FOURTH REPORT

COMMITTEE ON PUBLIC UNDERTAKINGS (1985-86)

(EIGHTH LOK SABHA)

MINERAL EXPLORATION CORPORATION LTD.

(MINISTRY OF STEEL, MINES & COAL— DEPARTMENT OF MINES)

सत्यमेव जयते

Presented to Lok Sabha on 23-8-1985

Laid in Rajya Sabha on 23-8-1985

LOK SABHA SECRETARIAT
NEW DELHI

August 1985/Sravana 1907 (Saka)

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(1985-86)

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INTRODUCTION

I, the Chairman, Committee on Public Undertakings having been authorised by the Committee to present the Report on their behalf, present this Fourth Report on Mineral Exploration Corporation Ltd.

2. The Committee's examination of the working of the company was mainly based on the Report of the Comptroller and Auditor General of India, 1983, Union Government (Commercial) Part-II.

3. The subject was examined by the Committee on Public Undertakings (1984-85). That Committee took evidence of the representatives of the Mineral Exploration Corporation Ltd. on 12 and 13 July, 1984 and also of the representatives of the then Ministry of Steel & Mines (Department of Mines) on 10 September, 1984. The Committee, however, could not finalise their Report due to the dissolution of the Seventh Lok Sabha on 31st December, 1984.

4. The Committee on Public Undertakings (1985-86) considered and adopted the Report at their sitting held on 26 July, 1985.

5. The Committee feel obliged to the members of the Committee on Public Undertakings (1984-85) for the useful work done by them in taking evidence and sifting information which forms the basis of this Report.

6. The Committee wish to express their thanks to the Ministry of Steel, Mines & Coal (Department of Mines) and Mineral Exploration Corporation Ltd. for placing before them the Material and information they wanted in connection with examination of the Company. They also wish to thank in particular the representatives of the Department of Mines and the Company who appeared for evidence and assisted the Committee by placing their considered views before the Committee.

7. The Committee also place on record their appreciation of the assistance rendered by the Comptroller and Auditor General of India.

NEW DELHI;
August 6, 1985.
Sravana 15, 1907 (*Saka*)

K. RAMAMURTHY,
Chairman,
Committee on Public Undertakings.

CHAPTER I

ROLE AND OBJECTIVES

A. *Role of MECL.*

1.1. The Mineral Exploration Corporation (MECL) was established in October, 1972 with the primary object of giving a commercial bias to mineral exploration and to bridge the gap between the initial discovery and eventual exploitation of mineral deposits. The Company was conceived as a sole agency of the Government of India to carry out detailed exploration of the minerals throughout the country. However, various other public sector undertakings like coal India Ltd. and its subsidiaries, National Mineral Development Corporation, Hindustan Copper Ltd., Hindustan Zinc Ltd. etc. who are engaged in the exploitation of mineral deposits also continued to carry out exploration through their own agencies. The exact line of demarcation between the public sector exploiting agencies and the MECL was to be determined in consultation with the concerned interests after the latter was set up. This had, however, not been done so far although eleven years had elapsed since the Company was formed. The Company informed Audit in June 1983 that this had created a situation where the Company was not clear of its future role and it also affected its plans for modernisation and investment besides creating a situation where it had to face undesirable competition.

1.2. When the Committee desired to know the reasons for the other public sector undertakings taking up exploration work themselves instead of entrusting it to MECL the Director (Technical) of the Company stated during evidence:—

> "......Prior to 1973. there was no commercial agency for carrying out this work. Certain companies had then developed some exploration wings themselves. They had quite a number of drilling equipment.... At the time of the formation of the Company (MECL) it was envisaged that we should be the sole agency. There were also certain letters from the then Secretary, to the combined Department of Coal and Mines that the entire work would be carried out by us..... At the same time, despite the

fact that a specialised agency had been set up, there was a definite tendency on the part of these organisations to expand further."

1.3. The Committee desired to know whether at the time of establishment of MECL, it was considered feasible to ask the other public undertakings to part with their equipment and give it to MECL because MECL was supposed to be a commercial concern for all these companies. The representative of the undertaking replied:—

"I don't think it was thought in that way that they would part with these equipments and give them to MECL. But what was conceived was that this company would utilise these equipments for carrying out certain developmental and production drilling that would be needed within the existing mines."

