down the operation of Unit # 1 of BTPS-B. The Corporation appealed (January 2010) to the JSPCB for reconsideration of the matter and committed for early construction of permanent ash pond, which was still pending (December 2012).

(i) ***Delay in acquisition of land resulted in environmental degradation***

The ash ponds in MTPS with an area of 600 acres and holding capacity of 220 lakh m^3 were constructed to meet the requirement of Units # 1, 2 & 3 (3 X 210 MW). Subsequently, five more units were commissioned in 2005, 2008, 2011 and 2012 respectively* without acquiring any additional land for construction of ash ponds. Further, the work for evacuation of ash from ash ponds to the abandoned mines was delayed. Evacuation started only in 2009 when the ash ponds were filled with 175.08 lakh m^3 of ash. Ash evacuation rate (i.e. 2.25 lakh MT per month) was not commensurate with the rate of accumulation of ash in the ash ponds (i.e. 3 lakh MT per month approx) resulting in filling up of ash ponds. It was observed that there was restriction on



movement of vehicle for lifting of ash from the ash ponds due to absence of passage for vehicle movement owing to non-acquisition of land by the Corporation. As a result spillage of ash slurry took place in the nearby paddy fields (exhibited above), affecting

* *Unit-4 – 210 MW, Unit-5 & 6 – 2 X 250 MW and Unit-7 & 8 – 2 X 500 MW.*

nearly 300 acres of land. Till 2009-10, the Corporation had to pay avoidable crop compensation to the tune of ₹ 1.74 crore for 150 acres of land (January 2012) and compensation for the remaining 150 acres was to be paid (August 2012). Due to breach (March 2012) in the ash pond, the nearby dams (Jamgari Dam and the upper Maliara Jor Bundh) of West Bengal were affected due to huge deposition of fly ash on the bed of the dams which reduced the capacity of the dams considerably and created problems in irrigation in the command area. Block Development Officer, Govt. of West Bengal observed (08 June 2012) that Maliara Jor Bandh was fully covered with ash and that the water was destroying the agricultural land nearby; that fly ash was getting deposited on residences and causing breathing trouble among the inhabitants. The Corporation is liable to bear the cost of cleaning of the above dams.

Management stated (December 2012) that the process of acquisition of land for additional pond had been taken up with the MoEF. The belated action for acquisition of land lacked justification and resulted in environmental degradation.

11.1.5.6 Deficiency in tendering process for evacuation of ash

The Corporation had restricted (November 2006) the Qualifying Requirement (QR) of tenders for evacuation of ash from the ash ponds to only those contractors who had experience in "evacuation and dumping of ash in power stations" instead of industry practice of keeping the QR as "ash or earth evacuation", a practice which had been followed by DVC prior to 2006. The contracts awarded accordingly were due to expire and the Corporation invited (March 2010) fresh tenders based on the above restrictive QR. The action led to cartel formation among the qualified bidders violating the provisions of the Works and Procurement Manual of the Corporation and CVC guidelines. Subsequently, the Corporation modified the QR, at the behest (August 2010) of the Ministry of Power, and made it more competitive by reverting to the norm prevailing prior to November 2006 i.e. "ash or earth evacuation". Fresh tenders were issued (September 2010) by cancellation of tenders issued in March 2010. The apex Court gave an interim order (December 2011) in the case filed by existing contractors stating that the Corporation may process the new tender based on the modified QR, but the order could be placed only after the case was decided and the case was pending as of December 2012. It was observed that the L1 bidders with respect to fresh tenders (with relaxed QR) (September-October 2010) of BTPS, DTPS and MTPS were found to be lower by 24.8 *per cent*, 23.3 *per cent* and 2.85 *per cent* respectively than the estimated rates. Thus, due to restrictive QR in 2007 the Corporation could not avail of competitive market rates and had to incur extra expenditure[♥] of ₹ 32.84 crore on transportation of 145.43 lakh M^3 during the period from 2008-09 to 2011-12.

While accepting the above observation, the management stated (December 2012) that the modified QR was finalised in line with the Works & Purchase Manual and CVC guidelines.

11.1.5.7 Utilization/Disposal of Ash

(a) Loss of generation due to non-adherence to environmental norms

Ash generated in BTPS-B plant is dumped in the abandoned mines of Bokaro & Kargali area of Central Coalfields Limited (CCL). In terms of the recent agreement (December

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[♥] ***earlier tender rates of ₹147.87(DTPS), ₹222.41(MTPS) ₹136.29 (CTPS) and ₹115.96(BTPS)***

2010) with CCL, BTPS is to take necessary measures for compaction of fly ash regularly with dozer, reclamation of the top with soil etc to avoid pollution. It was, however, observed that despite repeated cautioning by CCL, BTPS did not take necessary action in this regard. CCL disallowed BTPS from disposing of ash in its mines for 41 days (11.05.2012 to 20.06.2012) due to which the ash could not be evacuated from its ash ponds for dumping into the mines of CCL. Consequently, BTPS had to forcefully shut down its units for 316 hours (from 08.06.2012 to 15.06.2012) leading to generation loss of 46.669 MU and loss of contribution amounting to ₹ 8.40 crore.

Management replied that shut down of BTPS during the above period was not due to non-compliance with environmental norms. This contention was not acceptable as the correspondence of the BTPS management with its headquarters and with CCL, JSPCB and Jharkhand State Electricity Board revealed that generation was disrupted during the above period due to non-evacuation of ash from ash ponds.

Conclusion

Managing ash has been a long standing problem for the Corporation. The MoEF and pollution control boards had issued directions from time to time for reduction of ash generation, collection, evacuation and utilisation of the same in an effective and eco-friendly manner. Underperformance of the ash handling system, non-installation of dry fly ash collection system in all the power stations, poor management of ash ponds and further dumping in abandoned mines led to loss of generation, river and dam pollution and damages to paddy fields. Huge avoidable cost on transportation of ash continued to be incurred. The corporation needed to develop a clear strategy for utilisation of ash in an eco-friendly manner through CDM projects.

The matter was reported to the Ministry in December 2012; their reply was awaited (March 2013).

11.2 Irregular/ double payment

Non-observance of proper procedure and misuse of official capacity and absence of security and other safety measures led to irregular/double payment of ₹ 58.95 lakh.

Damodar Valley Corporation (Corporation) follows a standing procedure for issue of work order and payment of bills thereof. The proposal for work are forwarded by the concerned user section with detailed scope of work, estimated cost, completion schedule to the appropriate authority as per the delegation for obtaining administrative approval to undertake the proposed works prior to the floating of enquiry and finalization for issue of work order. The work bills are submitted by the contractor to the concerned user section which then certifies the work done and sends the bill to the Accounts Section for payment. If the bill is found to be in order, it is passed for payment by the officers of Accounts Wing. After receipt of the passed bill, voucher no. and date are given in Bank Payment Register. Thereafter the cheque and the passed bill are submitted to the cheque signing authority for issuing the cheque and making payment to the contractor.

However, instances of irregular release of payment during the period from August to October 2011 at Bokaro Thermal Power Station (BTPS), a unit of the Corporation, were noticed by audit which was in violation of the existing procedure for sanction and release of payments. A total sum of ₹ 39.03 lakh was released by the Accounts Section in five instances against which no work orders were issued, no jobs were executed and vouchers were missing, indicating violation of the existing procedure to be followed before releasing payments.

In additional five instances a total payment of ₹ 19.92 lakh was released against bills for which payments were already released earlier. It was observed that after making payment, the existing practice of recording such payment on the back side of the Agreement/work order was not followed and no contractor-wise ledger was maintained. It was also noticed that most of these bills were either photocopies or scanned copies of previous bills and there were instances of manipulation like overwriting, changing the date of the work done etc. In all the above five cases, the bills were passed for payment by the head of the Accounts Section violating the existing procedures.

During the course of audit during May 2012, management contacted (May 2012) the concerned parties for refunding irregular/ double payment of ₹ 58.95 lakh (₹ 39.03 lakh + ₹ 19.92 lakh) as stated above. Thereafter, five parties refunded a sum of ₹ 33.40 lakh while audit was in progress. Earlier, CBI has filed (April2012) an FIR of criminal conspiracy against a party to whom an amount of ₹ 8.27 lakh were released without any service being provided by the party. The case is under investigation till January 2013.

Thus due to non-observance of the existing system, payments were released to the parties for no work/job. It was further observed that important accounts and records/documents were not kept under lock and key and were stored in open public places. Bank payment books for the period September and October 2011 were burnt and severely damaged in April 2012 by chemical burning as detected by the inspection team of the management.

Thus, non-observance of proper procedure, absence of security and other safety measures led to irregular / double payment of ₹ 58.95 lakh (₹ 39.03 lakh + ₹ 19.92 lakh). Although such irregular payments were made from August 2011 onwards, action was initiated by the management to recover the loss only after commencement of audit in May 2012. While accepting the above irregularities, the management stated (November 2012) that no disciplinary action could be taken till receipt of advice from CVC to whom the case was referred.

The matter was reported to the Ministry in October 2012; their reply was awaited (March 2013).

NHPC Limited

11.3 Irregular encashment of casual leave and optional holidays

NHPC Limited made irregular payment of ₹ 20.32 crore to its employees on account of encashment of casual leave/optional holidays during 2001-10.

As per instructions of Department of Public Enterprises (DPE), leave rules are framed by CPSEs with the approval of their Board of Directors keeping in view the broad parameters of the policy/guidelines laid down by the Government of India. DPE has not issued any specific instructions/guidelines permitting encashment of casual leave and optional holidays. Other CPSEs like NTPC Limited, Power Grid Corporation of India Limited, Power Finance Corporation Limited, Rural Electrification Corporation Limited and SJVN Limited are also not providing facility for encashment of casual leave/optional holidays to their personnel.

Though there were no guidelines of DPE and no practice in other CPSEs indicated above for encashment of casual leave and optional holidays, a proposal was put up (December 2000) by the Management of NHPC to their Board of Directors (Board) to allow encashment of casual leave and optional holidays. The proposal was justified to curb tendency amongst employees to avail casual leave/optional holidays during the last quarter of the year leading to absenteeism which adversely affected the office work. Board approved the proposal in December 2000 and the scheme was extended to employees and executives from calendar year 2001. The Government nominee director who attended the meeting of the Board did not express any disagreement to the proposal, as noticed from the minutes of the meeting.

It is pertinent to mention that while clarifying on the issues raised by Ministry of Shipping, Government of India, DPE stated (October 2010) that casual leave must not be encashed at all and unavailed casual leave must lapse at the end of the calendar year. In compliance of this clarification of DPE, NHPC discontinued the scheme for encashment of casual leave/optional holidays with effect from January 2011 with approval of Chairman and Managing Director, NHPC. But the amount of ₹ 20.32 crore paid to its employees on account of casual leave/ optional holidays encashed during January 2001 to December 2010 was however, not recovered.

The Management stated (October/November 2012) that the benefit of encashment of casual leave and optional holidays was allowed to arrest the trend of absenteeism during the months of October-December which adversely affected the office work.

The reply is not tenable as casual leave/optional holidays were neither encashable under any instructions/policy of the Government nor NHPC obtained specific approval of DPE in this regard.

Thus, payment of ₹ 20.32 crore to employees on account of encashment of casual leave/optional holidays during the years 2001 to 2010 was irregular.

The matter was reported to the Ministry in November 2012; their reply was awaited (March 2013).

Power Finance Corporation Limited

11.4 Performance related payments and perquisites to employees in excess of DPE norms

PFC made performance related payments and allowed perquisites aggregating to ₹ 21.63 crore to its executives during April 2007 to March 2012 in excess of the ceilings prescribed by the Department of Public Enterprises.

Department of Public Enterprises (DPE) issues instructions *inter alia* for regulating pay, allowances, perquisites and performance related payments by Central Public Sector Enterprises (CPSEs) to their personnel from time to time. Decision of Government to revise pay and allowances of executives of CPSEs with effect from 1 January 2007 was conveyed (26 November 2008) by DPE. This was followed by a Presidential directive (30 April 2009) by Ministry of Power to Power Finance Corporation Limited (PFC) to revise the pay and allowances of their personnel strictly as per DPE guidelines.

Audit examined implementation of these instructions by PFC and observed that following payments were made by PFC in excess of the prescribed guidelines:

Performance related payments

DPE guidelines of 26 November 2008 *ibid* permitted performance related payments (PRP) by CPSEs subject to a maximum ceiling of 5 *per cent* of distributable profits of an enterprise. In terms of these guidelines, PFC, with approval of their Board of Directors (Board), was paying PRP and annual reward to their executives at varying rates from time to time subject to ceiling of 5 *per cent* of distributable profits.

DPE guidelines of November 2008 *ibid*, however, introduced maximum ceiling slabs ranging from 40 to 70 *per cent* of basic pay of executives below Board level and 100 *per cent* to 200 *per cent* of the basic pay for Board level executives for PRP. These ceilings were in addition to the overall maximum ceiling of 5 *per cent* of distributable profits of an enterprise.

A Remuneration Committee was constituted (January 2010) by the Board to look into the issues pertaining to PRP and annual bonus. Remuneration Committee observed that different levels of executives up to Board level were being paid PRP (including annual reward) at the rates ranging from 121 *per cent* to 130 *per cent* of basic pay and would be adversely affected by implementation of revised guidelines of DPE which restricted PRP to maximum of 40 to 70 *per cent*. Remuneration Committee recommended payment of an additional component in the form of 'Baseline Compensation' subject to a ceiling of 66 *per cent* of the basic pay as well as 5 *per cent* of distributable profits of PFC to partially compensate the executives against fall in the revised PRP *vis a vis* pre revised PRP. The recommendations of Remuneration Committee were accepted by the Board (March 2010) and were also approved for Board level executives. The government nominee directors on the Board who attended the Board meeting where the recommendations of Remuneration Committee were approved did not express disagreement on the issue, as was evident from the minutes of the meeting.

In October 2011, Ministry of Power sought details of PRP payments and 'Baseline Compensation' disbursed/proposed to be disbursed by PFC after the applicability of revised DPE guidelines. In response, PFC informed (November 2011) Ministry that as DPE guidelines led to an overall loss with regard to PRP to personnel, a 'Baseline Compensation' was approved by the Board which had been empowered by DPE OM dated 26 November 2008 to decide on annual bonus and policy of its distribution across the executive and non-unionised supervisors within the prescribed limits of 5 *per cent* of profit before tax. Ministry forwarded the letter of PFC to DPE for information and necessary action. Response of DPE was awaited (March 2012) by the Ministry. Meanwhile PFC paid 'Baseline Compensation' amounting to ₹ 20.52 crore to its personnel during 2009-10 and 2010-11* on the basis of approval of their Board.

The Management stated (August 2012) that 'Baseline Compensation' was introduced based on incremental growth and also keeping in view the fact that the employees had been put to financial loss on account of payment of PRP and 'Baseline Compensation' was within the overall ceiling of 5 *per cent* of distributable profits. As every employee

* ***Payments for 2011-12 were yet to be made (December 2012)***

contributed to incremental growth of the corporation, 'Baseline Compensation' was extended uniformly across all levels including Board level functionaries.

The reply is not tenable as DPE guidelines did not prescribe protection of PRP drawn earlier by the employees and hence the rationale of financial loss to employees put forward by the Remuneration Committee and approved by the Board was flawed. Further, gradewise ceilings were fixed by DPE in addition to overall ceiling of 5 *per cent* of distributable profits and Board was not empowered under DPE instructions to approve PRP in excess of these gradewise ceilings.

Thus, PFC made payments of PRP/'Baseline Compensation' in violation of the guidelines of DPE.

Payments towards perquisites in excess of DPE ceilings

Instead of prescribing a fixed set of allowances and perquisites, DPE permitted (November 2008) CPSEs to follow 'Cafeteria approach' allowing executives to choose from a set of perquisites and allowances (other than house rent allowance and leased accommodation which were regulated separately) subject to a maximum ceiling of 50 *per cent* of basic pay. Accordingly, PFC identified (November 2009) 15 perks and allowances to be included in the basket forming part of the cafeteria out of which executives were permitted to choose perks and allowances subject to their aggregate being limited to 49.9 *per cent* of their basic pay. Balance 0.1 *per cent* of the basic pay was meant for monetization of operational expenses for running of canteen.

Audit observed that in addition to the identified perks and allowances aggregating to 50 *per cent* of basic pay, PFC has been providing interest subsidy on housing loans to employees. The benefit in respect of interest subsidy on housing loans to executives which was beyond the maximum ceiling of 50 *per cent* of basic pay of executives as fixed by DPE, aggregated to ₹ 1.11 crore during 2007-12.

Management stated (August 2012) that interest subsidy on housing loan had not been included in the 50 *per cent* cap because housing as a perquisite has been kept out of the ceiling of 50 *per cent* by DPE in their instructions of November 2008.

The reply is not convincing as DPE guidelines had laid down that all perks and allowances except four specified allowances *viz.* North-East allowance limited to 12.5 *per cent* of basic pay, allowance for underground mines limited to 15 *per cent* of basic pay, Special allowance up to 10 *per cent* of basic pay for serving in the difficult and far flung areas and Non practicing allowance limited to 25 *per cent* of basic pay for medical officers, were to be within the overall ceiling of 50 *per cent* of basic pay. This was further clarified by DPE (June 2011) on questions raised by some Ministries that no other allowance or perk would be kept outside the 50 *per cent* ceiling. Further, housing in the form of house rent allowance and leased accommodation are not comparable to interest subsidy on housing loan.

The matter was reported to the Ministry in October 2012; their reply was awaited (March 2013).

CHAPTER XII: DEPARTMENT OF PUBLIC ENTERPRISES

Bharat Electronics Limited, Bharat Heavy Electricals Limited, Bokaro Power Supply Company Power Limited, Cochin Shipyard Limited, Dredging Corporation of India Limited, Ferro Scrap Nigam Limited, Hindustan Petroleum Corporation Limited, Mangalore Refinery and Petrochemicals Limited, MECON Limited, National Hydro Power Corporation Limited, NTPC Limited, Neyveli Lignite Corporation Limited, NTPC SAIL Power Company Private Limited, NMDC Limited, Power Finance Corporation Limited, Power Grid Corporation of India Limited, Rashtriya Ispat Nigam Limited, Rural Electrification Corporation Limited, SJVN Limited and Steel Authority of India Limited

12.1 Irregular payment towards encashment of Half Pay Leave and Sick Leave

Encashment of half pay leave/sick leave in deviation from DPE guidelines, resulted in irregular payment of ₹ 413.98 crore from January 2007 to November 2012.

