OVERVIEW

This volume of Audit Report represents reviews on nine selected areas of operation involving nine Public Sector Undertakings under six Ministries. These areas were selected in audit for review on the basis of their relative importance in the functioning of the concerned organisation. The total financial implication of these reviews is Rs.2987.47 crore.

MINISTRY OF COAL

Central Coalfields Limited

❖ Rajrappa Project

The Draft Project Report (DPR) of Rajrappa Open Cast Project (OCP) was approved in June 1983 by the Government of India at an estimated capital cost of Rs.91.46 crore with targeted output of three million metric ton (MMT) of coal and 8.5 Mcum of overburden (OB) removal. However, it never achieved the production level as per the Project Report. Considering the accumulation of backlog of OB removal, the World Bank agreed to fund this project with the main emphasis on procurement of Heavy Earth Moving Machinery (HEMM) amounting to Rs.91.56 crore. The HEMM were inducted in 1998-99. Various aspects of the working of the OCP were examined in performance audit and the significant findings were as under:

- The Area Management deviated from the mining practice as per DPR and undertook selective mining from upper seams at a favourable stripping ratio in the earlier years. This resulted in huge backlog in OB removal during the later period.
- Systematic method of OB dumping was not followed which resulted in re-handling of 3.69 Mcum of OB to sustain coal production with an extra expenditure of Rs.58.57 crore during 1997-98 to 2005-06.
- In spite of spare departmental capacity being available, the mismatch of equipment imposed severe constraints on production and transportation of coal resulting in extra expenditure of Rs.6.73 crore during 2001-02 to 2005-06 on engagement of contractors for coal production.
- During 2001-02 to 2005-06, on an average 13 out of 58 dumpers on roll remained under breakdown each year and the availability (23 to 44 *per cent*) of working dumpers was far below the norms (72 *per cent*) due to poor maintenance.
- The Management did not initiate any action to acquire 1512.69 hactares of land for starting operation in Block II. As the construction work on a high level bridge on Damodar was incomplete, Block II (having 70 MMT of coal reserves worth Rs.6,650 crore) remained inaccessible
- The Management did not take possession of tenancy land in two villages compelling the Company to virtually abandon Section III where 2.9 MMT coal reserves valuing Rs.287.97 crore remain blocked.

- The Company could not provide documentary evidence on diversion of 510.82 hectares of forest land for mining purposes prior to 1980 and paid Rs.68.59 crore towards compensatory afforestation, penal charges, etc.
- In spite of average annual production falling below half the target of three MMT, the Rajrappa area management did not initiate any action towards rationalisation of the workforce and paid Rs 4.80 crore towards idle salary and wages during the five years ending March 2006. It continued to pay an average amount of Rs.3.76 crore as overtime allowance per annum to different categories of employees.

Neyveli Lignite Corporation Limited

❖ **Performance of Thermal Power Stations**

- Neyveli Lignite Corporation Limited (Corporation) was incorporated in 1956 for excavating lignite in the Neyveli area and generating power therefrom. The Corporation had three lignite based Thermal Power Stations (TPS I, TPS II and TPS I expansion) with dedicated mines and generating capacity of 2,490 MW. A performance audit of TPS I and TPS II was carried out and the major audit findings were as below.

- Power Plants were operated for more hours than planned and generation exceeded the targets during 2001-02 to 2005-06 but the generation targets were not revised in the light of actual achievement. Although the plants were in service for more hours than planned, the actual generation fell short of potential generation (i.e., generation at full capacity for the actual hours of operation) by 7,623 MU. Forced outages and non-availability of lignite were the major constraints which caused a loss of generation of 5,661 MU. Thermal Power Station II came under the Availability Based Tariff (ABT) system from January 2003 and declaration of availability equal to 75 *per cent* of the installed capacity was required as per the Central Electricity Regulatory Commission norms to recover the full capacity charges. While actual PAF achieved in TPS II during 2001-02 to 2005-06 was consistently higher than 75 *per cent*, the Corporation had declared lower availability of 71.29 *per cent* and 72.75 *per cent* during 2004-05 and 2005-06 because of the anticipated shortfall in lignite production. This led to non-recovery of capacity charges of Rs.16.59 crore. The quantity of lignite consumed by both the TPS did not tally with the quantity of lignite transferred from the mines. While the quantity of lignite consumed was accounted on volumetric basis in Mine I, it was derived in TPS I based on the station heat rate norms fixed by CERC and the difference was attributed to the loss of moisture during storage. The Corporation had not independently fixed norms for loss of weight of lignite due to moisture. Considering the calorific value of lignite adopted by the Management and the average boiler efficiency achieved by the TPS, the consumption of lignite worked out in Audit varied significantly from that recorded by the Management. As such, the consumption worked out by the Management did not depict the impact of boiler efficiency actually achieved. The operation and maintenance expenses exceeded the norms of Bulk Power Supply Agreement/Central Electricity Regulatory Commission.