1.4. In regard to the need for a clear definition of the role of MECL in mineral exploration, the Ministry informed Audit (November, 1983), as follows:—

"The public sector undertakings under the Department of Mines have taken up exploration work only within their lease hold areas; new areas are left for exploration by MECL. However, in the case of coal, exploration work is done both by Central Mine Planning and Design Institute (CMPDI) and MECL. The question of assigning the work of coal exploration between CMPDI and MECL is under consideration of the Department of Mines and a satisfactory solution will be arrived at in consultation with the Department of Coal."

1.5. Asked to state whether there would be enough work for MECL if other undertakings under the Department of Mines were allowed to take up exploration work within their leased areas, the Director (Technical), MECL stated in evidence:

"This matter has been taken up by us with our administrative Ministry. In 1979, a decision was taken that at least the organisations under the Department of Mines would permit our undertaking the work even where lease holds were there e.g. on behalf of Hindustan Zinc and Hindustan Copper."

1.6. From the Report of the Sub-Group IV (Exploration) of the Working Group on non-ferrous metals, the Committee noticed that though the Government have decided that detailed exploration in the lease holds of public enterprises under the Department of Mines would be done by MECL, in respect of lease hold areas of other organisations, Government may authorise under notification, the GSI or any central organisation to undertake exploration in those areas.

1.7. In this connection, the Secretary, Department of Mines stated in evidence:

> "......after the MECL came into being, the detailed exploration work was handed over to MECL. What the exploration wings of the various undertakings are doing today is developmental exploration; they have got their own mining leases and they are exploiting those minerals. Apart from this developmental exploration, none of the public enterprises is really doing detailed exploration.... really there is no overlapping between what they are doing and what the MECL is supposed to do. The detailed exploration work is being handled by MECL. We ensure that no detailed exploration work for exploring any particular mineral in any particular area is really taken up by any of the other public enterprises."

1.8. On connection with exploration of coal, however, the Secretary, Department of Mines stated in evidence:—

> "The CMPDI is perhaps the only public sector enterprise which is doing the same kind of work in the area of coal as the MECL is doing. In the area of coal, there is definitely overlap.... Apart from that, there is no overlapping."

1.9. Asked to state the steps proposed to be taken to end this overlapping of functions of CMPDI and MECL, the witness stated:

> "The Fazal Committee which went into 15 public enterprises including those in the coal sector recommended that CMPDI should become the mining consultants in the area of coal similar to MECON in the area of steel....CMPDI is designed to work in the specialised area of design and consultancy in the coal sector as MECON which was started as part of the Hindustan Steel Central Engineering Design Bureau has become a leading consulting agency

in the steel sector. There is room for CMPDI to develop in this line as a leading consultancy and design organisation in the coal sector. The exploration part they were doing before they should really give up so that MECL could consolidate and strengthen their efforts in the area of exploration..... In fact we can take over all the drills of CMPDI and we can take over their personnel also. MECL's terms are quite similar to those of CMPDI, I can see no difficulty."

1.10. When the Committee desired to know the role of MECL *vis-a-vis* GSI, the Secretary, Dtpartment of Mines informed in evidence:

"Previously, before MECL came into existence, even the task of detailed exploration was part of the GSI activities. It was only in 1972 that the exploration function was taken away and given to the new corporation. (At present) GSI makes a regional assessment including exploration but not to that much detail. The detailed exploration will be undertaken by MECL. It is possible that on the basis of GSI's regional exploration alone if an investment decision is taken, it may go wrong.... MECL gets a copy of reports undertaken by the GSI. But MECL cannot take up any detailed investigation *suo-moto*. They can take the work either if the Government asks or one of the clients asks."

B. *Diversificatin of activities*

1.11. According to the Report of C&AG, Union Government (Commercial), 1983, Part II on MECL, exploratory drilling, mining, mine construction along with the requisite geological and analytical works and finally preparation and submission of geological reports containing results of the investigations and reserves established, formed the main activities of the Company. The major exploration activity of the Company at present was in the various coal fields of the country though it has also done mineral exploration in ferrous, non-ferrous, non-metallic and precious metals. Besides mineral exploration, the Company has extended in recent years its activities to geo-technical investigations for dam foundation and ground-water resources.