According to the Department of Public Enterprises (DPE) instructions of April 1987[1], an individual central public sector enterprise (CPSEs) may frame leave rules for its employees keeping the broad parameters of the policy guidelines laid down in this regard by the Government of India (GoI).

GoI allowed encashment of half pay leave (HPL) and earned leave (EL) put together within the overall ceiling of 300 days with effect from 1-1-2006, on superannuation, which was an enhancement to the earlier ceilings on encashment of EL up to 240 days. Thus, in terms of DPE instructions of April 1987 *ibid*, CPSEs were also required to follow the overall ceiling of 300 days for encashment of EL and HPL for their employees on retirement.

On a reference made by Ministry of Shipping DPE clarified to all CPSEs on 26 October 2010[2] that, they were not permitted to encash leave beyond the overall ceiling of 300 days. In a further clarification of 17 July 2012[3], referring to its instructions of April 1987, DPE reiterated that sick leave could not be encashed, though EL and HPL could be considered for encashment of leave on retirement subject to the overall limit of 300 days.

A. Audit observed that the following CPSEs deviated from the DPE guidelines and made irregular payment of ₹ 391.31 crore to their employees towards HPL encashment on superannuation over and above the ceiling of 300 days.

Sl. No.	Administrative Ministry	Name of CPSE	Period	Amount (₹ in crore)
1	Ministry of Coal	Neyveli Lignite Corporation Limited (NLC)	January 2007 to September 2012	6.46
2	Ministry of	Bharat Heavy Electricals	January 2007 to September	150.01

[1] OM No. 2(27)85-BPE(WC) dated 24 April 1987
[2] OM No. 2(32)10-DPE(WC) GL-XXIII dated 26 October 2010
[3] OM No. 2(14)/2012-DPE(WC) dated 17 July 2012

	Heavy Industries	Limited (BHEL)	2012	
3	Ministry of Petroleum and Natural Gas	Hindustan Petroleum Corporation Limited (Visakh Refinery) (HPCL)	April 2007 to March 2012	0.50
4	Ministry of Power	NTPC Limited	April 2007 to September 2012	43.61
5	Ministry of Power	Power Grid Corporation of India Limited(PGCIL)	April 2007 to November 2012	13.28
6	Ministry of Power	NHPC Limited	April 2007 to September 2012	10.97
7	Ministry of Power	Rural Electrification Corporation Limited (REC)	November 2008 to September 2012	1.67
8	Ministry of Power	Bokaro Power Supply Company Private Limited	January 2007 to March 2012	1.22
9	Ministry of Power	Power Finance Corporation Limited (PFC)	April 2007 to March 2012	0.60
10	Ministry of Power	NTPC SAIL Power Company Private Limited	January 2007 to March 2012	0.39
11	Ministry of Power	SJVN Limited	April 2007 to September 2012	0.14
12	Ministry of Shipping	Dredging Corporation of India Limited (DCI)	April 2007 to March 2012	1.19
13	Ministry of Steel	Steel Authority of India Limited (SAIL)	January 2007 to March 2012	144.19
14	Ministry of Steel	MECON Limited	January 2007 to March 2012	6.40
15	Ministry of Steel	Rashtriya Ispat Nigam Limited (RINL)	April 2007 to March 2012	6.13
16	Ministry of Steel	NMDC Limited	April 2007 to March 2012	4.19
17	Ministry of Steel	Ferro Scrap Nigam Limited (FSNL)	January 2007 to March 2012	0.36
TOTAL				**391.31**

BHEL stated (November 2012) that Chairman & Managing Director had approved the provision of HPL encashment and that the service conditions of Central/State Government and the CPSEs were different.

SAIL, NTPC, NTPC SAIL Power Company, FSNL stated (October2012/February 2013) that encashment of HPL was as per the Company's leave rules. **PGCIL** stated that scheme was adopted from NTPC and continued in PGCIL and approved by Board of Directors which comprised representation from Ministry of Power also.

MECON stated (January 2013) that DPE directives of 26 October, 2010 related to encashment of EL and separate instructions for encashment of HPL on superannuation was not issued by DPE.

NHPC, SJVN, Bokaro Power Supply Company, REC, PFC, NMDC, RINL, DCI and HPCL (Visakh Refinery) stated (October-December 2012/February 2013) that HPL encashment scheme was introduced with the approval of the Board of Directors, in conformity with the policy followed by several other CPSEs, and it was not obligatory to strictly adopt GoI leave rules.

NLC did not provide reply to the above audit observation.

Replies of CPSEs are not acceptable as the leave encashment beyond the overall policy of Government of India was not permitted as per the DPE instructions of April 1987. Further, DPE's circular of 26 October 2010 clarified that CPSEs were not permitted to encash leave beyond the overall ceiling of 300 days. In another clarification issued in July 2012, referring to instructions of April 1987, DPE reiterated that EL and HPL could be considered for encashment on superannuation subject to overall limit of 300 days. Therefore, encashment of HPL to employees on retirement beyond the overall ceiling of 300 days was in violation of DPE guidelines and was, thus, irregular.

B. Audit further observed that the following CPSEs deviated from the DPE guidelines as they paid to their employees towards sick leave, which resulted in irregular payment of ₹ 22.67 crore, as per details given below:

Sl. No.	Administrative Ministry	CPSE	Period	Amount (₹ in crore)
1	Ministry of Defence	Bharat Electronics Limited	April 2007 to June 2012	21.49
2	Ministry of Shipping	Cochin Shipyard Limited	December 2007 to November 2012	0.94
3	Ministry of Petroleum & Natural Gas	Mangalore Refinery and Petrochemicals Limited (MRPL)	November 2010 to March 2012	0.24
Total				**22.67**

BEL stated (September 2012) that by implementing such encashment it was able to achieve lower attrition rate and recruit/retain trained manpower for production.

Cochin Shipyard Limited stated (February 2013) that DPE's clarification on sick leave encashment was issued only in July 2012 and, as they proposed to obtain further directives from DPE, the employees who retired from service since November 2012 had not been paid encashment of sick leave. **MRPL** did not furnish the reply (March 2013).

The above replies are not acceptable as DPE's clarification of July 2012 specifically disallowed encashment of sick leave and the clarification was applicable to all CPSEs.

In sum, the above CPSEs' leave rules/policy for encashment of sick leave or of EL with HPL exceeding 300 days, on superannuation, violated the DPE guidelines and resulted in extra expenditure of ₹ 413.98 crore for the period January 2007 and November 2012.

United India Insurance Company Limited, The New India Assurance Company Limited, National Highways Authority of India and Food Corporation of India.

12.2 Recoveries at the instance of audit

During test check, several cases relating to non-recovery, short recovery excess payment, short charging of premium etc. were pointed out. In 21 cases pertaining to four CPSUs audit pointed out that an amount of ₹ 152.97 crore was due for recovery. The management of PSUs had recovered an amount of ₹ 121.86 crore during the period 2011-12 as detailed in **Appendix-I.**

Steel Authority of India Limited

12.3 Corrections/rectifications at the instance of audit

During test check, cases relating to deficiencies in the systems, policies and procedures etc. were observed and brought to the notice of the management. Details of cases where the changes were made by the management in their policies/procedures at the instance of audit are given in **Appendix-II.**

CHAPTER XIII: MINISTRY OF SHIPPING

The Shipping Corporation of India Limited

13.1 Disposal of Vessels

13.1.1 Introduction

The Shipping Corporation of India Limited (Company) was formed in October 1961 by amalgamating Eastern Shipping Corporation and Western Shipping Corporation. Government of India conferred (August 2008) 'Navaratna' status to the Company which owns and operates around one third of the Indian tonnage and provides various kinds of marine trade services such as tanker, bulk, liner, etc.

The Ministry of Shipping, Government of India prescribed (April 1995) economic life of vessels of various categories, according to which tankers and bulk carriers could be scrapped/disposed off after the completion of 20 years and 25 years of economic life respectively. The Company disposed off 30[1] vessels (**Annexure-IV**) during the period 2009-10 to 2011-12 and realized ₹ 598.67 crore as net sale proceeds as detailed below:

Table 1

(₹ in crore)

Year	No of vessels	DWT[2] (MT)	Sale Proceeds
2009-10	8	453540.00	122.52
2010-11	9	520426.90	200.97
2011-12	13	568657.14	275.18
Total	**30**	**1542624.04**	**598.67**

13.1.2 Scope of audit

Audit examined during the period June 2012 to October 2012 records pertaining to the sale of 30 vessels disposed of by the Company during the years 2009-10 to 2011-12. The records in the Mercantile Marine Department (Ministry of Shipping) relating to de-registration of disposed vessels were also examined.

13.1.3 Audit Objectives

Audit study was undertaken to assess whether:

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[1] *Vessel M.V Dr. Nagendra Singh, sold during the year 2011-12 was not considered in audit as the vessel was declared as Constructive Total Loss (CTL) due to fire and the Company got full insured value of the vessel. The sale was conducted on behalf of the underwriters.*

[2] *Dead Weight Tonnage (DWT) is the displacement of any loaded condition minus the lightship weight. It includes the weight of crew, passengers, cargo, fuel, water and stores.*

- prudent norms* were uniformly applied for preparation of Techno Economic Study (TES) to ascertain the useful life of the vessel so as to arrive at an appropriate decision to either sell or for further trading.
- basis of estimation of the economic life and base price of sale, had considered all correct and relevant parameters and were correctly and uniformly applied.
- there existed a competitive and robust bidding process.
- rules and regulations including instructions of Government of India were complied with and terms and conditions of sale were adhered to.

13.1.4 Audit Criteria

The system for disposal of vessels was examined against the criteria derived from:

- Guidelines issued by Government of India relating to disposal of vessels;
- Guidelines issued by the Company and the decisions taken by the Board;
- Terms and Conditions in the tendering documents;
- Best practices adopted in the Industry.

13.1.5 Audit Methodology

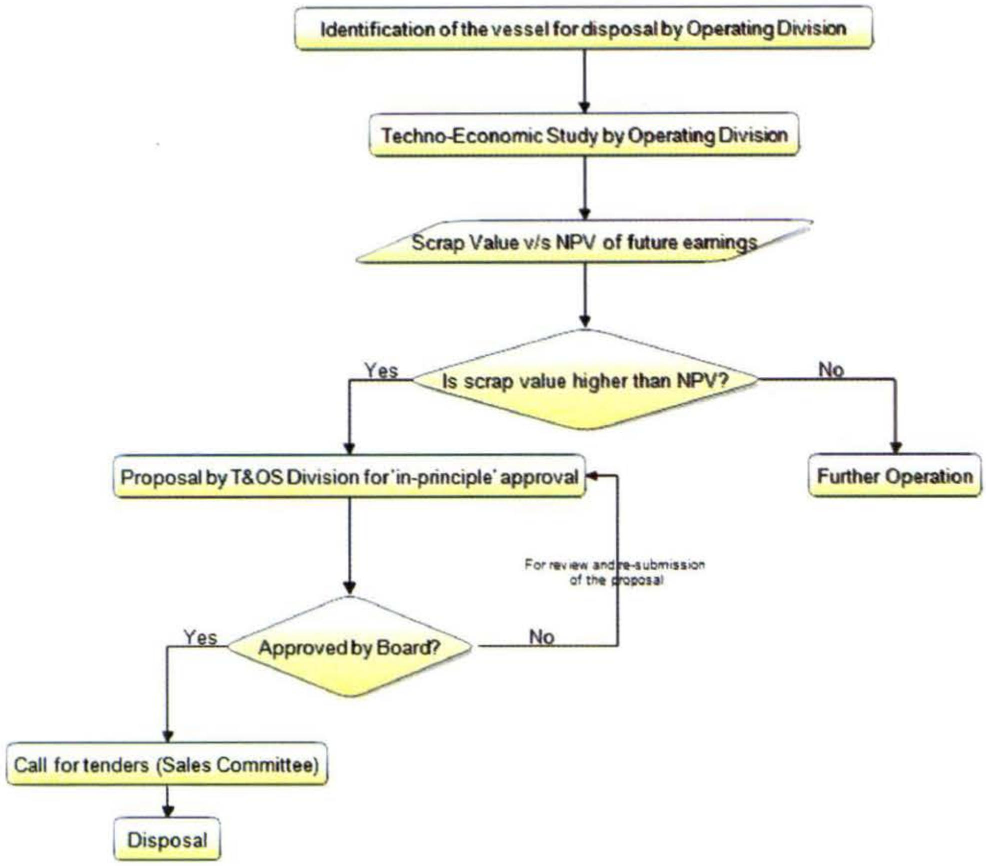
Test check of the records pertaining to preparation of Techno Economic Study (TES) to arrive at the economic value of the vessels was carried out along with related instructions in this regard. Cases of individual sale of vessels were test checked with reference to terms and conditions as per the agreement entered and the guidelines issued. Process of bidding and award of contract for sale were seen keeping in view the guidelines that had been drawn up by the Company.

13.1.6 Process of Disposal

In terms of Article 150 (2) (d) of Articles of Association of the Company, the Board of Directors was empowered to take decisions for disposal of vessels which were economically not viable. As per the GOI's OM dated 16 April 1990, the Company had to follow the guidelines issued by Ministry of Surface Transport, Goverment of India.

The flow chart depicting the steps in the process of disposal is as under:

***** *TES is being conducted to arrive at a decision whether to sell or operate the vessel further by using uniform norms such as highest scrap rate published in the last three months in the Clarkson weekly, expected future earnings for three years as published in Drewry magazine, estimated expenditure for next three years, etc.*



13.1.7 Audit Findings

13.1.7.1 Process of disposal carried out on the basis of guidelines which were not approved by Government

The Ministry of Surface Transport had prescribed (April 1990) the guidelines for the sale/scrapping of the ships. The Company revised (August 2000) the guidelines and Ministry of Shipping also had approved (June 2001) the same. The Company again revised the guidelines, and submitted (April 2004) to the Ministry for approval. The Ministry, while refusing the proposal (December 2004) directed the Company to follow the existing guidelines/procedure in letter and spirit. However the Board of Directors approved the revised guidelines (May/July 2010) and thereafter, followed the new guidelines. This was, however, sent to the Ministry only for information (October 2010). No specific approval of the Ministry was obtained.

The Management/Ministry stated (November 2012/February 2013) that SCI Board during its meeting (April 2009) observed that SCI was bestowed upon the "Navratna" status on 01August 2008 by the Government of India and therefore recommended SCI to revise the existing disposal guidelines. Subsequently, the "Guidelines for disposal of SCI's vessels" were revised and was approved by SCI Board (July 2010).

The Ministry further stated (February 2013) that the Ministry of Shipping (MoS) had nominated two Directors on the SCI Board and at least one director was present during the Board meetings when the subject was being discussed and deliberated upon.

Therefore, the views of the MoS were conveyed / considered by the Government Directors on SCI Board.

The reply needs to be considered in the light of the fact that the Joint Secretary (Ministry of Shipping), one of the Government Directors on the Board of SCI had clarified (November 2011) that any change in disposal guidelines required the approval of Government. This fact was ignored by the Board and the new guidelines were followed without approval by the Government.

Major changes between the guidelines of 2001 and 2010 were given below:

Table 2

Subject	Guidelines of 2001	Guidelines of 2010
Sale price	In principle approval was obtained for the disposal of the vessel at a realizable sale value as concluded in the TES.	In principle approval was obtained for the disposal of the vessel at a realizable sale value as concluded in the TES. In addition to this, the Board would authorise CMD to dispose the vessel upto (-) 10 *per cent* of the Board approved sale price. Thus, the net realisable sale value was allowed to be reduced by 10 *per cent* of the value as concluded in the TES.
Re-tendering	In case the tender was not finalised due to offer being lower than the Board approved price, H 1 backing out, etc., re-tendering was to be conducted.	In case H1 bidder backs out, the Sales committee with the concurrence of the CMD, will have the option to invite all the participating bidders (except the H1 bidder) to submit fresh bids within a short span of time, say within 24 hours, instead of going for re-tendering.
Final approval	The recommendations of the sales committee will be first put up to the CMD and thereafter to the Board of Directors for their final approval.	If the H1 bid is within the price band authorized by the Board, then the CMD was authorized to approve sale of the vessel. However in case the price is lesser than the price band, the proposal is put up to the SCI Board for final approval.

Audit observations with reference to the above were as follows:

In the 2010 guidelines, it was inserted that in case H1 bidder backs out, the Sales committee with the concurrence of the CMD, had the option to invite all the participating bidders (except the H1 bidder) to submit fresh bids within a short span of time, say within 24 hours, (snap bids) instead of going for re-tendering. Since the rates quoted were known to all the bidders (at the time of opening the tender), the chances of obtaining better rates were restricted and the existing tenderers were observed to be quoting a rate which was always less than the H1 of the original tender. It was also observed in the case of four vessels where snap bids were invited from existing bidders, the prices realized were less than the H1 price by ₹ 3.39 crore as given below:

Table 3

Sl. No.	Name of the vessel	H1 price in the first tender	Price realised in snap bid	Difference	Exchange rate	₹ In lakh
		(USD in lakh)				
1	Rishikesh	40.82	39.42	1.40	51.77	72.48
2	Jadunath Singh	38.34	36.50	1.84	46.58	85.82
3	Piru Singh	39.40	37.51	1.89	47.06	89.15
4	Lok Rajeshwari	30.10	28.07	2.03	44.96	91.20
	Total					338.65 or 3.39 crore

If the intention behind snap bid was speedy sale, this was defeated as the process of snap bid itself was initiated after considerable delay ranging between 14 and 33 days after the opening of the original bids.

The Ministry stated (February 2013) that the inordinate delay in snap bids was caused due to the H1 bidder backing out or dishonouring his H1 bid.