MINISTRY OF DEFENCE

Bharat Earth Movers Limited

❖ Performance of Engine Division

To meet the requirement of engines for the production of Earth Moving (EM) equipment, the Government accorded approval (1988) to establish manufacturing facilities of engines at the Mysore Complex of the Company. The first phase of the project was commissioned in April 1991 and the second phase (with establishment of Flexible Manufacture System) in March 1998. The project envisaged manufacture of 2400 engines in the sixth year of commencement of production. A performance audit of the Engine Division was carried out and the major audit findings were as below.

- The Company fixed the annual production targets between 15 and 57 *per cent* of the installed capacity during 2000-01 to 2005-06. However, the Company could not achieve even these low targets as there were shortfall of 23 and 27 *per cent* in achieving these targets during 2003-04 and 2005-06 respectively.
- The Company resorted to manufacture of EM equipment with engines of other make despite availability of in-house capacity. As a result, the Company could utilise only 14 to 42 *per cent* of the installed capacity for captive consumption during 2000-01 to 2005-06.
- The Company could not recover even the material cost in nine out of twenty models of engines produced during 2005-06. The excess cost incurred by the Company worked out to Rs.2.09 crore. The manufacturing cost was higher mainly due to high cost of raw material and components, under utilisation of installed capacity and low volume of production for captive consumption.
- The diversification efforts (1998-99) made to manufacture and sell Company's engines for use in Diesel Generator sets were not successful resulting in loss of Rs.2.49 crore besides accumulation of unsold stock valuing at Rs 3.14 crore as on 31 March 2006. Another diversification effort made (2004-05) to use the Company's engines in compressor application was also not successful as there was no demand for the compressors made by the Company in the market.

Hindustan Aeronautics Limited

❖ Outsourcing activities

The Company had been outsourcing components, tools and assemblies since 1980. However, a major thrust to outsourcing was given from 2002-03 by formulating (April 2002/March 2003) the procedures and systems for outsourcing. The Company had outsourced works amounting to Rs.625.61 crore which worked out to 3.72 *per cent* of the turnover of Rs.16795 crore during 2002-03 to 2005-06. A performance audit was taken up to review the outsourcing activities in the Company during the period 2001-02 to 2005-06. The major audit findings were as below.

- Determination of available in-house capacity, which was vital for deciding quantum of outsourcing, was not realistic and uniform among divisions. In-house capacity was not

properly utilised before resorting to outsourcing. The method adopted for working out savings from outsourcing was also not uniform.

- A systematic database of the items to be outsourced had not been developed.
- The vendors list was not updated regularly, mandatory documents during registration process were not obtained and orders were placed on unregistered vendors in certain cases.
- Developed vendors were not nurtured by placing continuous orders. Dependence on limited sources and non-development of alternative sources were also noticed.
- Placement of orders in excess of capacity of the vendors was noticed. Repeat orders were being placed on selected vendors in spite of poor performance.
- It was noticed that orders were split, repeat orders were placed without entering into any Long Term Agreement (LTA) with vendors and adequate security was not taken for the raw material issued. There were also lacunae in the system of physical verification and reconciliation of material lying with vendors.

MINISTRY OF MINES

National Aluminium Company Limited

❖ Acquisition and operation of Rolled Products unit

While acquiring (March 2000) International Aluminium Products Limited, a 100 *per cent* Export Oriented Unit (EOU) to manufacture rolled products promoted by Mukund Limited, National Aluminium Company Limited (Company) did not adequately consider the problems consequent on takeover of a partially completed unit with imported equipment lying in prolonged storage. The Company entered the rolled product segment through acquisition route but its performance in the downstream segment was not upto the mark. The Company failed to fully commission the plant in time. The absence of competitive marketing strategy for rolled products led to low capacity utilisation. In the absence of any significant export order in hand coupled with technically deficient and incomplete equipment the Company was unlikely to fulfil its export commitment. The inability of the RPU to export would call for payment of duty of Rs.78.35 crore because of the EOU status of RPU. As the Company failed to generate any significant sales volume, Rs.361.74 crore invested (September 2006) in acquiring and commissioning of the unit remained unproductive.