1.12. The Committee desired to know the reasons for the Company taking up the extra activities like geo-technical investigations for dam foundation and ground-water resources, instead of concentrating on its main activity of mineral exploration. The Director (Technical) of MECL stated in evidence:—

"In the beginning we had a large number of drilling equipments which were kept idle. Later on we thought that instead of keeping them idle, with the expertise in drilling, we could take up these works........ In 1981-82 and 1982-83 there was a severe drought in Orissa; the drilling had to be done on a hard strata. We did that job with success; others could not do that."

1.13 Asked as to why this equipment could not be utilised for mineral exploration, the witness stated that the equipment had originally been transferred to the company as an asset from GSI in 1973. The Company did not have a choice in this transfer. This equipment contained a large number of drills of law capacity which could not be used for exploration purposes. He added—

"Subsequently, with the experience that we gained, we have taken a policy decision not to buy such equipment any more. We are following it. Since we had some surplus, we will utilise it in an area where the expertise needed is available with us."

1.14. On enquiry whether specific approval of the Government was taken for this purpose, the witness stated:—

"For this purpose, we did not take specific approval from Government of India, but it was within the knowledge of the Board of Directors."

1.15 On a query whether there were any other such cases, the Director (Technical) informed the Committee in evidence:—

"There is a standing request from the Brahmputra Flood Control Board. They are prepared to give us all assistance for our work. The other is Narmada Sagar Project."

1.16 The Committee pointed out that there was already an apex body at national level viz. Central Ground Water Board (under the Ministry of Irrigation) whose main activities were to conduct systematic hydrogeological surveys, ground water exploration, resource evaluation studies, studies on special ground water problems, geophysical investigations etc. and asked whether it was appropriate for MECL to take up activities already being carried out by a Central agency instead of concentrating on its main activity of mineral exploration. The Secretary, Department of Mines stated in evidence: —

> "They have undertaken the ground water drilling in Orissa on a specific request from the Government there.

C. *Corporate Plan*

1.17 According to Audit the company had not drawn up since its inception and upto 1982-83 any long term programme in mineral exploration indicating *inter-alia* drilling and mining capacities of the Company. Asked to state the reasons therefor, the Director (Technical), MECL stated in evidence:

> "Our planning in the past to a large extent has been uncertain because we were not very sure about our share in the exploration."

1.18 The Committee desired to know whether any national plan for exploration of various minerals indicating the share of various agencies has been prepared by Government. The Secretary, Department of Mines stated in evidence that this was done for the first time for the Seventh Five Year Plan.

1.19 On the question of planning by the company the Department of Mines informed the Committee in a note that the first major planning exercise by the company in this direction was the preparation of a draft 10 year Roll Over Plan in 1976-77 which included almost all the important economic minerals other than oil and atomic minerals. However, in July, 1980 with the changes in the Sixth Plan of the country and also the changes in the patterns of demand, consumption, production, export/import of different minerals, it was considered necessary to recast the draft 10 year Roll Over Plan. MECL was asked to prepare basic approach papers for 20 years development programmes for (i) Alumina and Aluminium, (ii) Copper and Nickel, (iii) Lead & Zinc, (iv) Gold and (v) selected industrial minerals.

The position was again reviewed and the MECL was asked to take up preparation of a 10 years perspective plan covering the period from 1983-84 to 1992-93 for exploration of various minerals.

1.20 Asked to state whether the 10 year plan had been finalised, the MECL stated in a note furnished after evidence that the tentative programme for drilling and mining for various minerals drawn up as an initial document in the company for preparation of detailed action plan for equipment, performance etc. envisaged total target of 33.25 lakh mtrs. of drilling and 1.73 lakh mtrs. of mining. However, meanwhile the Planning Commission constituted working groups for preparing the approach paper for development and exploration of various minerals during Seventh Plan period. One of the sub-groups under the working group on Non-ferrous Metals dealt with exploration. Since the work load contemplated by the MECL in its 10 year perspective plan mentioned above had been incorporated with some modifications in the corresponding years of the Seventh plan, the finalisation of the 10-year perspective plan was not pursued.