The reply was factual. Such delay also entailed avoidable expenditure on standing charges to the extent of ₹3.51 crore as detailed below:

Table 4

(₹in crore)

Sl. No.	Name of the vessel	Delay in calling snap bids (days)	Standing charges per diem	Total
1	Rishikesh	33	0.03	0.99
2	Jadunath Singh	18	0.04	0.72
3	Piru Singh	31	0.04	1.24
4	Lok Rajeshwari	14	0.04	0.56
	Total	96	0.15	3.51

In contrast, in four cases where retendering had to be done due to quotes received being lower than the price band, the company could complete the retendering process much faster than the snap bid process as would be seen in the following table:

Table 5

Sl. No.	Name of the Vessel	Date of invitation of tender	Due Date of Tender	Tender opening date for 2nd tender	Tender opening date for 3rd tender	Date of sale	No. of days from due date of tender to date of sale (VII - IV)
I	II	III	IV	V	VI	VII	VIII
1	Havildar Abdul Hamid	02-Aug-10	12-Aug-10	24-Aug-10		08-Sep-10	27
2	Lance Naik Karam Singh	02-Aug-10	09-Aug-10	17-Aug-10	24-Aug-10	07-Sep-10	29

3	Pataliputra	19-Jan-12	30-Jan-12	09-Feb-12		17-Feb-12	18
4	Nirmaljith Singh Sekhon	13-Jan-10	25-Jan-10	04-Feb-10		10-Feb-10	16

Recommendation No.1: The existing guidelines may be reviewed duly ensuring requisite approvals.

13.1.7.2 Techno-Economic Study

TES is being conducted to arrive at a decision whether to sell or further operate the vessel by using uniform norms. Audit noticed deviations in preparation of TES as discussed below:

(A) Inclusion of Management Expenses in TES

As per the practice followed by the Company for preparation of TES, the management expenses were being excluded and basic cost of dry docking were taken as ₹ 5 crore. Audit observed that in case of vessel M V Kanpur, Company considered management expenses of ₹ 2.86 crore and basic cost for dry docking of ₹ 6 crore instead of above, and recommended for immediate scrapping. If the management expenses were excluded and ₹ 5 crore considered as the basic cost for dry docking the result was in favour of further operation. Audit observed that management expenses were excluded in all other cases since the same was to be spread over to the remaining vessels.

The Ministry stated (February 2013) that this was as per the earlier practice of including Management Expenses in preparation of TES. The reply is factually incorrect as the Company had excluded Management Expenses while preparing (March 2009) the TES for vessel M V Lok Prakash sold prior to vessel M.V.Kanpur as the same would be borne by the Company's other vessels. Thus, the inclusion of management expenses in case of vessel M V Kanpur was improper and to that extent projections were not correctly forecasted.

(B) Adoption of incorrect scrap rate for TES

In order to assess the viability of the vessel for further operation or to be immediately disposed of, the prevailing scrap rate was compared with the NPV of further operation. As per the procedure of the Company, the highest scrap rate/LDT[1] as published in the Clarkson Weekly in the three months preceding the TES date was to be adopted. However, we observed that in 25 cases, the rate adopted for TES was less by 0.55 to 23.36 *per cent* than the rates as published in Clarkson Weekly which resulted in fixation of lower base price by an amount of ₹ 60.48 crore and in four[2] cases, the rate adopted for TES was higher by 2 to 5.26 *per cent* which resulted in fixation of higher base price by ₹ 4.21 crore as given in Annexure-V.

Thus, the scrap rates adopted for working out the realizable scrap value lacked uniformity and consistency and resulted in fixation of lower base price in 25 cases by the Board and in four cases a higher base price by the Board.

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[1] ***Light Displacement Tonnage defined as the weight of the ship as built.***

[2] ***Vessels M T Havildar Abdul Hamid PVC, M T Lance Naik Karam Singh PVC, M T Lt.Rama Raghoba Rane PVC, M T Bharatidasan,***

The Management stated (November 2012) that the scrap rate taken was the highest during the last three months as per the Clarkson Report according to the directives of the Board of Directors. Reply also contained the vessel-wise date of TES proposal along with scrap rate applied with reference to the date of Clarkson Report. The Clarkson report referred to was the latest report considering the date of the TES proposal and not the highest in the preceding 3 months of the date of TES.

However, the Ministry stated (February 2013) that the Company considered the average weekly demolition scrap rate published in the Clarkson Weekly report for TES till the Board directed (December 2011) that the highest scrap rate in the preceding two months should be considered to arrive at the NPV calculation.

The fact remained that the directions of considering the highest scrap rate as given in the Clarkson report preceding 3 months was disregarded by the Management while preparing the TES.

Recommendation No.2: The procedure for preparation of the Techno Economic Study Report needs to be clearly defined and its adherence regularly monitored.

13.1.7.3 Delays in initiating proposals by Operating Division and non revision of scrap rate in case of delay in sale

TES conducted by the Operating Division taking into consideration the date of expiry of economic life of vessels and expiry of licenses were submitted to the Technical &Operation Division (T&OS) for obtaining 'in-principle' approval from the Board. The time frame allowed in the approved guidelines for disposal was as follows:

- 30 days to complete the TES and to obtain the approval of CMD after identification of the vessel for disposal by the Operating Division
- five days for preparation and submission of the proposal by T&OS Division to Board for in-principle approval;
- 80 days from in-principle approval to final disposal of the vessel

The scrap rate considered for TES was based on the highest scrap rate published in the Clarksons weekly during the last three months at the time of preparation of TES. The market rate was influenced by various factors such as supply/demand of scrap tonnage, labour issues, change in government rules/regulations, steel/metal market price etc. and was highly volatile.

When the scrap rates were so volatile and published on a weekly basis, fixation of 80 days in the guidelines prevented the company from obtaining a value which was having a mark to market value and this was further compounded by the fact that even the 80 days limit was not adhered to in 13 out of 30 cases and actual sale was transacted after a period ranging from 86 days to 211 days from the date of 'in principle' approval by the Board. During this period, several changes in the scrap rates were communicated in Clarkson Weekly. In all these cases except vessel M V Devprayag, actual realization obtained by the Company was lower by an amount ranging between USD 8.64/LDT and USD 89.47/LDT when compared with prevalent scrap rates published in Clarkson Weekly and resulted in less realization of ₹ 19.94 crore after taking into account the gain in one of the vessels. (**Annexure-VI**)

The Management stated (November 2012) that the existing guidelines for the disposal of vessels did not specify the time period for individual activity from the date of 'in principle' approval to the date of tender. The 80 days limit was not applicable if the vessel was commercially employed. The reply further stated that detailed clarification and the process of attending to queries took some time.

The reply also admitted there was delay in the initiation of TES and the criteria of 115 days were not complied with and ensured future compliance. However, the Ministry stated (February 2013) that the proposal for disposal towards most of the vessels was initiated timely by the Operating Division and was approved by the Management approximately two months prior to disposal.

The reply was not acceptable as the decision to dispose of the vessel was taken based on the scrap rate published at the time of preparation of TES. Since the scrap rate was volatile, the Company should have considered revision of the scrap rate when the sale was concluded after 80 days from the TES date.

13.1.7.4 Delay in processing tender and avoidable expenditure of standing charges

As per guidelines/procedure for disposal of vessels, final disposal of vessels had to take place within 80 days from in-principle approval by the Board. The guidelines did not specify the number of days required for each step such as invitation of tender, evaluation of offers received, finalization of tender etc.

Company had not prescribed any milestones for internal activity. However, it was observed that in eight cases tenders were invited after the vessel was laid up, incurring avoidable expenditure of ₹ 2.24 crore on standing charges. This period ranged from one to 17 days as could be seen from **Annexure-VIII**. Since invitation of tender and response of the bidder invariably also involved inspection of the vessel by prospective bidder, the Company in order to avoid these standing charges should cut the delays by issuance of tender notification in and around arrival of the vessel for lay up by effective planning. Any unexpected delay in arrival of vessel could be compensated by commensurate extension in submission of bids.

The Company agreed (November 2012) that the existing guidelines for disposal of vessels did not specify the time period for individual activities from the date of in-principle approval to the date of tender and further, stated that it was practically not possible to complete all the preliminary tendering procedures before lay-up of a vessel.

13.1.7.5 Inclusion of excess fuel oil

The Company obtained (November 2011) clarifications from various international publications including Clarkson Weekly regarding inclusion of cost of bunkers in the reported ship disposal prices. As per the clarifications received, the internationally reported prices were inclusive of minimum bunkers on board. Accordingly, the Ship Disposal Sub-Committee (SDC) recommended (December 2011) minimum quantity of 140 MT of Heavy Oil (basis 24 MT/day consumption x 5 days plus 15-20 tons unpumpable) and 75 MT of Diesel Oil (basis 2.5 MT/day consumption/30 days). Board in its meeting held on 13 January 2012 directed that the "management may set above benchmark for the quantity of bunker to be maintained on the vessels put up for disposals''.

Taking into account the minimum quantity fixed, Audit applied these norms retrospectively to assess the extent to which the value of scrap obtained got reduced on account of excess bunker quantity in the previous disposals and observed that in 12 cases (**Annexure-VIII**) there was excess bunker available at the time of delivery which resulted in reduction of sales realization to the extent of ₹ 8.63 crore.

The Management/Ministry stated (November 2012/February 2013) the consumption of bunkers practically varied from vessel to vessel depending upon its age, size and the condition of its equipments. This fact was also recognized by the SDC while revising the guidelines for disposal.

The fact remained that Company had not set any benchmark for the quantity of bunker to be maintained on the vessels put up for disposal.

13.1.7.6 Deficiencies in process of tendering

As per the guidelines approved by the Company in the year 2010, tenders were to be processed by a Tender Processing Committee (TPC) comprising officers not below the level of General Manager from the Divisions of Finance, Operation and Technical and Off shore Services. The details of the vessels which were put up for disposal were to be advertised in Indian/foreign newspapers with communications to INSA, MSTC, various shipbrokers in the list of SCI. The tenderers would be asked to deposit the tender along with EMD in the tender box which would be unlocked and the tender documents removed after giving the serial numbers and initialed by the TPC members or their nominees. Scrutiny of 159 such tender documents against sale of 30 vessels revealed the following deficiencies:

(i) Tender Register was not maintained to record the details of the tenders received for individual vessels.

The Management noted (November 2012) the above for future compliance.

(ii) Although the guidelines stipulated that the agents were allowed to participate on behalf of the Principal on the basis of a specific authority letter issued by the Principal, in 36 tenders submitted by agents, proper authorization from Principal were not found to be attached with the tender documents. The authority letter needed to be attested by a Notary which was not found to have been done while submitting the tenders.

The Management stated (November 2012) that the authorization letters submitted by e-mail were not kept in the file. It was further stated that the requirement of receiving notarized authorisation letter was not mentioned in the existing guidelines. The reply was not acceptable as the authorisation letters duly signed by a Notary should have been attached to make it legally valid.

(iii) Eight out of 159 tender documents did not have the signature of tenderer in the form. In case of vessel M T Sabarimala, though the vessel was sold to M/s Anisa Shipping, the tender documents had remained unsigned. Besides violation of guidelines, this had serious implications in case of backing out resulting in non-finalisation of tenders.

The Management noted (November 2012) the above for future compliance.

(iv) M/s Kalthia Ship Breaking Ltd. had submitted their offer for vessel M T Havildar Abdul Hamid PVC in the form purchased for vessel M T Lance Naik Karam Singh. When the acceptance letter was sent to the firm, the Company stated (August 2010) that they neither paid EMD nor quoted for the vessel M T Havildar Abdul Hamid PVC instead the offer was made for the vessel MT Lance Naik Karam Sigh PVC. However, in view of the 'long term cordial relations' the Company accepted the offer.

The Management accepted the observation and stated (November 2012) that this was done in the interest of the Company to avoid further delay in re-tendering.

(v) Over and above this, 26 tenders submitted did not mention the name of the signatory, in 53 cases seal of the tenderer was not found to have been affixed in the requisite space provided and the address of witness and/or signatory was not mentioned in 95 cases. In 73 cases neither the name nor the signature of the witness were found to be affixed and in 26 cases, the details of EMD were not furnished.

The Management accepted (November 2012) the observation and noted the same for future compliance.

(vi) As per the guidelines, all the corrections and overwritings in the tender documents were required to be initialed by the members of the TPC. However, it was observed that in 16 cases even when there were corrections in the most important details i.e., in respect of the amounts that were quoted, these were not found to have been initialed by the TPC. The instruction in respect of initials on the corrections on the tender form was an important control instruction to prevent malpractice and to maintain transparency and its non-compliance indicated that the process was significantly impaired.

The Management stated (November 2012) that the corrections were countersigned by the TPC members/representatives and in certain cases the same had been missed out inadvertently.

(vii) In case of vessel M V Hardwar, offer forms for vessel M V Kanpur were used by M/s Holborn Shipping Inc. In case of vessel M T Nirmaljit Singh Sekhon, M/s JRD Industries used the form for "Further Trading" but quoted for "Scrapping" the vessel and the tender form submitted by M/s Ashapura Logistics Ltd. was not signed by TPC members as stipulated in the Guidelines for Disposal of Vessels. M/s Rossmere submitted their tender for the vessel M T Lance Naik Karam Singh in the tender form purchased for vessel M T Havildar Abdul Hamid. For vessel M V Varanasi, M/s Holborn Shipping Inc., Marshall Islands used the tender forms purchased for vessel M V Mandakini. All these tenders were treated as valid.

The Management admitted (November 2012) that M/s. Holborn Shipping Limited submitted the tender form meant for vessel M V Kanpur and this was brought to the notice of the party and corrections were made and signed by the TPC. We observed that the corrections were counter signed only by the witness.With regard to tender submitted by M/s Ashapura Logistics, the Management stated (November 2012) that this was inadvertently not initialed by the TPC members.The change of form in respect of vessel Varanasi by bidder M/s Holborn, the Management stated that the bidder inadvertently used the form of 'Mandakini' for Varanasi.

The Ministry stated (February 2013) that the Company has progressed to the electronic auction methodology for better transparency and smoothening of disposal processes.

13.1.7.7 Restricted competition on account of deficient practices

(A) Repeated Snap bids on account of backing out by H1

Tenders were invited (September 2009) for the disposal of vessels MT Naik Jadunath Singh PVC and MT CH Piru Singh PVC against which three and four offers were received respectively. Since H1 backed out in both cases, by obtaining verbal consent from CMD (21 October 2009) the Company invited Snap Bids (one in case of Vessel MT Naik Jadunath Singh PVC and two in case of Vessel MT CHM Piru Singh PVC). The details of offers received are given below:

Table 6

Vessel MT Naik Jadunath Singh PVC

Bidder's name	First tender (29-09-2009)			Snap bid (22-10-2009)	
	Amount quoted in ₹ /(USD)	Agent's name	Remarks	Amount quoted (₹)	Remarks
Global Shiptrade.	18,41,01,000 (38,34,239)	Sandeep Mehta	Backed out*		
Marianna Shipping	16,85,80,665 (35,11,000)	Chandrakant Oza		16,35,24,825 (35,11,000)	
Sea Maritime Corp.	17,38,62,315 (36,21,000)	Pramod Gade		16,99,98,750 (36,50,000)	Sold (Oct. 09)

Vessel MT CHM Piru Singh PVC

Bidder's name	First tender (29-09-2009)			Snap bid (22-10-2009)		Snap bid II (05-11-2009)	
	Amount quoted in ₹ /(USD)	Agent's name	Remarks	Amount quoted (₹)	Remarks	Amount quoted (₹)	Remarks
Global Shiptrade	18,92,00,000 (39,40,435.28)	Sandeep Mehta	Backed out*				
Excel International	18,24,57,000 (38,00,000)	Brahmadatt		17,69,85,000 (38,00,000)	Backed out*		
Marianna Shipping	16,85,80,665 (35,11,000)	Chandrakant Oza		16,35,24,825 (35,11,000)		17,65,45,521 (37,51,100)	Sold (Nov. 09)
Grand International	17,96,24,115 (37,41,000)	Pramod Gade		17,23,27,500 (37,00,000)		17,60,70,165 (37,41,000)	

EMD of ₹20 lakh forfeited and blacklisted for three years

It could be seen from the above that, in both tenders, all bidders except Shri Pramod Gade and Shri Chandrakant Oza, backed out and these two Agents (Pramod Gade and Chandrakant Oza) got one vessel each. Thus the chances of formation of cartel could not be ruled out. Even though M/s Global Shiptrade Pvt. Ltd represented by Shri. Sandeep

Mehta was blacklisted by the Company for three years, the firm participated in eight tenders[1] thereafter, in the name of M/s Holborn Shipping Inc. and got one vessel (M V Patliputra).

The Management stated (November 2012) that since Shri Sandeep Mehta was merely acting as the buyer's agent in both the cases, there was no legal reason to stop M/s. Holborn Shipping from participating in SCI's tenders.

The above reply is not acceptable as Shri Sandeep Mehta of M/s Global Shiptrade Pvt. Ltd. participated in the tender for vessel Jadunath Singh as Managing Director. In case of another vessel (M V Hardwar), Shri Sandeep Mehta participated as Director of M/s. Holborn Shipping Inc. The address, phone No, fax number and e-mail address were same for both the Companies.

The Ministry stated (February 2013) that M/s. Holborn Shipping Inc., buyer of M V Pataliputra was neither blacklisted nor kept on hold from participating in the Company's tender for sale of ships. The reply further stated that a completely different entity cannot be denied participation for sale of ships because one of its Directors is also on the Board of a blacklisted Company.

However, the fact remained that the Company failed to verify the credentials of the bidding firms and the very purpose of blacklisting the firm was defeated. Further, Shri. Sandeep Mehta was not merely the Director of the Company but was participating in the tenders by signing the tender forms on behalf of both the Companies.

(B) The guidelines required giving wider publicity for disposal of vessels through intimation to INSA, MSTC and ship breakers association. Despite all the efforts as stated to have been done by the Company for enlarging the field for competition, it was observed that out of 30 vessels sold during the period, 3 agents cornered 13 vessels. Shri Shashank Agarwal submitted 13 offers representing eight[2] firms and got six vessels, Shri Pramod Gade submitted 14 offers representing five[3] firms and got four vessels and Shri Rashmin Sharma submitted six offers representing four[4] firms and got three vessels.

Review in audit of disposal of 30 vessels revealed that out of 159 tenders that were received, 79 offers (50 *per cent*) were submitted by agents of which 33 offers were submitted by 3 agents who had cornered 13 vessels out of 30.