MINISTRY OF PETROLEUM AND NATURAL GAS

Indian Oil Corporation Limited

❖ **Solvent Dewaxing Unit (SDU) of Digboi Refinery and Microcrystalline Wax (MCW) Plant of Haldia Refinery**

SDU of Digboi Refinery

Indian Oil Corporation Ltd set up a solvent dewaxing and de-oiling unit at its Digboi refinery in May 2003 to process Heavy waxy distillates (HWD) for production of Micro crystalline wax (MCW). Initial tests of HWD indicated that it was hard to deoil and process into MCW and the same was also indicated in the test conducted by the process licensor selected to set up the Unit. Still the Company went ahead with the project. The process licensor to whom the contract was awarded did not have proven technical credentials. Consequently, even after mechanical completion of the Unit, modifications in two phases had to be conducted at a cost of Rs.6.86 crore which could not be recovered from the contractor. Processing of HWD in the unit resulted in clogging up of the filters and could be used for this purpose only for 16 days after commissioning. Thereafter the Unit was primarily used only for processing Pressable waxy distillates (PWD). The capacity utilisation ranged from 49 *per cent* to 72 *per cent* during 2003-04 to 2005-06. The paraffin wax produced from processing PWD also did not meet the quality norms and could be used for production of lower value products resulting in a loss of revenue of Rs.8.33 crore.

MCW plant of Haldia Refinery

The availability of input for MCW was not considered for fixation of capacity of MCW plant of Haldia Refinery resulting in oversizing of the plant with an additional capital investment of Rs. five crore. The capacity utilisation of MCW plant was only 1.8 *per cent* to 6.1 *per cent* during the period from 2001-02 to 2005-06. The Bright Neutral slack wax not processed for production of MCW was diverted to other unit for production of low value products resulting in loss of revenue of Rs.25.06 crore.

Oil and Natural Gas Corporation Limited

❖ **Performance of offshore rigs in shallow water areas**

- Exploration of hydrocarbon reserves in the blocks awarded by the Directorate General of Hydrocarbon (DGH) and development of proved reserves for production by drilling exploratory and development wells are the two main activities of Oil and Natural Gas Corporation Limited (Company). To carry out drilling in shallow water areas, the Company deployed owned as well as hired rigs.

- In addition to owned rigs, the Company also deployed charter hired rigs which were often hired at higher rates due to lack of advance planning and delay in tender finalisation. Rig requirement was also not assessed correctly.

- The Company did not plan adequate number of exploratory wells to achieve the target of reserve accretion during the 10th Five Year Plan. Even the planned exploratory wells were not drilled. DGH had also raised a demand for liquidated damages for shortfalls/delays in the Minimum Work Programme and extension sought in respect of five blocks under New Exploration Licensing Policy (NELP)-I to III. Advance planning and coordination was lacking in providing support services resulting in idling of rigs. The Company had not hired adequate number of modular rigs to carry out work-over jobs. Instead, costlier jack up rigs were used.

- The Company had not laid down any dry dock policy for owned jack up rigs due to which dry dock repairs were delayed resulting in higher cost of repairs, condition of class and non-availability.

- Four major Exploratory and Production (E&P) projects with drilling of 183 wells were started during the period 2002-03 to 2005-06 without obtaining mandatory environmental clearance from the Government of India, Ministry of Environment and Forests. Monitoring and internal control system was not adequate for effective planning, charter hiring, deployment and dry dock repairs of rigs.

MINISTRY OF SHIPPING

The Shipping Corporation of India

❖ **System of collection and accounting of freight and other charges from agents**

- The Shipping Corporation of India Limited did not have an effective system to ensure compliance of contractual terms by agents regarding opening of separate bank accounts for depositing freight and other charges collected within prescribed time; opening of a separate bank account for expenditure and preventing netting of expenditure from freight collected; timely receipt of accounts and furnishing of bank guarantee. The Company failed to carry out timely reconciliation of accounts or resolution of ambiguities in the agreement. This led to blocking of Rs.3.29 crore, loss of Rs.14 crore and excess charging of Rs.85.31 lakh by the agents besides involving the Company in unnecessary litigation.

MINISTRY OF STEEL

Steel Authority of India Limited

❖ **Coal Dust Injection system in the blast furnaces**

- Steel Authority of India Limited (SAIL) operates 24 Blast Furnaces (BF) with an annual production capacity of 13.60 million tonne (MT) of hot metal. Metallurgical Coke (Met Coke or BF Coke) forms a major portion of the cost of hot metal production. For replacement of expensive metallurgical coke with non-

coking coal, SAIL introduced Coal Dust Injection system (CDI) in six blast furnaces in Bhilai Steel Plant and Bokaro Steel Plant. The Company was eager to modernise its BFs for making them cost effective but it did not ensure availability of commensurate infrastructural facilities for successful operation of CDI. This resulted in under utilisation of the capacity for CDI created at a cost of Rs.146.80 crore and loss of Rs.142.60 crore due to shortfall in the targeted substitution of BF coke.

- SAIL also has a Corporate Plan to introduce CDI in all the Plants in a phased manner. Proposals for installation of CDI in five more blast furnaces in Durgapur Steel Plant, Bokaro Steel Plant and Rourkela Steel Plant at an estimated cost of Rs.406.08 crore have been approved. Before committing fresh investments in the installation of CDIs in other blast furnaces, the Management had not rectified or improved the condition of the selected BFs nor created commensurate infrastructure to achieve the optimum utilisation of CDI System.