1.21. From the report sub-Group IV (Exploration of the Working Group on non-ferrous metals set up by the Planning Commission, the Committee noticed that the total mineral-wise targets of exploration during Seventh Plan period (1985-1990) have been fixed as under (figures in brackets indicate the share of MECL)—

	Ore/Mineral	Total Target (1985—90) Drilling (m)	Mining (m)
1	2	3	4
1	Coal . . .	26,30,000 (13,50,000)	10,000 (10,000)
2	Lignite .	2,55,000 (2,00,000)	
3	Gold	1,40,000 (1,00,000)	16,000 (16,000)
4	Lead zinc ores .	2,05,000 (90,000)	12,500 (10,000)
5	Copper ore .	2,20,000 (1,00,000)	17,500 (15,000)
6	Tin Tungsten ores	1,00,000 (35,000)	35,000 (32,500)
7	Manganese ore .	55,000 (35,000)	3,000 (3,000)
8	Nickel & Chromite ores .	30,000 (10,000)	2,000 (2,000)
9	Bauxite	25,000 (15,000)	3,000 (3,000)
10	Diamond	33,000 (15,000)	30,000 (30,000)

1	2	3	4
11	Limestone and Dolomite	1,37,000 (35,000)	2,000 (2,000)
12	Apatite & Rock Phosphate	55,000 (20,000)	3,000 (3,000)
13	Potash	55,000 (30,000)	
14	Industrial minerals	1,00,000 (15,000)	1,000 (1,000)
15	Others (including geothermal deep geology, ground water & geotechnical, etc.)	3,40,000 (2,75,000)	7,500 (7,500)
	TOTAL:	43,60,000 (23,25,000)	1,42,500 (1,35,000)

Apart from the share of MECL indicated in the brackets in the above statement, the rest of the drilling and mining would be carried out by Geological Survey of India (GSI), Central Mine Planning and Design Institute (CMPDI), Singareni Coal Fields Ltd. Neyveli Lignite Corporation, Hindustan Zinc Ltd., Hindustan Copper Ltd. and Cement Corporation of India.

1.22. When the Committee desired to know whether any exploration programme has been drawn up upto 2000 A.D., the company in a note, submitted after evidence, stated that it had generally been noticed from the reports of the Sub-Groups on copper & nickel, lead-zinc, aluminium, precious and other high valued minerals and metals, etc. that projections of demand patterns beyond 5 years or similar short term range were beset with risk since the fast developments in science & technology would cause changes in the demand pattern. However, an order of magnitude estimate of the demand of various minerals and the resultant requirment of exploration inputs, could be contemplated for the period beyond 7th plan. The sub-group on exploration had taken into account some estimate of demands upto 2000 A.D. and the likely inputs of drilling and mining etc. that might be necessary for exploration in the same period. A more definite basis for such long term for casting, might be available after the Government finalise the 7th plan document.

1.23 The Committee are distressed to note that though at the time of setting up of Mineral Exploration Corporation Ltd. in October, 1972, the Company was conceived as a sole agency of the Government of India to carry out detailed exploration of the minerals throughout the country. various other public sector undertakings like Coal India Ltd. and its sub-

sidiaries, National Mineral Development Corporation Ltd., Hindustan Copper Ltd., Hindustan Zinc Ltd. etc. continue to carry out exploration through their own agencies. The exact line of demarcation between the function of public sector exploiting agencies and MECL which was to be determined in consultation with the concerned interests has not so far been done in clear terms in spite of the fact that more than 12 years have lapsed in between. Admittedly, this has created a situation where the company was not clear of its future role which naturally affected its plans for modernisation and investment besides creating a situation where it had to face avoidable competition.