- Shri Pramod Gade represented both the bidders viz., M/s Kalthia Ship Breaking on 17 August 2010 and M/s Rossmere International Ltd. on 24 August 2010 for vessel Karam Singh.
- Shri Shashank Agarwal and Shri Pramod Gade were the two agents who had participated in the tenders for the vessels Hamid and Karam Singh on behalf of

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[1] ***Devprayag, Hardwar, Kanpur, Mandakini, Murshidabad, Pataliputra, Uttarkashi, Varanasi***

[2] ***Marianna Shipping Ltd., Anisa Shipping Ltd.(two vessels), Joplin Overseas Investment Ltd. (two vessels), Natalia Shipping Pvt Ltd, Karina Shipping Ltd. and Grand International Shipping Co.***

[3] ***R.L.Kalthia Ship Breaking Pvt. Ltd., Grand International Ltd., Sea Maritime, Powerful International and Rossmere International Ltd.***

[4] ***Karina Shipping Ltd., Natalia Shipping Pvt. Ltd., Sea Lion Marine Ltd. and Joplin Overeas Investments Pvt Ltd***

four different parties and grabbed one vessel each, indicating chances of cartel formation.

These three agents were found to be representing different firms of M/s GMS Inc., Dubai and M/s Wirana Shipping Corporation, Singapore. We further noticed that out of 30 vessels sold, M/s GMS Inc. and M/s Wirana Shipping Corporation, Singapore, Cash Buyers[1] acquired 16 vessels and four vessels respectively by representing through six[2] (GMS) and three[3] (Wirana) firms.

Thus, limited members of firms/agents defeated the aim of fostering competition.

The Management stated (November 2012) that bidders such as M/s GMS Inc. and M/s. Wirana Shipping Corporation operate through many subsidiary companies registered in various countries across the world. Bidder representatives were merely representing their respective subsidiary/sister companies during various tenders of the Company. Although the companies are different by name and registration, they belong to the holding company.

The Ministry further stated (February 2013) that when the world's largest and second largest buyers of ships have competed in the Company's tenders for disposal and emerged successful, it is a testament to the fact that the Company's tenders have had global level of competition. Hence, the Company has not limited the competition.

However, the fact remained that the buyers of ships participating through the same set of agents restricted the scope for competitive quote.

13.1.7.8 Collection of EMD

(A) Deficiencies in the system of collection of EMD

The guidelines stipulate that the tenderer has to submit EMD up to 5 per cent of the expected sale value as per TES or ₹50 lakh whichever is lower.

Clauses 5 (ii) and 8 of General Terms and Conditions of tender prohibits the Company from adjusting any EMD paid for earlier tenders and EMD had to be either refunded to unsuccessful tenderers or adjusted as Security Deposit for the successful tenderer. However, the Company violated the rules as EMD paid by one bidder was adjusted for the bidding by another. The genuineness of the requests for changes/adjustments made by the agents was not verified by the Company with the principals.

The Company had not maintained any register for watching receipt of EMD and transfer of EMD as Security Deposit/adjustment towards other tenders/refund etc. In the absence of proper documentation, whether EMD was collected in all cases could not be ensured. Some of the illustrative cases highlighting deficiencies in the system of collection and reassignment of EMDs are highlighted below:

(i) We observed that in 16 instances, the tenderers wanted the Company to adjust the EMD paid for earlier tenders and was accepted by the Company in all cases.

[1] The term Cash Buyers in the ship breaking industry refers to companies that possess the financial strength to pay the value of the ships upfront without utilizing any kind of credit..

[2] Marianna Shipping Ltd., Anisa Shipping Ltd., Karina Shipping Ltd., Joplin Overseas Investment Ltd, Natalia Shipping Pvt. Limited and Sea Lion Marine Ltd.

[3] Grand International Ltd., Sea Maritime and Powerful International.

(ii) M/s Delmer Group PTE. Ltd., while submitting their offer for vessel M V Hardwar, attached a copy of swift payment (dated 14 Oct 2011) at New York as proof of EMD. However, the same was credited to the Company's account only on 21 October 2011. TPC accepted this offer while opening the tenders (14 October 2011) and the vessel was sold to M/s Delmer Group.

The Company stated (November 2012) that the above was accepted as an exceptional case and in the best interest of the Company. The above reply was not acceptable as the same is against Clause 5 (i) of the General Terms and Conditions of Tender.

(iii) In respect of vessel Raghoba Rane, M/s Gurudev Enterprises submitted cheque for ₹ 50 lakh instead of demand draft/pay order which was to be credited to company's account before closing of tender submission. The tender was however, accepted.

The Management/Ministry stated (November 2012/February 2013) that the guidelines and tender conditions are silent on the acceptance of cheque towards EMD; hence the cheque was accepted as an exception in this case. The reply was not acceptable as the guidelines clearly specify that the EMD could be paid either by way of a Demand Draft/Bank's Pay Order or by way of a Bank Guarantee. As such, acceptance of cheque towards EMD was against the guidelines.

(iv) In respect of vessel Raghoba Rane, another tenderer M/s. Grand International Shipping Company, Singapore did not remit the full amount of EMD in USD, instead requested to adjust balance amount from EMD remitted towards earlier tender not refunded. The amount available, however, was insufficient. But the tender was accepted by the Company

We observed that the swift payment was done by the firm on 2 August 2010 at 11:54 hrs at London (IST 16:30 hrs) after the tender was opened at 15:30 hrs. Thus, the Company allowed the offerer to participate in the tender without making the payment of EMD and avoided retendering and attached the swift copy with the tender form after opening of the tender. The nonpayment of EMD was qualified by the Internal Auditors also, however, the same was not considered by the TPC.

The Ministry stated (February 2013) that the time 11:54 Hrs (GMT) refers to the time of confirmation of swift payment by the bank and not the exact time of remittance. However, the fact remained that the swift payment was received by the Company well after the tender opening time of 15:30 Hrs (IST). Further, acceptance of EMD which is credited to Company's account after completion of tendering process defeated the very purpose of collection of EMD to qualify as a bidder.

(B) Forfeiture of EMD

As per Clause 11 of General Terms and conditions of tender, the EMD of the tenderer would be forfeited in case the offer of acceptance was rejected by the tenderer. We observed that in six cases*, the Company forfeited the EMD due to non-acceptance of the offer. In addition to forfeiting the EMD, the bidders were blacklisted for 3 years in case

***** *M/s MV Shiptrade for vessel M V Lok Rajeshwari, M/s Attar Ltd and M/s Grand International for vessel M V Rishikesh, M/s Global Shiptrade for M T Naik Jadunath Singh and M T CHM Piru Singh and M/s Excel International for M T CHM Piru Singh)***

of vessels Jadunath Singh and Piru Singh and one year in case of vessel M V Lok Rajeshwari and in the other two cases, the Company decided to forfeit the EMD without blacklisting the firms. We further observed that in case of M/s. Attar Ltd. the forfeited amount was lying in customer's account without accounting for it as Company's income and in case of M/s Grand International, the forfeited amount was refunded resulting in loss of ₹ 50 lakh.

The Management/Ministry had not furnished any reply.

Recommendation No.3: The procedure for receipt and accounting of EMD needs to be enforced.

(C) Discrepancy in buyers and agency remitting the EMD and sale proceeds

Audit observed that in 23 cases, the EMD was paid by a party other than the offerer. The details are given in **Annexure-IX.**

Audit further observed that in five cases the sale proceeds were paid by a party other than the buyer as given below:

Table 7

(In USD)

Sl. No.	Name of the vessel	Name of the Buyer	Payment received	Payer
1	M V Hardwar (for further trading)	M/s Delmer Group Pte. Limited, Singapore	65,58,694	M/s Ariel Maritime PTE. Limited, Singapore
2	M V Uttarkashi (for further trading)	M/s Grand International Limited, Singapore	49,06,870	M/s Wirana Private Limited,, Singapore
3	M V Lok Rajeshwari (for scrapping)	M/s Mickey Shipping Limited, Liberia	31,60,159	Part payment of US$ 280690 made by M/s Mickey Metal and balance by Alloys Trading
4	M T Major Dhan Singh Thapa (for scrapping)	M/s Grand International Limited, Singapore	41,09,329	M/s DragonWell Corporation, Samoa
5	MT Major Somnath Sharma (for scrapping)	Powerful International Corp. Pvt Ltd.	30,65,075	M/s DragonWell Corporation, Samoa

The Management agreed (November 2012) that some sale proceeds were received from parties other than the buyers. However, the proceeds had been received through proper banking channel and the management did not see any money laundering aspects in these cases.

The reply was not acceptable as the payment from a party other than the buyer was in contravention of the provisions contained in the tender form as well as the Memorandum of Agreement which stipulated that the buyer had to make the payment. This also has legal and taxation implications with attendant reputation risk to a Government Company.

Recommendation No.4: System needs to be evolved to establish the identity of buyers to ensure transparency and to avoid legal and taxation issues having adverse implications on reputation of the company.

Conclusion

Though the Company has to dispose of the vessels that have passed their economic life to keep a robust young fleet, the procedures for disposal needs to be more transparent. The method of preparation of TES needs to be clearly documented and uniformly followed. A timeframe needs to be evolved for the entire process for various milestones from the in principle approval upto eventual disposal. Delays in initiating proposal for sale and processing of tenders should be avoided, so as to fetch maximum prices. The perpetuation of the practice of one agent representing more than one prospective buyer and one agent bidding for two firms for the same vessel had the potential for limiting competition. There was a need to put in place a system to plug the deficiencies like accounting of EMD for one vessel against another and flagrant non-compliance to tender procedure.

CHAPTER XIV: MINISTRY OF STEEL

NMDC Limited

14.1 Idle investment of ₹65.55 crore

Failure to secure forest clearance led to idling of the entire investment of ₹ 65.55 crore made on wind energy farm for over 24 months and consequential non-realisation of revenue of ₹13.20 crore.

NMDC Limited (the Company) decided (April 2006) for setting up of 10 Mega Watt (MW) wind mill so that the generated energy can be wheeled to the Karnataka electricity grid and banked as per the requirements of Donimalai Iron Ore Project. It engaged (March and September 2008) M/s Suzlon Energy Limited (Suzlon) to execute the project on a turnkey basis. Suzlon completed the work and commissioned the Wind Energy Generators in respect of six units (9 MW) in September 2008 and the balance one unit (1.5 MW) in March 2009 with total installed capacity of 10.5 MW at a total cost of ₹65.55 crore. All these units located at Anehalu village in Karnataka were connected to the Grid through 33 KV transmission lines. These lines passed through the Jogimatti Reserve Forest in Chitradurga District, Karnataka. Wheeling and banking agreement for wind and mini hydel projects was approved by Karnataka Electricity Regulatory Commission in July 2008. But, since NMDC had to take all the approvals afresh if it had to go for wheeling and banking agreement and as Suzlon declined to facilitate wheeling and banking arrangement for captive use, NMDC entered (July and November 2009) into two Power Purchase Agreements (PPAs) with Bangalore Electricity Supply Company Limited (BESCOM) for sale of power from the wind energy farm at a rate of ₹ 3.40 per kilowatt hour (kwh) unit of power. Accordingly, the Company earned ₹ 13.45 crore from September 2008 to September 2010 from the sale of power of 395.78 lakh units.

Meanwhile, the Range Forest Officer, Chitradurga Range, Chitradurga lodged a forest offence case, for want of forest clearance for the 33 KV transmission lines laid (without approval) in the forest land (from wind energy farm to Grid) in Jogimatti Reserve Forest, in August 2009 before the Judicial Magistrate First Class, Chitradurga. Subsequently the operations were stopped (October 2010) by the Forest Authorities as Suzlon continued its unauthorized 33 KV power supply activities without obtaining due permission from Government in the Forest area. Later, Suzlon filed (April 2011) a writ petition with the High Court of Karnataka for interim stay and the case is still pending (September 2012). Meanwhile, Suzlon is also making efforts to obtain the necessary approvals for re-routing the power evacuation from NMDC wind farm.

In this regard, audit observed that the project involved laying of HT lines in reserved forest which require the prior approval of the Ministry of Environment and Forest (MoEF) under Section 2 of the Forest Conservation Act, 1980. Further, as per Para 4.8 of the procedures laid under Forest (Conservation) Amendment Rules, 2004, if a project involves forest as well as non- forest land, work should not be started on non - forest land till the approval of the Central Government for release of forest land has been given.

Though a provision is made in the contract that Suzlon shall have to arrange for necessary statutory clearances/ approvals on behalf of NMDC, the Company did not satisfy itself that all statutory clearances were obtained before the start of work of wind energy farm. This shows that the Company had not exercised due diligence in ensuring that the required clearances are in place before the start of the work. The Company had taken up (January 2011) the issue of obtaining of the forest clearances with Suzlon only after the Forest Authorities had given orders not to energize the plant and lines.

The Ministry in its reply (November 2012) stated that strict due diligence required as per the scope of the work was done by NMDC before awarding the work for setting up of wind farm. Immediate emphasis was mainly on restoration of wind farm and necessary action will be taken by NMDC against Suzlon to recover the losses once the wind farm is started. Meanwhile, Suzlon has set up an alternative evacuation route and the approval of the Chief Electrical Inspector to Government (CEIG), Govt. of Karnataka had been obtained (August 2012). Subsequently, Suzlon has forwarded the draft supplemental PPA to be entered by NMDC with BESCOM.

The fact remains that NMDC has not ensured whether Suzlon had obtained the necessary statutory approvals required from the Forest Authorities and thus, failed in exercising due diligence leading to idling of the entire investment of ₹ 65.55 crore leading to 338.35 lakh units of power not getting generated and consequential non-realisation of revenue of ₹ 13.20 crore[♥] due to stoppage of power generation during October 2010 to September 2012.

Steel Authority of India Limited

14.2 Excess payment in Performance Related Pay scheme

SAIL management did not adhere to the DPE guidelines with respect to payment of 'performance related pay' and made an irregular payment of ₹ 319.61 crore during the period from 2007-08 to 2010-11

In pursuance of the DPE guidelines contained in OM No. 2(70)/08-DPE (WC)-GL-XVI/08 dated 26 November 2008 and OM No. 2(70)/08-DPE (WC)-GL-IV/09 dated 9 February 2009 Steel Authority of India Limited (the company) introduced PRP scheme for its executives. A Remuneration Committee headed by an Independent Director of the company was to decide the PRP and policy for its distribution within the prescribed limit.

The Audit noted the following irregularities in implementation of the DPE guidelines which resulted in excess payment of PRP to the company's executives from 2007-08 onwards totaling ₹ 319.61 crore up to the financial year 2010-11. PRP for the year 2011-12 was not paid (March 2013).

1. The above DPE guidelines required that the company should have a robust and transparent performance management system (PMS). It should adopt a 'Bell Curve Approach' in grading the executives so that not more than 10 to 15 *per cent* are graded as 'Outstanding/Excellent' and 10 *per cent* of executives should be graded as 'Below Par'. No PRP was to be paid to those achieving 'below par' rating. The company however did

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[♥] ***Non realisation of revenue = 388.35 lakh units (calculated based on average generation of the seven units in a month during September 2008 to September 2010) X ₹3.40 per unit as per the PPA*** not adopt 'Bell Curve Approach' in grading and paid PRP to all its executives in violation of the DPE guidelines resulting in avoidable payment of ₹ 87.45 crore[1] for the years 2007-08 to 2010-11.

Management stated (June 2012) that the Remuneration Committee had finalised the PRP scheme; grading the performance of 10 *per cent* of its executives as 'below par' should not be insisted for a 'Maharatana' company like SAIL and actual distribution of performance grading was almost 'Bell Curve Shaped'.

Management reply is not acceptable as (a) while finalizing PRP for the year 2007-08 and 2008-09 in its 5th meeting held on 8 July 2010, the Remuneration Committee headed by an Independent Director of the company established a five tier executive performance rating system including rating 'Minus C' for non-performers with no entitlement of PRP and (b) there was no relaxation for the 'Maharatana' companies and DPE vide OM No. (21)/11-DPE (WC) –GL-XIII/2011 dated 6 July 2011 reiterated its previous guidelines as "it should be ensured that 10 *per cent* of the executives and non-unionised supervisors in a CPSE have to be graded as 'below par' and not paid any PRP".

2. The DPE guidelines prescribe the basic formula for PRP payable to an executive. The Remuneration Committee however adopted a PRP formula wherein the multiplier for the weightage of Exexutive Performance Rating (EPR) exceeded the DPE prescribed limit which was irregular. As a result an excess payment of PRP was made to the company's executives from 2007-08 onwards totaling ₹ 232.16 crore up to the financial year 2010-11 as shown in Table.

Irregular payment of PRP by SAIL

	2007-08			2008-09			2009-10			2010-11		
(a)EPR rating categories	A	B	C	A	B	C	A	B	C	A	B	C
(b)Corresponding DPE prescribed PRP multiplier for EPR (*per cent*)	80	60	40	80	60	40	80	60	40	80	60	40
(c) PRP multiplier for EPR adopted by SAIL (*per cent*)	98.5	97.0	95.5	98.5	97.0	95.5	98.0	96.0	94.0	97.5	95.0	92.5
(d) Excess of (c) over (b) (*per cent*)	18.5	37.00	55.5	18.5	37	55.5	18	36	54	17.5	35	52.5
(e)PRP payment made[2]	48.93	98.88	27.41	77.83	84.97	12.50	109.49	130.16	9.20	59.78	76.09	3.64
(e) Irregular Payment (₹ in crore)	9.19	37.71	15.92	14.62	32.41	7.27	20.11	48.81	5.29	10.73	28.03	2.07
Total	₹ 232.16 crore											

Management stated (June 2012) that: (a) the scheme was finalized by the Remuneration Committee which considered the physical and financial performance of the company and its plants/Units and performance of the executives as an individual and as a member of the team; (b) appropriate weightage was assigned in accordance with the peculiarity of

[1] ***Calculated on basis of percentage of total PRP payment***
[2] ***Calculated on basis of 90 per cent (10 per cent commented in point 1) of total PRP distributed among A,B, and C category of executives in proportion to their number in total employees***

the working of the Steel Industry and (c) the PRP payment was made within the amount available from the PBT and within the ceiling prescribed by DPE.

The management reply is not acceptable as DPE OM dated 26 November 2008 required the Remuneration Committee to decide the PRP and policy for its distribution *within the prescribed limit.* In its reply DPE has confirmed (April 8, 2013) that the powers delegated to Maharatna CPSEs do not cover the matters relating to Pay/PRP.

The IFD of Ministry of Steel agreed (March 2013) that the company should have adopted a 'Bell Curve Approach' in grading the executives so that 10 to 15 *per cent* are graded Outstanding/Excellent and 10 *per cent* of executives should be graded 'Below Par'. It also stated that the Remuneration committee adopted a PRP formula in which the multiplier for weightage of EPR exceeded the DPE prescribed limit which was irregular.

Thus, SAIL management did not adhere to the DPE guidelines applicable to it with respect to payment of 'performance related pay' and made an irregular payment amounting to ₹ 319.61 crore for the years 2007-08 to 2010-11.

14.3 Excess payment of allowances and perks

SAIL undervalued the monetized value of recurring expenditure on infrastructural facilities attributable to the company's executives resulting in excess payment of perks and allowances amounting to ₹ 98.61 crore up to 31 March 2012

Steel Authority of India (the company) implemented the revised pay scale for its Board Level and below Board Level Executives in accordance with the guidelines contained in Department of Public Enterprises (DPE) Office Memorandum (OM) No.2/70/2008-DPE (WC) dated 26 November 2008 and No.2/70/2008-DPE (WC)-GL-VII/09 dated 2 April 2009. The Board of Directors also approved the revised perks and allowances for executives with effect from 5 October 2009.

According to DPE guidelines (a) the Board of Directors would decide on the allowances and perks admissible to the different categories of executives subject to a maximum ceiling of 50 *per cent* of the basic pay; (b) Instead of having a fixed set of allowances, the CPSE may follow 'Cafeteria Approach' allowing the executives to choose from a set of perks and allowances; (c) Where CPSE has created infrastructure such as hospital, colleges, schools, clubs etc. these facilities should be monetized for the purpose of computing the perks and allowances; (d) For the purpose of reckoning the value of infrastructure facilities, the recurring expenditure on maintaining and running the infrastructure facilities alone would be taken into account and the said amount shall be restricted to 10 *per cent* of the basic pay of all executives and non-unionised supervisors within the overall limit of 50 *per cent* of basic pay; and (e) This recurring expenditure attributable to the executives should be computed based on the proportion of total basic pay of executives and the total basic pay of workmen.

Audit observed that the monetized value of the recurring expenditure of the company attributable to the executives on the infrastructure facilities consisting of education, medical and clubs etc. was greater than 10 *per cent* of their total basic pay during the years 2009-10, 2010-11 and 2011-12. Therefore, according to the DPE formula, the perks and allowances under the 'Cafeteria Approach' should have been restricted to 40 *per cent* of executives' total basic pay. However, the company paid the perks and allowances to its executives to the extent of 44 to 46 *per cent* of their basic pay resulting in total excess payment of ₹98.61 crore for the period from 5 October 2009 to 31 March 2012.

Management stated (November 2012) that the payment of salaries and wages should not be considered as recurring expenditure for reckoning the value of the infrastructural facilities like hospital and schools and only recurring expenditures like consumption of medicines, stores & spares, repair & maintenance, power & fuel, miscellaneous expenditure and depreciation were reckoned which was 3.8 *per cent* of executives' total basic pay.

While agreeing with the Audit observations, Ministry stated (March 2013) that employee remuneration and benefits on medical and education are absolutely fixed cost for the Company.

The reply of the Management/Ministry is not acceptable as expenditure on salaries and wages being essential to provide the services and exclusion of such expenditure from reckoning the value of infrastructure such as hospitals etc. was against the DPE guidelines.

Thus, by undervaluing the monetized value of recurring expenditure on infrastructural facilities attributable to the company's executives the company has paid excess payment of perks and allowances amounting to ₹ 98.61 crore up to 31 March 2012 and may further increase.

CHAPTER XV: MINISTRY OF URBAN DEVELOPMENT

Delhi Metro Rail Corporation Limited

15.1 Implementation of Airport Metro Express Line Project through Public Private Partnership

15.1.1 Introduction

Delhi Metro Rail Corporation Limited (DMRC) is a Joint Venture company of Government of India (GOI) and Government of National Capital Territory of Delhi (GNCTD). GOI accorded approval for the Airport Metro Express Line (AMEL) from New Delhi railway station to Indira Gandhi International Airport (IGIA) (May 2007) / Dwarka (January 2009) through Public Private Partnership (PPP) mode. A Special Purpose Vehicle viz. Delhi Airport Metro Express Private Limited (DAMEPL) was incorporated with the consortium Reliance Energy Limited/CAF holding 100 *per cent* equity. As per Concession Agreement entered into (August 2008) between DMRC and DAMEPL the work relating to design, installation, commissioning, operation and maintenance was undertaken through DAMEPL and civil work executed by DMRC. The project covering 22.7 kms was completed at a total cost of ₹ 5697 crore (₹ 2812 crore by DMRC and ₹ 2885 crore by DAMEPL). As on 31 March 2012 paid up equity of DAMEPL was just ₹ one lakh against long term borrowings of ₹ 2752.05 crore (secured loan 1932.10 crore and unsecured loan ₹ 819.95 crore). The accumulated loss of DAMEPL as on 31 March 2012 was ₹ 341.13 crore. As per Concession Agreement an Escrow Agreement was entered into on 30 April 2009 between DAMEPL, Axis Bank and DMRC to streamline appointment of Escrow Agent, Establishment and Maintenance of Escrow account[*], Operating Procedures (deposits and withdrawals) to aid in project execution.

Commercial operation of AMEL commenced with effect from 23 February 2011. The operation was suspended on 8 July 2012 due to defects in civil works. On rectification of defects by DMRC, DAMEPL recommenced operations of AMEL on 22 January 2013.

The audit covered basis of selection of PPP model, the Concession Agreement (CA) and execution and operation of the AMEL.

15.1.2 Audit Findings

15.1.2.1 Planning

Airport Authority of India (AAI) anticipated in 2004 a steep rise in air traffic at IGIA due to Commonwealth Games to be held at New Delhi in October 2010 and proposed for a metro link to connect IGIA to Connaught Place. AAI decided (July 2004) to assign the work of feasibility study to DMRC and DMRC in turn assigned the work of preparation

[*] ***Means an account which the concessionaire shall open and maintain with a Bank in which all inflows and outflows of cash on account of capital and revenue receipts and expenditures shall be credited and debited, as the case may be, in accordance with the provisions of Concession Agreement.***

of Detailed Project Report (DPR) to RITES Limited. The DPR considered three models for financing of the project and recommended the PPP model.

Under the PPP Model civil costs outside Airport were to be borne by GOI and GNCTD equally as equity contribution with the balance cost including rolling stock to be contributed by the concessionaire with a Debt:Equity ratio of 7:3. The cost of civil works within the airport was to be contributed by the Airport Operator as grant.

Empowered Committee[▽] and GOI accorded approval in August 2006 and May 2007, respectively, for AMEL from New Delhi Railway Station to IGIA. The 'Expression of Interest' (EOI) for selection of bidders for development of AMEL was called for in January 2007 through international competitive bidding process. All the five consortia who responded to EOI were pre-qualified for Request for Proposal (RFP) stage. However, only two consortia viz. Reliance Energy Limited /CAF and Larsen & Toubro Infrastructure Development Project Limited/ GEIIPL participated in RFP. The bids were evaluated on the basis of financial and technical criteria (prior experience in developing, operating or maintaining urban transport system, minimum networth of ₹400 crore, average annual turnover of ₹ 1200 crore etc.) and the bid of M/s Reliance Energy, *inter-alia*, offering concession fee of ₹ 51 crore, was evaluated as the highest bidder. Letter of Acceptance was issued (January 2008) to M/s Reliance Energy Ltd., which incorporated a Special Purpose Vehicle (SPV), viz. Delhi Airport Metro Express (Pvt.) Ltd. (DAMEPL) to design, install, commission, operate and maintain the AMEL from New Delhi railway station to Dwarka Sector 21, for a concession period of 30 years and the Concession Agreement (CA) for the same was entered into between DMRC and DAMEPL on 25 August 2008. Upon termination of the CA the Concessionaire is required to deliver forthwith actual or constructive possession of the Airport Metro Express Line free and clear of all encumbrances. Upon termination by DMRC on account of a Concessionaire's event of default during the operation period, DMRC shall pay to the Concessionaire an amount equal to 80 *per cent* of the Debt Due. In case of termination by the Concessionaire on account of DMRC event of default, DMRC shall pay to the Concessionaire an amount equal to debt due, 130 *per cent* of the adjusted equity and depreciated value of the project assets, if any, acquired and installed on the project after the 10th anniversary of the COD. Upon termination on expiry of the Concession Period by efflux of time, no termination payment shall be due and payable to the concessionaire what so ever, provided that in the event, any project assets is acquired and installed on the project within five years of the cessation of the Concession by normal efflux of time, with prior written consent of DMRC, then an amount equal to the depreciated value of such project assets shall be made by DMRC to the Concessionaire.

Audit observed that:

- Cabinet Committee on Economic Affairs (CCEA) had mandated (October 2005) that all projects having capital cost or underlying value of assets more than ₹ 100 crore would be brought before the Public Private Partnership Appraisal Committee (PPPAC) and after clearance by PPPAC, the project would be put up to the competent authority for final approval. However, the Company did not obtain PPPAC approval at any stage of AMEL.

[▽] ***Consisting of Cabinet Secretary, Secretaries of Ministry of Urban Development, Road Transport and Highways, Railways, Civil Aviation, Home Affairs, GNCTD, Planning Commission, ASI, Revenue, Expenditure, and MD DMRC.***

DMRC replied (November 2012) that the Mass Rapid Transit System projects were not routed through PPPAC as the same were reviewed by Empowered Committee and EGoM.

The reply was not acceptable as the instant project was a PPP project and hence compliance to the GOI directions in this regard was mandatory.

- In contravention of guidelines (January 2006) of the Ministry of Finance restricting the quantum of financial support (VGF) in PPP in infrastructure to maximum of 40 *per cent* of the total project cost, the GOI approval for the project considered contribnution by concessionaire to the extent of 46.17 *per cent* (13.92 *per cent* equity and 32.25 *per cent* debt) of the total project cost as against 60 *per cent* required as per above guidelines.

  DMRC stated (November 2012) that AMEL was having a different structure of financing which was approved by EGoM. The reply was not acceptable as AMEL was not an exception and when all the envisaged benefits of PPP projects were available to the private partner, Government instructions on VGF should also have been followed.

- The criterion for selecting PPP model was that only through this mode the AMEL could be completed in time i.e. before start of Commonwealth Games. The objective however was defeated as the project could be completed five months after the Games.

- Against ridership of 42500 passengers per day projected in the DPR for the year 2011, actual average ridership during 17 months operation of AMEL ranged between 5344 and 17794 passengers per day. The DPR projections were based on certain assumptions; however, justification for adopting such assumptions was not available in the DPR. Thus correctness of methodology adopted to work out projected ridership could not be verified in audit.

  It was seen that the DAMEPL had requested for deferment of concession fee for five years and invoked arbitration (October 2012) under sustainability/financial viability clause.

15.1.2.2 Financing pattern of the project

Public Private Partnership is an arrangement between a Government owned entity on the one side and a private sector entity on the other with well defined allocation of risk between the parties. In the present project, civil works including HT sub-stations were built by DMRC and balance work (i.e. procurement, installation and commission of systems, rolling stock etc.) were provided by the concessionaire. It was, however, observed that the essential element of allocation of risks was absent in the project, as discussed below:

(a) Non inclusion of Debt: Equity ratio in the Concession Agreement

As stipulated in the DPR and also approved by the Ministry vide its order dated May 2007, the Concessionaire's contribution was to be maintained in the debt equity ratio of 7:3. Accordingly, the Concessionaire was to fund ₹ 2885 crore i.e. ₹ 865.50 crore by way of equity and balance of ₹ 2019.50 crore as debt. Audit, however, observed that Ministry's orders for maintaining debt-equity ratio of 7:3 were neither incorporated in the Concession Agreement nor complied with by the Concessionaire.

Audit observed that the concessionaire brought in equity capital of only ₹ 1 lakh at the time of incorporation (April 2008) and an amount of ₹ 611.95 crore was infused as Share Application Money pending allotment (₹ 373.90 crore in 2008-09, ₹ 93.05 crore in 2009-10 and ₹ 145 crore in 2010-11). This Share Application Money was subsequently converted into interest free unsecured sub-ordinate debt in 2010-11. Thus although authorised capital was ₹ 870 crore, the paid up capital remained at only ₹ 1 lakh, which was the minimum requirement as stipulated by Section 3 of the Companies Act, 1956 for a private company.

Audit observed that reasons for conversion of share application money into sub-ordinate debt were not on record.

Audit further observed conversion of share application money pending allotment into interest free subordinate debt, aided the concessionaire to operate a project of ₹ 5697 crore with an insignificant risk of ₹ one lakh.

DMRC replied (November 2012) that debt-equity ratio was the subject matter of 'financing documents' and monitoring the same was in the interest of senior lender. It further mentioned that share application money pending allotment was to be included in equity while calculating debt equity ratio. It also stated that the subject matter of 'equity' and 'debt due' comes into play only at the time of termination of CA and only subordinate debt disbursed by lenders is considered part of debt due.

It should be noted that compliance to EOI/financing parameters was to be ensured by DMRC. Also share application money pending allotment does not form part of equity unless allotted. Instead of insisting upon the Concessionaire to maintain the defined debt-equity ratio, the DMRC merely asked (June 2012) the Concessionaire to clarify on conversion of share application money into subordinate debt, that too after 15 months of the event (March 2011).

DMRC did not furnish any justification for non-incorporation of debt equity ratio in the Concession Agreement. Clarity in the matter is necessary to avoid the eventuality of DMRC bearing major share of risk.

15.1.2.3 Non-completion of punch list items

Clause 17.6 of the CA states that if the Independent Assessor (CMRS[◊]) certifies the tests of the Project systems to be successful and the project can be legally, safely and reliably placed in commercial operations, then the consultant may at the request of the Concessionaire issue a provisional certificate of completion (Provisional Certificate) as per schedule 'K'. Such a Provisional Certificate would be appended with a list of outstanding items (Punch List) signed jointly by the Consultant and the Concessionaire. All punch list items were to be completed by the Concessionaire within 90 days of the date of issue of such Provisional Completion Certificate. In case of delay beyond 90 days, the Concessionaire was allowed an additional 60 days to complete the work, subject to payment of damages of ₹ 2.00 lakh per week of such delay. Failure to complete the punch list items entitled DMRC to terminate the CA in accordance with provisions of clause 29.2 of CA.

[◊] ***Commissioner of Metro Rail Safety***

Provisional Completion Certificate (PCC) was issued on 22 February 2011 with Commercial Operation Date (COD) as 23 February 2011. Punch list items appended therewith included major work such as two stations out of six stations i.e., Dhaula Kuan and Delhi Aero city stations, side platforms at New Delhi and IGI Stations, down platform at Dwarka Sector-21, check-in facilities and Baggage Handling System, etc. Audit, however, observed that punch list items required to be completed within 90 days (23 May 2011) remained incomplete even after lapse of 22 months period from the date of PCC (from 22.02.2011 to 31.12.2012). Out of damages of ₹ 1.88 crore (upto February 2013) levied as per clause 17.6 of the CA an amount of ₹ 1.19 crore was recoverable from DAMEPL (February 2013). The final completion certificate has also not been issued to the Concessionaire so far (February 2013).

15.1.2.4 Non-receipt of payments due to DMRC as per CA

As per Article 8 of the CA, DMRC was entitled to receive from the Concessionaire (i) license fees of ₹ 10,000 per year during the term of the agreement, to be paid in advance within 90 days of the commencement of the year to which it is due and payable (ii) yearly Concession Fee of ₹ 51 crore from COD (with 5 *per cent* escalation every year), to be paid in advance within 90 days of the commencement of the year for which it is due and payable; and (iii) share of gross revenue (@ 1 *per cent* from 1st to 5th year, and increasing subsequently) with DMRC. Share of gross revenue was to be remitted on a quarterly basis within 10 days of the end of each calendar quarter.

Further, sub-clause 23.2.1 of Article 23 of the CA directs the Concessionaire to instruct the Escrow Bank to pay all dues to DMRC, prior to debt servicing payments.

Audit noticed that since commercial date of operation to 31 March 2012 the Concessionaire had paid an amount of ₹ 51.37[1] crore towards Annual Licence Fee, Annual Concession Fee and share in revenue. However, as on November 2012, following amounts were outstanding against the Concessionaire:

- Annual License fee of ₹ 10,000 from August 2012,
- Annual Concession Fee, for the year 2012-13 amounting to ₹ 53.55 crore (due w.e.f. 23.05.2012); and
- 1 *per cent* revenue share amounting to ₹ 11 lakh for the months of April & May 2012.

Audit further observed that the CA did not contain any penal clause to act as a deterrent for delay in payments by the Concessionaire. Further, the Management also did not enforce its right to receive payments through Escrow accounts. Thus, apart from non realisation of payments of ₹ 53.67 crore, DMRC suffered loss of ₹ 3.30 crore towards interest[2].

DMRC replied that although they had the option to receive the amounts directly out of the Escrow account, but considered it prudent not to take further action at that stage as there was no income to the Concessionaire due to stoppage of operations. The reply was not acceptable as on the due date of annual concession fee i.e. May 2012, the line was

[1] ***License Fee ₹ 30, 000 for years 2009-11, Concession Fee ₹ 51.00 crore for the year 2011-12 and Revenue share of ₹0.36 crore upto quarter ended 31 March 2012.***

[2] ***@ 8 per cent (upto February 2013)***

operational and was stopped only in July 2012. Moreover, DMRC should have protected its financial interests by including a penal clause in the CA for delay in payments.