1.24 **The Committee observe that the belated decision (1979) authorising MECL to undertake detailed exploration work in the leasehold areas of other agencies, was confined to organisations under the Department of Mines. In respect of undertakings under other Ministries, a separate notification has to be issued to authorise GSI or any other central organisation to undertake exploration in the leasehold areas of such undertakings. The Committee desire that the Mineral Exploration Corporation Ltd. should be made the main agency to undertake detailed exploration of minerals in the leasehold areas of all organisations under the Central Government.**

1.25 **MECL is also not very clear about its role in coal exploration. In the opinion of the Committee, the functions of Central Mine Planning and Design Institute and MECL are definitely overlapping. The Fazal Committee recommended that the CMPDI should be developed as a specialised agency for design and consultancy in the coal sector just as MECON was a consultancy agency in the steel sector. However, the Committee feel that the matter did not receive the attention of the Government it deserved. They, therefore, recommend that the feasibility of assigning exploration of coal solely to MECL and coverting CMPDI into a purely consultancy organisation in the coal sector should be examined urgently.**

1.26 **The Committee note that the main activities of the company are exploratory drilling, mining, mine construction along with the requisite geological and analytical works and finally preparation and submission of geological reports containing results of the investigations and reserves established. However, in recent years the company, without obtaining the specific approval of Government, has extended its activities to geotechnical investigations for dam foundation and ground water resources simply because a number of low capacity drills were transferred to it as assets of GSI which could not be used for exploration purposes by MECL. The Committee do not appreciate MECL undertaking extraneous work not falling strictly within its scope of functions simply because of some equipment handed over to it by GSI being in its possession. The departure on** the part of MECL from its main objectives is all the more unhealthy when there is already an apex body at national level *viz.* Central Ground Water Board to conduct systematic hydrogeological surveys, ground water exploration, studies on special ground water problems etc. and much remains to be done in the sphere of its own activity of mineral exploration wherein its performance is very insignificant. The Committee would suggest that the equipment with MECL which is not found suitable for mineral exploration should be disposed of or transferred to Central Ground Water Board instead of making it a base for undertaking works not connected with the company's main objectives and clearly beyond its defined functions.

1.27 The Committee are unhappy to note that till recently no long-term national plan in mineral exploration was prepared by Government indicating the share of various agencies. The MECL in turn was not certain of its share in the exploration It continued to prepare from time to time different plans covering different periods. The first exercise was the preparation of a draft 10 year plan in 1976-77. In July, 1980, however, it was recast and the company was asked to prepare basic approach papers for 20 years development programmes for certain minerals. Later, the position was again reviewed and MECL was asked to take up preparation of a 10 year perspective plan covering the period 1983-84 to 1992-93. Hardly had this plan been finalised when the working groups for preparing approach paper for development and exploration of minerals during Seventh Plan period were set up by the Planning Commission. The MECL's plan was also incorporated in this for 1985—90. A more definite basis for long term forecasting upto 2000 A.D. is expected to be available only after finalisation of the 7th Plan document. The Committee view with concern the frequent changes effected by Government in the formulation of long term plans for mineral exploration. They desire that firm estimates of the demand of various minerals and the resultant requirement of exploration inputs on a long term basis, at least upto the year 2000 A.D. should be made soon and made available to MECL so as to provide a more definite basis for its future activities and planning therefor.

CHAPTER II

OPERATIONAL PERFORMANCE

A. *Targets and Achievements*

2.1 During the Fifth Plan period, Mineral Exploration Corporation's achievements were 4,19,481 metres in core drilling against a target of 12,76,150 metres (32.87%) and 16,492 metres in exploratory mining against a target of 54,604 metres (30.20%). The Committee desired to know the reasons for the company's achievement during Fifth Plan being far below targets. They were informed in a note submitted by the Company that it could not achieve the targets due to the following reasons:—

(i) The persons from Geological Survey of India were repatriated and shortage of experienced persons was felt.

(ii) The indigenous drills purchased by the company had testing problems.

(iii) Shortage of accessories became a constraint and supply of good quality material was either not available in the country or had a very long lead time. There were frequent postponements in delivery schedules.

(iv) Shortage of POL and power also affected work during the period.

(v) Deterioration industrial relations in the company and bad law and order situation in Dhanbad and Asansol belt affected the work.