15.1.2.5 Non-monitoring of Escrow account

Memorandum of Operating Procedure (MOP) for operation of escrow account was executed (April 2009) between DAMEPL and Axis Bank Limited wherein Para 1.2 of MOP defines 'Authorised investment' which are as follows:-

- Government of India securities
- Interest bearing deposits with banks/financial institutions acceptable to the Lenders
- Short term senior debt instruments or certificates of deposit or instruments rated at least AA of investment grade by CRISIL or ICRA or CARE or any other reputed credit rating agency
- Any scheme of a mutual fund that invests only in gilt and or debt instruments of investment grade rated at least AA by CRISIL or ICRA or CARE or any other agency and which is freely redeemable and
- Any other instrument as may be approved by the Lender's Agent from time to time.

Audit, however, observed that during the period 2009-12, investments of DAMEPL were limited to a particular set of mutual funds as detailed below:

Statement showing investments

(₹ in lakh)

Short Term Investments	2009-10	2010-11	2011-12
Reliance Money Manager Fund Institutional – Daily Dividend Plan	599.99	0.51	0.54
Reliance Liquid Fund – Treasury Plan – Institutional Plan	0.18	0.19	24.02
Reliance Liquidity Fund	1.07	22230.25	30.46
Total investments	**601.24**	**22230.95**	**55.02**

DMRC replied (November 2012) that if the Concessionaire or escrow agent had entered into any practices which were not permissible, action shall be taken as permitted under CA. It was further stated that DMRC had decided to appoint a special auditor to thoroughly review all the investments and all transactions under the escrow account and had also served a default notice to the Concessionaire in this regard.

The fact remained that the management had failed to monitor the escrow account transactions timely.

Audit observed that ₹ 285.43 crore was released from escrow account by the DAMEPL to its Group Companies, i.e., Utility Energytech and Engineers Private Limited and Reliance Utility Engineers Private Limited during 2009-12. While verifying their relationship with Reliance Infra it was noticed that paid up equity share capital of Reliance Utility Engineers Private Limited as on 31 March 2011 was held by Spice Commerce and Trade Private Limited (an associate of Reliance Infra) and Space Trade Enterprises Private Limited. The above two companies (M/s Spice and M/s Space) had the same registered office address and the domain address for email was that of Reliance Infra. The above findings revealed a complex ownership structure of these companies.

It was further observed that although ₹ 58.70 crore was released during 2010-11, out of escrow account, to Utility Energy Tech Private Ltd. Audit was unable to understand as to how the funds were released from escrow account to Utility Energytech when it was not in existence during this period (2010-11) as it had changed its name to Reliance Utility Engineers Private Limited as per fresh certificate of incorporation issued on 26 October 2010 by Registrar of Companies. Further, DAMEPL also contravened provisions of Accounting Standard 18 - 'Related Party Disclosures' issued by Institute of Chartered Accountants of India (ICAI) as it did not disclose 'related party' in respect of the above transactions in their accounts during the years 2009-10 to 2011-12. In the absence of details, audit could not verify the purpose and validity of such releases.

DMRC intimated (November 2012) that special auditor was being appointed to thoroughly review all transactions under the escrow account .

It is apparent from the above that DMRC did not keep a vigil as per Article 25 'Accounts and Audit' of CA, on payments released from the escrow account and thus failed to ensure proper monitoring of escrow transactions.

15.1.2.6 Compliance with Operation and Maintenance clauses

As per Article 19.1 (a), (e) and (g) of the CA the Concessionaire was to provide suitably trained personnel for O&M activities at all times, undertake routine maintenance including prompt repairs of any wear or damage found and undertake major maintenance work such as track replacement, repair to structures etc. Further, Section 4.1 of the Operation and Maintenance manual mandates monthly inspection. Article 20 of the CA enjoins DMRC to inspect the project atleast monthly and send its O&M Inspection Report to the Concessionaire. The Concessionaire was required to remedy the defects and deficiencies set forth within 30 days of its receipt and submit a compliance Report.

Audit observed that DMRC wrote to DAMEPL that the Concessionaire failed to carry out (till May 2012) any inspections (Routine, Principal and Special inspection) of viaduct and bearings as per the provisions of the O&M Manual. Moreover, the Concessionaire was not equipped with the inspection infrastructure required to carry out the inspection as per the manual. Although the Concessionaire did not comply with CA clauses but they appointed a consultant viz. M/s Shirish Patel & Associates Consultants Pvt. Ltd. (SPA) with the approval of DMRC to investigate defects in the DMRC works and on the basis of defects as brought out in the report (June 2012) of SPA, suspended the train services from 8 July 2012. In a meeting held on 4 July 2012 under the Chairmanship of the Secretary, Ministry of Urban Development, a Joint Inspection Committee (JIC) was constituted for inspection of the bearings and structure of the line. JIC's report (July 2012) identified certain defects such as (a) bearings provided at improper locations, (b) defects in cross levels (c) bearing material damaged etc., and concluded that poor execution of bearing seating work and poor workmanship during construction were the reason for problems in bearing area. Further, it also opined that secondary reason for the present state of affairs was absence of proper inspection of the girders, especially in the bearing area, both before commissioning and during initial stage of train operations.

Audit further observed that though DMRC carried out monthly inspection but failed to detect any major defects in civil construction. DMRC in its monthly inspection carried out in March 2012 had pointed out certain defects during inspection of viaduct, which were not taken to any logical conclusion because they were stated to be as per the design of viaduct. The defects were later confirmed by JIC.

The line came to a halt in July 2012, within 16 months of commissioning. DMRC had carried out the repair work valuing ₹ 15 crore at the risk and cost of the civil contractor and operations resumed w.e.f. 22 January 2013. As the civil structure was built by DMRC and balance works as well as O&M were the responsibility of the Concessionaire, each party was holding the other responsible for the defects in the civil structure and for improper maintenance. The Concessionaire invoked arbitration (October 2012) under clause 36.2 of Concession Agreement on the grounds including sustainability/ financial viability of the project. DMRC had not taken any action, except issuing notices to civil contractor for poor workmanship and Consultant for poor quality of inspection during construction period of the project. The final report of the enquiry committee appointed by the Ministry of Urban Development was pending (February 2013).

15.1.2.7 Undue advantage to DIAL due to relaxing payment conditions

AMEL was envisaged by the Ministry of Civil Aviation (MoCA) in the year 2004 and MoCA agreed that DIAL would pay an upfront fee of ₹ 350 crore as grant towards civil jobs for the metro line inside the Airport, which was approved by the EGoM. Subsequently, DIAL requested (July 2007) DMRC to add one more station near NH-8 to serve its commercial areas for which it agreed to bear the additional cost of ₹ 98 crore to be paid in advance. Commercial rights of the two stations viz. NH 8 and at Airport were given to DIAL *vide* an agreement dated April 2009. However, on the request of the Secretary MoCA, DMRC allowed DIAL to make payment of ₹ 448 crore in four instalments (1 June 2009, 1 September 2009, 1 December 2009 and 1 March 2010).

Audit observed that allowing DIAL to make payment in four instalments was in contravention of GOI approval for the payment of construction costs upfront. Further, DIAL did not make the payment even as per the agreed schedule and an amount of ₹ 54.43 crore was outstanding (February 2013). Further, records relating to cost-benefit analysis of the expected revenues from the commercial rights of the two stations as against investment made by DIAL were not available with DMRC.

DMRC replied (October 2012) that this payment was beyond DIAL's agreement with MoCA and there is no favour or undue advantage to DIAL. The reply does not clarify why stage payments were accepted, when it was very clear from the conception stage of the project itself that this payment was to be made upfront.

15.1.2.8 Concession in Customs Duty

DAMEPL requested (3 March 2009) DMRC to forward the letter of recommendation for availing concession on custom duty to Ministry of Urban Development (MoUD). Audit observed that instead of seeking recommendation of MoUD, the Chief Project Manager (Airport Line) of DMRC directly issued a recommendation letter to the Customs Authorities. Audit further observed that cost approved for this project by EGoM was inclusive of taxes and duties. Hence, issue of a recommendation letter by DMRC to enable concession in the customs duty for capital goods valued at ₹ 991.08 crore gave an undue advantage to Concessionaire.

DMRC replied (November 2012) that it had issued only a recommendation letter and not any certificate to customs. The reply was not acceptable as on the basis of DMRC's letter a benefit of ₹ 29.56 crore in form of concession in customs duty was availed by the contractor, which ultimately benefited the Concessionaire.

Conclusion

In contravention of guidelines (January 2006) of the Ministry of Finance restricting the quantum of financial support (VGF) in PPP in infrastructure to maximum of 40 *per cent* of the total project cost, the concessionaire was allowed to contribute only to the extent of 46.17 *per cent* (13.92 *per cent* equity and 32.25 *per cent* debt) of the total project cost. Further, the project has been executed using a unique model of PPP wherein the Concessionaire is operating a project of ₹ 5697 crore with an insignificant equity of ₹ one lakh. DMRC failed to ensure the payments due to it and also withdrawals from the Escrow Account as per agreements.

The operations were suspended on 8 July 2012 due to defects in civil works. The Joint Inspection Committee constituted by the Ministry for examining defects in civil structure attributed them to poor workmanship and absence of proper inspection during construction as well as operation. Though the line has resumed operations from 22 January 2013 the Concessionaire has invoked arbitration under Clause 36.2 of CA on the grounds including sustainability/financial viability of the project.

The matter was reported to the Ministry in February 2013; their reply was awaited (March 2013).

CHAPTER XVI

Follow-up on Audit Reports (Commercial)

Audit Reports of the CAG represent the culmination of the process of scrutiny of accounts and records maintained in various offices and departments of PSUs. It is, therefore, necessary that appropriate and timely response is elicited from the executive on the audit findings included in the Audit Reports.

The Lok Sabha Secretariat requested (July 1985) all the Ministries to furnish notes (duly vetted by Audit) indicating remedial/corrective action taken by them on various paragraphs/appraisals contained in the Audit Reports (Commercial) of the CAG as laid on the table of both the Houses of Parliament. Such notes were required to be submitted even in respect of paragraphs/appraisals which were not selected by the Committee on Public Sector Undertakings (COPU) for detailed examination. The COPU in its Second Report (1998-99-Twelfth Lok Sabha), while reiterating the above instructions, recommended:

- setting up of a monitoring cell in each Ministry for monitoring the submission of Action Taken Notes (ATNs) in respect of Audit Reports (Commercial) on individual Public Sector Undertakings (PSUs);
- setting up of a monitoring cell in Department of Public Enterprises (DPE) for monitoring the submission of ATNs in respect of Reports containing paras relating to a number of PSUs under different Ministries; and
- submission to the Committee, within six months from the date of presentation of the relevant Audit Reports, the follow up ATNs duly vetted by Audit in respect of all Reports of the CAG presented to Parliament.

While reviewing the follow up action taken by the Government on the above recommendations, the COPU in its First Report (1999-2000-Thirteenth Lok Sabha) reiterated its earlier recommendations that the DPE should set up a separate monitoring cell in the DPE itself to monitor the follow-up action taken by various Ministries/Departments on the observations contained in the Audit Reports (Commercial) on individual undertakings. Accordingly, a monitoring cell is functioning in the DPE since August 2000 to monitor the follow up on submission of ATNs by the concerned administrative Ministries/Departments. Monitoring cells have also been set up within the concerned Ministries for submission of ATNs on various Reports (Commercial) of the CAG.

Further, in the meeting of the Committee of Secretaries (June 2010) it was decided to make special efforts to clear the pending ATNs/ATRs on CAG Audit Paras and PAC recommendations within the next three months. While conveying this decision (July, 2010), the Ministry of Finance recommended institutional mechanism to expedite action in the future.

A review in Audit revealed that despite reminders, the remedial/corrective ATNs on the transaction audit/compliance audit paragraphs/reviews contained in the last five years'

Audit Reports (Commercial) relating to the PSUs under the administrative control of various Ministries, as detailed in **Appendix-III,** were not received by Audit for vetting. No ATN has been received in respect of 4, 5, 7, 11 and 44 transaction audit/compliance audit paragraphs/reviews contained in Audit Reports (Commercial) of 2007, 2008, 2009, 2010 and 2011 respectively. Further 47 transaction audit/compliance audit paragraphs/reviews contained in Audit Reports presented in Parliament during May to September 2012 was also awaited.

Out of 118 paras/reviews on which ATNs were awaited, 22 paragraphs related to PSUs under the Ministry of Finance (Banking and Insurance Division), 14 paragraphs related to PSUs under the Ministry of Heavy Industries & Public Enterprises, 13 paragraphs related to PSUs under the Ministry of Petroleum & Natural Gas and 10 paragraphs related to PSUs under the Ministry of Defence.

(USHA SANKAR)
Deputy Comptroller and Auditor General
and Chairperson, Audit Board

New Delhi
Dated: 10 May, 2013

Countersigned

(VINOD RAI)
Comptroller and Auditor General of India

New Delhi
Dated: 10 May, 2013

APPENDICES

&

ANNEXURES

Appendix –I

(Referred to in para 12.2)

Recoveries at the instance of Audit during 2011-12

(Amount ₹ in Lakh)

Name of Ministry/ Department	Name of the PSU	Audit observations in brief	Amount of recovery pointed out by Audit	Amount recovered by the Management
Finance-Insurance Division	United India Insurance Company Limited	Outstanding co-insurance premium from ICICI.	31.01	41.05
	The New India Assurance Company Limited	Excess settlement of claim.	2.72	2.72
		Incorrect Application of Tariff – Short Collection of Premium.	3.13	3.13
Road Transport	National Highways Authority of India	Short recovery of concession fee.	2835.00	2547.00
Consumer Affairs Food and Public Distribution	FCI Punjab Region	Avoidable payment of gunny depreciation.	8122.00	7075.58
	FCI DO Chandigarh	Undue benefit to rice millers due to non-recovery on short delivery of levy rice crop year 2008-09.	236.00	235.69
	FCI DO Ferozepur	Over payment on account of gunny depreciation to State Government agencies on procurement of rice (2009-10).	724.00	724.23

		Loss due to non recovery of cost of foodgrains from PSWC.	38.00	110.77
		Blockade of funds due to non recovery of cost of foodgrains from PSWC and loss of interest.	485.72	417.42
		Loss on acceptance and disposal of BRL rice.	1113.76	25.55
		Excess payment to State Agencies on account of storage gain on wheat procured under central pool.	702.00	7.58
	FCI, DO Patiala	Loss of interest due to gunnies given on loan to State Government agencies.	61.87	61.87
	FCI, DO Sangrur	Excess payment to State Agencies on account of storage gain on wheat procured under central pool.	226.00	217.00
		Unjustified payment of carry over charges on BRL wheat by State Government agencies.	41.44	41.44
		Extra payment of carry over charges payable to State agency due to failure of agency to load specials.	26.04	26.03
		Short recovery of transit loss from the transport contractors.	1.86	1.91
		Non-recovery for unloading and stacking charges from State Government/Rice Millers.	548.00	548.00
		Undue burden on GOI due to un-authorized charging of Mandi Shulk on Sales under Mid Day Meal Scheme.	59.67	59.67
		Non-recovery of Transit losses of fertilizer from CWC/SWC.	22.59	22.59

		Payment of demurrage to Railways FSD, Harduaganj.	14.27	14.27
		Non-payment of electricity bill.	2.14	2.14
		Total	15297.22	12185.64

Appendix –II

(Referred to in para 12.3)

Corrections/Rectifications at the instance of Audit

(Amount ₹ in Lakh)

Name of the Ministry/department	Name of the PSU	Audit observation/Suggestion in brief	Action taken by the Management
Steel	Steel Authority of India Limited (SAIL)	Loss of ₹ 4.29 crore due to lack of due diligence and deficiency in procurement of RH refractory	The management included a performance guarantee clause in the purchase order

Appendix –III

(Referred to in Chapter XVI)

Statement showing the details of Audit Reports prior to 2012 (Commercial) for which Action Taken Notes are pending

No. & year of Report	Name of Report	Para No.
Department of Bio- Technology		
11 of 2007	Compliance Audit	Para 3.1.1
9 of 2010	Compliance Audit	Para 1.1.1
Department of Atomic Energy		
8 of 2012	Compliance Audit	Para 1.1
Ministry of Road Transport & Highways		
11 of 2008	Compliance Audit	Paras 18.1.1
9 of 2010	Compliance Audit	Para 17.1.2
3 of 2011	Compliance Audit	Para 15.1
8 of 2012	Compliance Audit	Paras 13.1, 13.2,13.3 and 13.4
Ministry of Shipping		
8 of 2012	Compliance Audit	Paras 14.1, 14.2 and 14.3
10 of 2010-11	Performance Audit of activities of selected PSUs	Chapter IX
5 of 2011-12	Performance Audit on Management of Vessels by Shipping Corporation of India Limited	
Ministry of Chemicals and Fertilizers		
11 of 2008	Compliance Audit	Para 9.2.1
PA 9 of 2008	Review of Activities of selected PSUs	Chapter I
24 of 2009	Compliance Audit	Paras 13.2.1(a) and 13.2.1(d)
10 of 2010-11	Performance Audit of activities of selected PSUs	Chapter IV
3 of 2011	Compliance Audit	Para 8.1 and 8.2
Ministry of Civil Aviation		
CA 23 of 2009	Information Technology Applications in PSUs	Chapter I
3 of 2011	Compliance Audit	Para 2.3

No. & year of Report	Name of Report	Para No.
8 of 2012	Compliance Audit	Paras 2.1, 2.2, 2.3, 2.4 and 2.5
Ministry of Coal		
3 of 2011	Compliance Audit	Paras 3.2 and 3.3
9 of 2011-12	Performance Audit Report on Corporate Social Responsibility of Coal India Limited	
10 of 2010-11	Performance Audit of activities of selected PSUs	Chapter IV
8 of 2012	Compliance Audit	Paras 3.1 and 3.2
Ministry of Consumer Affairs, Food and Public Distribution		
3 of 2011	Compliance Audit	Paras 6.1,6.2,6.3,6.4 and 6.5
8 of 2012	Compliance Audit	Paras 6.1,6.2 and 6.3
Ministry of Defence		
24 of 2009	Compliance Audit	Para 6.1.3
9 of 2010	Compliance Audit	Para 7.1.1
10 of 2010-11	Performance Audit of activities of selected PSUs	Chapter IV
3 of 2011	Compliance Audit	Paras 7.2, 7.3, 7.4 and 7.5
4 of 2011-12	Performance Audit of Procurement System in Bharat Electronics Limited	
8 of 2012	Compliance Audit	Paras 7.1 and 7.2
Ministry of Finance (Insurance Division)		
11 of 2007	Compliance Audit	Paras 10.2.1, 10.3.4 and 10.4.3
24 of 2009	Compliance Audit	Paras 1.1.1 and 8.2.1
10 of 2010-11	Performance Audit of activities of selected PSUs	Chapter V
9 of 2010	Compliance Audit	Paras 9.2.1, 9.4.1, 9.4.2 and 9.4.3
3 of 2011	Compliance Audit	Paras 9.2, 9.3, 9.4, 9.5 and 9.6
8 of 2012	Compliance Audit	Paras 8.2, 8.3,8.4 and 8.6
Ministry of Finance (Banking Division)		
CA 10 of 2008	Information Technology Applications in PSUs	Chapter IV

No. & year of Report	Name of Report	Para No.
11 of 2008	Compliance Audit	Para 2.2.1
8 of 2012	Compliance Audit	Para 9.4
Ministry of Heavy Industries & Public Enterprise		
24 of 2009	Compliance Audit	Para 9.3.1
9 of 2010	Compliance Audit	Paras 15.1.1 and 15.2.1
10 of 2010-11	Performance Audit of activities of selected PSUs	Chapter IV
3 of 2011	Compliance Audit	Paras 10.1, 10.2, 10.3, 14.1, 14.4 and 14.5
8 of 2012	Compliance Audit	Paras 9.1, 9.2, 9.3 and 9.4
Ministry of Housing and Urban Poverty Alleviation		
3 of 2011	Compliance Audit	Para 11.1
Ministry of Petroleum and Natural Gas		
9 of 2010	Compliance Audit	Para 13.6.1
3 of 2011	Compliance Audit	Paras 12.3 and 12.9
8 of 2012	Compliance Audit	Paras 11.1, 11.3, 11.4, 11.5, 11.6, 11.7, 11.8, 11.9 and 11.11
11 of 2012-13	PA on Hydrocarbon Exploration efforts of ONGC Limited	
Ministry of Power		
11 of 2008	Compliance Audit	Para 20.1.1
22 of 2010-11	NTPC Limited-Capacity Addition Programme Project Management	
3 of 2011	Compliance Audit	Para 13.5
8 of 2012	Compliance Audit	Paras 12.1, 12.2 and 12.3
10 of 2012-13	PA on Capacity Expansion in Hydrro Power Sector by CPSEs	
Ministry of Steel		
27 of 2010-11	Performance Audit Report on Corporate Social Responsibility of Steel Authority of India Limited and Rashtriya Ispat Nigam Limited	
3 of 2011	Compliance Audit	Paras 17.2 and 17.7
8 of 2012	Compliance Audit	Paras 15.1 and 15.2

No. & year of Report	Name of Report	Para No.
Ministry of Textiles		
9 of 2010	Compliance Audit	Para 20.1.1
10 of 2010-11	Performance Audit of activities of selected PSUs	Chapter X
8 of 2012	Compliance Audit	Para 16.1

Annexure-I

(Referred to in para 7.8.3.2)

Statement showing cases involving excess expenditure incurred over the price quoted

(₹ in crore)

Name of item	Date of purchase order	Name of supplier M/s	Number of units ordered	Total amount paid/ payable	Actual price chargeable per unit	Price included in the quotation by HAL per unit	Excess incurred per unit	Total excess	Remarks
Reservoir and Relief Valve	October 2007	APPH (Bolton), England	14*	1.56	1.56	0	1.56	1.56	*Including two as float Company failed to include their cost in the quotation though the technical specifications provided by IAF required them
AMLCD instruments	October 2007	Thales Avionics, France	15*	23.21	1.93	1.36	0.58	6.90	*Including three as float
Cabin Pressure Control Valve (Pressure Regulator)	March 2008	Liebherr Aerospace, France	14*	1.46	0.13	0.01	0.12	1.33	*Including two as float
Integrated Avionics System (IAS)	January 2008	GE Aviation, UK	14*	21.49	1.79	1.28	0.51	6.12	*Including two as float
Ejection Seat and spares	April 2009	Martin Baker Aircraft Co., UK	14*	26.23	1.46	0.69	0.77	9.24	*Including two as float
Oxygen System with accessories	February 2008	Intertechnique, France	14*	6.90	0.58	0.27	0.31	3.72	*Including two as float
AL 55I engines	October 2008/	Rosoboronexport, Russia IDTO, Kanpur	6 10*	43.10 49.86 92.96	5.81	3.64	2.17	34.72	*Including four as spares
Total								**63.59**	

Annexure-II

(Referred to in para 10.1.1)

Details of E&P blocks of IOCL as on 28.02.2013

Sl. No.	Block	Status	IOCL's PI in *per cent*	Operator & its PI in *per cent*	Expenditure (₹ in crore)
1.	Carabobo Project – 1	Producing	3.5	Petro-Carabobo S.A. (Mixed Company)-60	210.93
2.	Rose	Producing	10	Carrizo Oil & Gas Inc	111.23
3	AAP-ON-94/1	Discovered	43.55	HOEC-40.32	177.28
4.	OML 142, Nigeria	Discovered	17.5	Summit Oil-30	76.59
5	Farsi Block, Iran	Discovered	40	OVL-40	162.29
6	BK-CBM-2001/1	Discovered	20	ONGC-80	39.03
7	NK-CBM-2001/1	Discovered	20	ONGC-80	31.67
8	MN-OSN-2000/2	Discovered	20	ONGC-40	291.52
9.	AA-ONN-2001/2	Discovered	20	ONGC-80	25.70
10.	Shakti, Gabob	Exploration	45	OIL-45	165.14
11.	Area 95-96, Libya	Exploration	25	Sonatrach-50	64.10
12.	Block 82, Yemen	Exploration	15	Medco-45	11.88
13.	Block 83, Yemen	Exploration	15	Medco-45	21.54
14.	CB-ONN-2005/2	Exploration	100	IOC-100	17.71
15.	CB-ONN-2005/7	Exploration	100	IOC-100	20.06
16.	KG-DWN-2005/1	Exploration	20	ONGC-70	16.30
17.	GK-OSN-2009/1	Exploration	20	ONGC-40	12.99
18.	GK-OSN-2009/2	Exploration	30	ONGC-40	19.19
19.	CB-ONN-2010/6	Exploration	20	ONGC-80	0.00
20.	MB-DWN-2000/1	Relinquished in 2006-07	15	ONGC-85	13.93
21.	MB-DWN-2000/2	Relinquished in 2006-07	15	ONGC-50	14.66
22.	MB-OSN-97/4	Relinquished in 2006-07	30	ONGC-70	46.87
23.	CR-ON-90/1	Relinquished in 2007-08	35	Premier Oil-29	182.88

Sl. No.	Block	Status	IOCL's PI in *per cent*	Operator & its PI in *per cent*	Expenditure (₹ in crore)
24.	GV-ONN-97/1	Relinquished in 2008-09	30	ONGC-40	22.01
25.	MB-OSN-2000/1	Relinquished in 2008-09	15	ONGC-75	45.74
26.	MN-ONN-2000/1	Relinquished in 2009-10	20	OIL-25	13.85
27.	WB-ONN-2000/1	Relinquished in 2003	15	ONGC-85	0.42
28.	GV-ONN-2000/1	Relinquished in 2003	15	ONGC-85	0.71
29.	Block-K, Timor Leste	Relinquished in 2011-12	12.5	REP DMCC-75	97.31
30.	WB-OSN-2000/1	Decided to be relinquished	15	ONGC-85	111.66
31.	Area 86, Libya	Decided to be relinquished	50	OIL-50	91.68
32.	Area 102/4, Libya	Decided to be relinquished	50	OIL-50	56.83
33.	MB-OSN-2004/1	Decided to be relinquished	20	GSPC-20	68.09
34.	MB-OSN-2004/2	Decided to be relinquished	20	Petrogas-20	71.03
		Total			**2312.82**

Annexure-III

(Referred to in para 10.1.1)

Details of E&P blocks of GAIL as on 28.02.2013

Sl. No.	Block	Status	GAIL's PI in *per cent*	Operator & its PI in *per cent*	Expenditure (₹ in crore)
1.	CB-ONN-2000/1	Producing	50	GPSC-50	119.83
2.	MN-OSN-2000/2	Discovered / Appraisal	20	ONGC-40	290.59
3.	AA-ONN-2002/1	Discovered / Appraisal	80	JOGPL-20	445.60
4.	CY-OS/2	Discovered / Appraisal	25	HEPI-75	126.63
5.	CB-ONN-2003/2	Discovered / Appraisal	20	GSPC-50	48.69
6.	A-1, Myanmar	Development	8.50	Daewoo-51	723.55
7.	A-3, Myanmar	Development	8.50	Daewoo-51	
8.	AN-DWN-2009/13	Exploration	10	ONGC-70	1.52
9.	AN-DWN-2009/18	Exploration	10	ONGC-60	1.53
10.	AN-DWN-2003/2	Exploration	15	Eni India-40	59.22
11.	AA-ONN-2003/1	Exploration	35	JOGPL-10	17.53
12.	CY-DWN-2004/1	Exploration	10	ONGC-70	11.16
13.	CY-DWN-2004/2	Exploration	10	ONGC-70	10.86
14.	CY-DWN-2004/3	Exploration	10	ONGC-70	13.03
15.	CY-DWN-2004/4	Exploration	10	ONGC-70	10.70
16.	CY-PR-DWN-2004/1	Exploration	10	ONGC-70	23.57
17.	CY-PR-DWN-2004/2	Exploration	10	ONGC-70	13.03
18.	KG-DWN-2004/1	Exploration	10	ONGC-70	18.23
19.	KG-DWN-2004/2	Exploration	10	ONGC-60	18.52
20.	KG-DWN-2004/3	Exploration	10	ONGC-70	8.99
21.	KG-DWN-2004/5	Exploration	10	ONGC-50	13.20
22.	KG-DWN-2004/6	Exploration	10	ONGC-60	22.41
23.	RJ-ONN-2004/1	Exploration	22.225	GSPC & GAIL-22.225 each	49.17
24.	KG-ONN-2004/2	Exploration	40	GSPC-40	33.82
25.	CB-ONN-2010/11	Exploration	25	GAIL-25	0.10
26.	AA-ONN-2010/2	Exploration	20	OIL-40	0.00
27.	GK-OSN-2010/1	Exploration	10	ONGC-60	0.08
28.	GK-OSN-2010/2	Exploration	10	ONGC-90	0.08

29.	CY-ONN-2005/1	Exploration	40	GAIL-40	27.05
30.	MN-OSN/97/3	Relinquished in 2007-08	15	ONGC-85	26.09
31.	NEC-OSN/97/1	Relinquished in 2007-08	50	Gazprom-50	473.57
32.	AD-7 Myanmar	Relinquished in 2008-09	10	Daewoo-60	37.22
33.	MN-ONN-2000/1	Relinquished in 2008-09	20	OIL-25	10.44
34.	Block-56 Oman	Relinquished in 2010-11	25	Oilex-25	47.37
35.	CY-ONN-2002/1	Relinquished in 2010-11	50	JOGPL-30	141.02
36.	GS-DWN-2000/2	Relinquished in 2006-07	15	ONGC-85	13.51
37.	MB-DWN-2000/2	Relinquished in 2006-07	15	ONGC-50	10.87
38.	KK-DWN-2000/2	Relinquished in 2004-05	15	ONGC-85	1.60
39.	RM-CBM-2005/III	Relinquished in 2010-11	35	Arrow Energy-35	4.54
40.	MR-CBM-2005/III	Relinquished in 2010-11	45	Arrow Energy-40	9.21
41.	TR-CBM-2005/III	Relinquished in 2011-12	35	Arrow Energy-35	12.28
42.	MB-OSN-2004/1	Decided to relinquish	20	GSPC-20	66.43
43.	MB-OSN-2004/2	Decided to relinquish	20	Petrogas-20	71.32
Total					**3034.16**

Annexure-IV

(Referred to in Para 13.1.1)

Details of 30 vessels sold during the period 2009-10 to 2011-12

Sl. No.	Name of the Vessel	Type of vessel	Year of disposal	Year of built	LDT of the vessel (LT)	DWT of the vessel (MT)	Date of sale	Date of delivery
1	M V Lok Prakash	Bulk	2009-10	1989	7191.18	26790.00	7/May/09	13/May/09
2	MT Major Somnath Sharma, PVC	Crude	2009-10	1984	13062.00	67225.20	26/May/09	1/Jun/09
3	M T Naik Jadunath Singh, PVC	Crude	2009-10	1984	13271.40	67169.40	29/Oct/09	5/Nov/09
4	M T CHM Piru Singh, PVC	Crude	2009-10	1984	13143.00	67161.30	17/Nov/09	23/Nov/09
5	M T Captain Gurbachan Singh Salaria, PVC	Crude	2009-10	1984	13117.10	67167.00	17/Nov/09	23/Nov/09
6	M T Major Dhan Singh Thapa, PVC	Crude	2009-10	1984	13133.00	67153.00	17/Nov/09	24/Nov/09
7	M T Nirmaljit Singh Sekhon, PVC	Product	2009-10	1985	10206.45	45485.00	10/Feb/10	13/Feb/10
8	M T Lt. Arun Khetarpal, PVC	Product	2009-10	1985	10238.22	45452.20	12/Mar/10	18/Mar/10
9	M T Havildar Abdul Hamid, PVC	Crude	2010-11	1985	13113.50	67164.10	8/Sep/10	16/Sep/10
10	M T Lance Naik Karam Singh, PVC	Crude	2010-11	1985	13108.00	67153.00	7/Sep/10	17/Sep/10
11	M T Lt.Rama Raghoba Rane, PVC	Crude	2010-11	1984	13052.00	67153.00	9/Aug/10	14/Aug/10
12	M T Major Shaitan Singh, PVC	Crude	2010-11	1985	13092.65	67185.30	29/Jun/10	1/Jul/10
13	M T Colonel A B Tarapore, PVC	Crude	2010-11	1985	13153.44	67123.00	20/Sep/10	28/Sep/10
14	M T Subedar Joginder Singh, PVC	Crude	2010-11	1984	13140.26	67167.90	10/Dec/10	15/Dec/10
15	M T Major Hoshiar Singh	Product	2010-11	1985	10269.60	45420.90	18/May/10	21/May/10
16	M V Lok Rajeshwari	Bulk	2010-11	1988	7367.80	26639.00	20/Dec/10	31/Dec/10
17	M T Lance Naik Albert Ekka	Product	2010-11	1985	10218.75	45420.90	2/Jul/10	9/Jul/10
18	M T Bharatidasan	Product	2011-12	1991	6961.10	29754.70	23/Jun/11	28/Jun/11
19	M T Tirumalai	Chemical	2011-12	1991	8831.00	33088.00	14/Oct/11	20/Oct/11
20	M V Hardwar	Bulk	2011-12	1986	10084.60	47311.08	31/Oct/11	24/Nov/11

21	M V Kanpur	Bulk	2011-12	1986	10218.50	47175.04	19/Oct/11	28/Oct/11
22	M V Varanasi	Bulk	2011-12	1987	10044.47	47351.84	21/Nov/11	29/Nov/11
23	M V Alaknanda	Bulk	2011-12	1986	10172.54	47221.76	21/Sep/11	28/Sep/11
24	M V Uttarkashi	Bulk	2011-12	1986	10171.44	47222.88	1/Dec/11	9/Dec/11
25	M V Rishikesh	Bulk	2011-12	1986	10080.00	47315.80	16/Dec/11	24/Dec/11
26	M V Mandakini	Bulk	2011-12	1986	10198.65	47195.23	21/Nov/11	29/Nov/11
27	M V Devprayag	Bulk	2011-12	1986	10046.90	47349.00	19/Dec/11	28/Dec/11
28	M V Murshidabad	Bulk	2011-12	1987	10083.31	47311.85	10/Feb/12	17/Feb/12
29	M V Pataliputra	Bulk	2011-12	1987	10091.10	47303.96	17/Feb/12	9/Mar/12
30	M T Sabarimala	Chemical	2011-12	1992	8862.81	33056.00	2/Mar/12	9/Mar/12
	Vessel M.V Dr. Nagendra Singh, sold during the year 2011-12 was not considered in audit as the vessel was declared as Constructive Total Loss (CTL) due to fire and the Company got full insured value of the vessel. The sale was conducted on behalf of the underwriters.							

Annexure-V

(Referred to in Para 13.1.7.2 (B))

Statement showing the difference between rate to be adopted for TES and the highest $/LDT as per Clarkson Weekly in the 3 months preceding TES date

Sl. No.	Name of the Vessel	Type of vessel	LDT of the vessel	Date of TES	Highest $/LDT as per Clarkson Weekly in the 3 months preceding TES date*	Clarkson report dated	$/LDT considered for TES	Clarkson report date adopted by Company	Per cent Difference between columns 6 and 8	Money value of indicative price per LDT ($) (as considered for TES) (4x8x14)	Money value of highest $/LDT as per Clarkson Weekly in the 3 months preceding TES date (4x6x14)	Difference (₹) (12-11)	Exchange rate (₹) (on the date of TES)
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	M T Major Shaitan Singh PVC	Crude	13092.65	13-Jan-10	400	8-Jan-10	370	8-Jan-10	-7.50	223,515,102.27	241,637,948.40	18,122,846.13	46.14
2	M T Colonel A B Tarapore PVC	Crude	13153.44	2-Jun-10	505	16-Apr-10	400	28-May-10	-20.79	244,601,370.24	308,809,229.93	64,207,859.69	46.49
3	M T Subedar Joginder Singh PVC	Crude	13140.26	8-Sep-10	470	27-Aug-10	465	3-Sep-10	-1.06	281,070,161.40	284,092,421.20	3,022,259.80	46.00
4	M V Kanpur	Bulk	10218.50	22-Mar-11	535	11-Feb-11	500	18-Mar-11	-6.54	240,134,750.00	256,944,182.50	16,809,432.50	47.00
5	M V Hardwar	Bulk	10084.60	8-Jul-11	550	27-May-11	490	1-Jul-11	-10.91	232,248,338.00	260,686,910.00	28,438,572.00	47.00
6	M V Varanasi	Bulk	10044.47	27-Jul-11	550	22-Jul-11	525	22-Jul-11	-4.55	237,300,603.75	248,600,632.50	11,300,028.75	45.00
7	M V Alaknanda	Bulk	10172.54	4-Aug-11	550	22-Jul-11	525	NA	-4.55	240,326,257.50	251,770,365.00	11,444,107.50	45.00
8	M T Tirumalai	Chemical	8831.00	23-Jun-11	576	6-May-11	450	NA	-21.88	177,556,086.00	227,271,790.08	49,715,704.08	44.68
9	M V Uttarkashi	Bulk	10171.44	16-Aug-11	550	22-Jul-11	525	12-Aug-11	-4.55	240,300,270.00	251,743,140.00	11,442,870.00	45.00

10	M V Rishikesh	Bulk	10080.00	23-Aug-11	550	22-Jul-11	525	19-Aug-11	-4.55	238,140,000.00	249,480,000.00	11,340,000.00	45.00
11	M V Mandakini	Bulk	10198.65	30-Aug-11	550	22-Jul-11	505	NA	-8.18	231,764,321.25	252,416,587.50	20,652,266.25	45.00
12	M V Pataliputra	Bulk	10091.10	22-Nov-11	548	9-Sep-11	420	NA	-23.36	203,436,576.00	265,436,294.40	61,999,718.40	48.00
13	M V Murshidabad	Bulk	10083.31	28-Nov-11	548	9-Sep-11	473	NA	-13.69	228,931,470.24	265,231,386.24	36,299,916.00	48.00
14	M T Sabarimala	Chemical	8862.81	15-Oct-11	610	2-Sep-11	545	NA	-10.66	231,851,109.60	259,503,076.80	27,651,967.20	48.00
15	M V Lok Prakash	Bulk	7191.18	9-Mar-09	280	30-Jan-09	275	NA	-1.79	98,878,725.00	100,676,520.00	1,797,795.00	50.00
16	MT Major Somnath Sharma, PVC	Crude	13062.00	3-Apr-09	355	3-Apr-09	300	27-Mar-09	-15.49	195,930,000.00	231,850,500.00	35,920,500.00	50.00
17	M T Naik Jadunath Singh PVC	Crude	13271.40	28-07-2009	323	3-Jul-09	275	17-Jul-09	-14.86	176,277,370.50	207,045,784.26	30,768,413.76	48.30
18	M T CHM Piru Singh, PVC	Crude	13143.00	3-Apr-09	355	3-Apr-09	300	27-Mar-09	-15.49	197,145,000.00	233,288,250.00	36,143,250.00	50.00
19	M T Captain Gurbachan Singh Salaria, PVC	Crude	13327.00	25-08-2009	360	7-Aug-09	280	14-Aug-09	-22.22	182,324,021.60	234,416,599.20	52,092,577.60	48.86
20	M T Major Dhan Singh Thapa, PVC	Crude	13133.00	3-Apr-09	355	3-Apr-09	300	27-Mar-09	-15.49	196,995,000.00	233,110,750.00	36,115,750.00	50.00
21	M T Nirmaljit Singh Sekhon PVC	Product	10206.45	26-12-2009	375	13-Nov-09	340	23-Dec-09	-9.33	161,710,993.80	178,357,713.75	16,646,719.95	46.60
22	M T Lt. Arun Khetarpal, PVC	Product	10238.22	26-12-2009	375	13-Nov-09	340	23-Dec-09	-9.33	162,214,357.68	178,912,894.50	16,698,536.82	46.60
23	M V Devprayag	Bulk	10046.90	17-Oct-11	548	9-Sep-11	545	NA	-0.55	262,826,904.00	264,273,657.60	1,446,753.60	48.00
24	M T Lance Naik Albert Ekka	Product	10218.75	11-Jan-10	375	13-Nov-09	370	8-Jan-10	-1.33	174,452,456.25	176,809,921.88	2,357,465.63	46.14
25	M T Major Hoshiar Singh	Product	10269.60	11-Jan-10	375	13-Nov-09	370	8-Jan-10	-1.33	175,320,557.28	177,689,754.00	2,369,196.72	46.14

											TOTAL	604,804,507.37	
1	M T Havildar Abdul Hamid PVC	Crude	13113.50	6-Apr-10	418	19-Mar-10	440	26-Mar-10	5.26	259,647,300.00	246,664,935.00	-12,982,365.00	45.00
2	M T Lance Naik Karam Singh PVC	Crude	13108.00	6-Apr-10	418	19-Mar-10	440	26-Mar-10	5.26	259,538,400.00	246,561,480.00	-12,976,920.00	45.00
3	M T Lt.Rama Raghoba Rane PVC	Crude	13052.00	6-Apr-10	418	19-Mar-10	440	26-Mar-10	5.26	258,429,600.00	245,508,120.00	-12,921,480.00	45.00
4	M T Bharatidasan	Product	6961.10	19-Apr-11	500	25-Mar-11	510	8-Apr-11	2.00	166,857,567.00	163,585,850.00	-3,271,717.00	47.00
											TOTAL	-42,152,482.00	
	NA: Not Available												
	*Highest $/LDT as per Clarkson Weekly in the 3 months preceding the TES date has been taken by considering the month in which the TES was conducted as the first month.												

Annexure –VI

(Referred to in Para 13.1.7.3)

Statement showing the revenue loss due to non-consideration of the scrap rates prevailing during the period of sale

Sl. No.	Name of the vessel	LDT of the vessel	Date of 'In-principle approval'	Board approved rate per LDT (in USD)	Date of Delivery	Days from In principle approval to date of delivery (6-4)	Prevailing market rate at the time of sale ($/LDT)	Difference (8-5)	Exchange rate on the date of sale (₹)	Sales realisation (including bunker) ($/LDT)	Difference (8-11)	Price Difference (₹) (3x10x12)
1	2	3	4	5	6	7	8	9	10	11	12	13
1	M V Hardwar	10084.60	13/Aug/11	490	24/Nov/11	103	512	22	49.05	605.44	-93.44	*-46,220,061.43*
2	Piru Singh	13143.00	27/Apr/09	300	23/Nov/09	210	307	7	47.06	296.62	10.38	6,420,129.44
3	Dhan Singh Thapa	13133.00	27/Apr/09	300	24/Nov/09	211	307	7	46.45	297.75	9.25	5,642,757.61
4	M T Major Shaitan Singh PVC	13092.65	02/Mar/10	370	01/Jul/10	121	400	30	45.66	391.36	8.64	5,165,081.85
5	M T Lance Naik Albert Ekka	10218.75	30/Jan/10	370	09/Jul/10	160	400	30	46.48	380.00	20	9,499,350.00
6	M T Lt.Rama Raghoba Rane PVC	13052.00	22/Apr/10	440	14/Aug/10	114	440	0	46.15	420.43	19.57	11,787,985.59
7	M T Lance Naik Karam Singh PVC	13108.00	22/Apr/10	440	17/Sep/10	148	470	30	46.74	380.53	89.47	54,815,398.80
8	M T Havildar Abdul Hamid PVC	13113.50	22/Apr/10	440	16/Sep/10	147	470	30	46.74	381.22	88.78	54,415,480.61
9	M T Tirumalai	8831.00	07/Jul/11	490	20/Oct/11	105	508	18	49.46	468.00	40	17,471,250.40
10	M V Kanpur	10218.50	20/May/11	500	28/Oct/11	161	515	15	49.08	454.17	60.83	30,507,703.70
11	M V Varanasi	10044.47	13/Aug/11	525	29/Nov/11	108	495	-30	49.62	452.74	42.26	21,062,662.98
12	M V Rishikesh	10080.00	22/Sep/11	540	24/Dec/11	93	492	-48	51.77	462.56	29.44	15,363,016.70
13	MT Jadunath	13116.72	11/Aug/09	275	05/Nov/09	86	320	45	46.58	297.91	22.09	13,496,477.90
											Total (net)	**199,427,234.16**

Annexure-VIII

(Referred to in Para 13.1.7.4)

Statement showing loss due to delay in submission of tender and finalizing the sale

Sl. No.	Name of the Vessel	Date of invitation of tender	Due Date of Tender	Due Date of retendering	Date on which the vessel was laid up	No of days from lay up to date of tender (4-6)	No of days delay (7-7 days)	Standing Charges (₹)	Date of sale	Difference from date of tender to date of sale (10-4 or 10-5)	Difference from date of tender to date of sale minus 10 days (11-10 days)	Total No. of days (8+12)	Loss (₹) (13x9)	No. of days from date of invitation of tender to lay up date (6-3)	Total avoidable expenditure (₹ in lakh)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Havildar Abdul Hamid	02/Aug/10	12/Aug/10	24/Aug/10	08/Aug/10	4		413000	08/Sep/10	15	5	5	2065000	6	0
2	Lance Naik Karam Singh	02/Aug/10	09/Aug/10	24/Aug/10	31/Jul/10	9	2	528800	07/Sep/10	14	4	6	3172800	-2	31.72
3	Rama Raghoba Rane	26/Jul/10	02/Aug/10		24/Jul/10	9	2	501600	09/Aug/10	7		2	1003200	-2	10.03
4	Major Shaitan Singh	08/Jun/10	21/Jun/10		11/Jun/10	10	3	427000	29/Jun/10	8		3	1281000	3	0
5	Colonel A B Tarapore	04/Sep/10	13/Sep/10		03/Sep/10	10	3	501600	20/Sep/10	7		3	1504800	-1	15.04
6	Major Hosiar Singh	26/Apr/10	07/May/10		27/Apr/10	10	3	303600	18/May/10	11	1	4	1214400	1	0
7	Tirumalai	29/Aug/11	03/Oct/11		26/Sep/11	7	0	243729	14/Oct/11	11	1	1	243729	28	0
8	Hardwar	24/Sep/11	14/Oct/11		29/Sep/11	15	8	288011	31/Oct/11	17	7	15	4320165	5	0
9	Kanpur	14/Sep/11	10/Oct/11		25/Sep/11	15	8	364789	19/Oct/11	9		8	2918312	11	0
10	Varanasi	17/Oct/11	09/Nov/11		20/Oct/11	20	13	304337	21/Nov/11	12	2	15	4565055	3	0
11	Alaknanda	19/Aug/11	09/Sep/11		01/Sep/11	8	1	284307	21/Sep/11	12	2	3	852921	13	0
12	Rishikesh	10/Oct/11	31/Oct/11		16/Oct/11	15	8	284307	16/Dec/11	46	36	44	12509508	6	0
13	Mandakini	17/Oct/11	09/Nov/11		25/Oct/11	15	8	282395	21/Nov/11	12	2	10	2823950	8	0
14	Devprayag	24/Nov/11	07/Dec/11		07/Nov/11	30	23	283452	19/Dec/11	12	2	25	7086300	-17	70.86
15	Murshidabad	25/Jan/12	02/Feb/12		24/Jan/12	9	2	288011	10/Feb/12	8		2	576022	-1	5.76
16	Pataliputra	19/Jan/12	30/Jan/12	09/Feb/12	04/Jan/12	26	19	288259	17/Feb/12	8		19	5476921	-15	54.77

17	Sabarimala	15/Feb/12	24/Feb/12		14/Feb/12	10	3	238249	02/Mar/12	7		3	714747	-1	7.15
18	Lok Prakash	31/Mar/09	15/Apr/09		05/Apr/09	10	3	408219	07/May/09	22	12	15	6123285	5	0
19	Somnath Sharma	30/Apr/09	15/May/09		08/May/09	7	0	438852	26/May/09	11	1	1	438852	8	0
20	Jadunath Singh	07/Sep/09	29/Sep/09	22/Oct/09	19/Sep/09	10	3	415860	29/Oct/09	7		3	1247581	12	0
21	Piru Singh	07/Sep/09	29/Sep/09	05/Nov/09	23/Sep/09	6		443349	17/Nov/09	12	2	2	886698	16	0
22	G.S.Salaria	12/Oct/09	03/Nov/09		31/Oct/09	3		409934	17/Nov/09	14	4	4	1639736	19	0
23	Dhan Singh Thapa	30/Oct/09	09/Nov/09		26/Oct/09	14	7	414438	17/Nov/09	8		7	2901066	-4	29.01
24	M T Nirmaljit Singh Sekhon	13/Jan/10	25/Jan/10	04/Feb/10	15/Jan/10	10	3	316800	10/Feb/10	6		3	950400	2	0
TOTAL												**203**	**66516448**		**224.34**

Annexure-VIII

(Referred to in Para 13.1.7.5)

Statement showing impact of excess bunker in the sale price

Sl. No.		LDT of the vessel (in long tons)	Quantity of Heavy Oil (in MTs)	Excess quantity of heavy oil after considering the minimum standard of 140 MTs fixed (in MTs)	Heavy oil rate per MT in US $	Value of excess quantity of fuel oil (in US $) (5x6)	Rate per LDT (in US $) (7/3)	Actual scrap rate obtained (including cost of fuel oil) in LDT in US $)	Actual scrap rate excluding value of excess fuel oil (per LDT in US $) (9-8)	Exchange rate adopted (₹)	Impact of excess bunker in ₹ (7x11)
1	2	3	4	5	6	7	8	9	10	11	12
1	M T G.S.Salaria	13117.1	229.20	89.20	733.25	65405.90	4.99	314.16	309.17	46.41	3035487.82
2	M T Lok Prakash	7191.18	179.59	39.59	473.22	18734.78	2.61	365.85	363.24	50.02	937113.69
3	M V Lok Rajeshwari	7367.80	397.52	257.52	513.50	132236.52	17.95	427.03	409.08	44.96	5945353.94
4	M V Hardwar	10084.60	311.47	171.47	996.25	170830.97	16.94	605.44	588.50	52.10	8900293.67
5	M V Kanpur **	10218.50	229.95	89.95	830.18	74674.69	7.31	454.17	446.86	48.76	3641137.93
6	M V Uttarkashi	10171.44	143.24	3.24	712.50	2308.50	0.23	486.69	486.46	52.00	120042.00
7	M V Rishikesh	10080.00	575.27	435.27	824.06	358688.60	35.58	462.56	426.98	51.77	18569308.63
8	M V Mandakini**	10198.65	275.40	135.40	733.50	99315.90	9.74	449.73	439.99	51.90	5154495.21
9	M V Devprayag	10046.90	600.00	460.00	793.00	364780.00	36.31	454.60	418.29	52.84	19274975.20
10	M V Pataliputra**	10091.10	425.00	285.00	784.50	223582.50	22.16	418.90	396.74	49.22	11004730.65
11	M V Murshidabad	10083.31	220.78	80.78	831.50	67168.57	6.66	465.33	458.67	49.00	3291259.93
12	M.T.Somnath Sharma	13062	397.50	257.50	522.73	134602.98	10.30	244.00	233.70	47.47	6389603.22
											86263801.88

** Approved rates for China is taken as the vessels were sold in China

Annexure-IX

(Referred to in Para 13.1.7.8 (C))

Statement showing EMD paid by a party other than the offerer

Sl. No.	Name of the vessel	Name of the offerer	Payer
1	M T CHM Piru Singh	M/s Grand International Limited, Singapore	M/s Dragon Well Corporation, Samoa
2	M T Captain Gurbachan Singh Salaria	M/s Grand International Limited, Singapore	M/s Dragon Well Corporation, Samoa
3	M T Naik Jadunath Singh	M/s Sea Maritime Corpn.	M/s Dragon Well Corporation, Samoa
4	MT Major Somnath Sharma	Powerful International Corpn.	M/s Demo International Ltd.,
5	M T Nirmaljit Singh Sekhon	M/s Grand International Limited, Singapore	M/s Sea Charm Shipping Inc., Singapore
6	M T Lt. Arun Khetarpal	M/s Grand International Limited, Singapore	M/s Sea Charm Shipping Inc., Singapore
7	M T Major Dhan Singh Thapa	M/s Grand International Limited, Singapore	M/s Dragon Well Corporation, Samoa
8	M T Bharatidasan	M/s Grand International Limited, Singapore	M/s Dragon Well Corporation, Samoa
9	M T Col.A B Tarapore	M/s Rossmere International Limited, Singapore	M/s Dragon Well Corporation, Samoa
10	M V Alaknanda	M/s Grand International Limited, Singapore	M/s Dragon Well Corporation, Samoa
11	M V Kanpur	M/s Grand International Limited, Singapore	M/s Dragon Well Corporation, Samoa
12	M V Rishikesh	M/s Grand International Limited, Singapore	M/s Dragon Well Corporation, Samoa
13	M T Tirumalai	M/s Grand International Limited, Singapore	M/s Mars Navigation, Monrovia
14	M V Mandakini	M/s Grand International Limited, Singapore	M/s Mars Navigation, Monrovia
15	M V Haridwar	M/s Grand International Limited, Singapore	M/s Mars Navigation, Monrovia
16	M V Uttarkashi	M/s Grand International	M/s Mars Navigation,

		Limited, Singapore	Monrovia
17	M T Major Hoshiar Singh	M/s Grand International Limited, Singapore	M/s Dragon Well Corporation, Samoa
18	M T Lance Naik Albert Ekka	M/s Grand International Limited, Singapore	M/s Dragon Well Corporation, Samoa
19	M T Shaitan singh	M/s Rossmere International Limited, Singapore	M/s Dragon Well Corporation, Samoa
20	M T Havildar Abdul Hamid	M/s Rossmere International Limited, Singapore	M/s Dragon Well Corporation, Samoa
21	M V Lok Rajeshwari	M/s Grand International Limited, Singapore	M/s Dragon Well Corporation, Samoa
22	M T Subedar Joginder Singh	M/s Grand International Limited, Singapore	M/s Dragon Well Corporation, Samoa
23	M T Lt. Rama Raghoba Rane	M/s Grand International Limited, Singapore	M/s Dragon Well Corporation, Samoa

The EMD paid for one vessel was adjusted for another one as given below:

1) **M T CHM Piru Singh for M T Captain Gurbachan Singh Salaria**
2) **M T Nirmaljit Singh Sekhon for M T Lt. Arun Khetarpal**
3) **M V Alaknanda for M V Kanpur and then for MV Rishikesh**
4) **M V Lok Rajeshwari for M T Subedar Joginder Singh**
5) **M T Tirumalai for M V Mandakini**
6) **M V Haridwar for M V Uttarkashi**
7) **M T Major Hoshiar Singh for M T Lance Naik Albert Ekka**