2.2 During the Sixth Five Year Plan, the company envisaged a target of 8,88,500 metres of core drilling and 50,500 metres of exploratory mining. The original and revised targets fixed year-wise and achievement thereagainst during 1980—84 were as follows.

Sl. No.	Item	1980-81					1981-82				
		Budget Estimate	Revised Target	Achievement	% age of achievement with BE & RE		Budget Estimate	Revised Target	Achievement	% age of achievement with BE & RE	
I.	Drilling (metres)										
	Promotional	55300	27450	19797	36	72	48000	22100	18570	39	84
	Contractual	133600	141038	111600	84	79	132000	129200	126571	96	98
	TOTAL	186900	168488	131397	70	78	180000	131300	145151	81	96
II.	Mining (metres)										
	Promotional	5699	4190	2773	49	66	5100	4470	4191	82	94
	Contractual	4788	4330	2914	61	67	5400	3130	2960	59	95
	TOTAL	10487	8520	5687	54	67	10500	7600	7151	68	94

Sl. No.	Item	1982-83					1983-84				
		Budget Estimate	Revised Target	Achievement	% age of achievement with BE & RE		Budget Estimate	Revised Target	achievement	% age of achievement with BE & RE	
I.	Drilling (metres)										
	Promotional	29700	19390	14236	48	73	30000	29147	25281	58·56	100·45
	Contractual	152500	166310	175135	115	105	202300	185853	189141	93·49	101·76
	TOTAL	182200	185700	189371	104	102	252300	213000	218422	86·57	101·59
II.	Mining (mts)										
	Promotional	4200	4899	5841	130	119	10100	9655	10470	103·66	108·44
	Contractual	6300	4791	4001	64	83	3900	1845	2023	51·87	109·64
	TOTAL	10500	9690	9842	94	102	14000	11500	12493	89·23	108·63

2.3 The Committee enquired the reasons for shortfall in drilling and mining with reference to targets fixed every year at the time of formulation of budget estimates. MECL informed in a note submitted after evidence that the company got work from GSI and Government of India in case of promotional projects and from clients in case of contractual projects. Firm programme of exploration work was not made available in advance, so that the things could be planned. Due to this many envisaged projects did not materialise and work suffered. Industrial relations, shortage of POL and deteriorating law and order situation also affected the work on year to year basis.

2.4 The Committee desired to know the projects in respect of which approval was delayed and the reasons therefor. The Secretary, Department of Mines stated in evidence as follows:—

"During the period 1981—84, four-year period, our analysis show that approval was delayed in respect of 6 projects, out of which 2 were copper projects—Dolamala and Surahari projects—where it was decided not to go ahead So, approval was delayed for very valid reasons. Ultimately, it was not sanctioned by the Government. In respect of the balance 4 projects, three projects were Sideswar and Chigarigunta for gold deposits in Singhbhum and tin deposit in Haryana. Hindustan Zinc has already taken a lease for the tin deposit. We would like to go ahead after the GSI finishes its work. We are waiting for the GSI report."

2.5 Asked to state the steps taken to ensure timely approval of projects, the witness stated:—

"Originally there was a technical Committee which cleared the promotional projects. After it clears the promotional projects, then it would be approved financially and administratively by the Government i.e. the department of Mines in consultation with the Ministry of Finance. This was leading to difficulties. Now, we have adopted a single-window approach. We have one committee which consists of technocrats, mines representative, Finance Ministry representativean d CMD and the superintending Ministry, Geologist from the Indian Bureau of Mines. Senior DDG(Operations), GSI is also a Member. . This Committee now considers all promotional proposals and approves or rejects them so that it is done by one Committee. There is no delay in approval. Therefore, no earlier problems are now faced. This Committee is called the Coordination Committee. It was set up on 3rd July, 1984.

2.6 In regard to the contractual projects, the Committee were informed by the Ministry in a note furnished after evidence that although the Government was not directly involved, all assistance would be rendered to secure contractual work to the Company and to settle matters of inter-Company problems|disputes, if any, for ensuring smooth functioning of Company.

B. *Project deficiencies*

2.7 A review of certain promotional and contractual projects conducted in audit revealed that there was inadequate project, planning, inadequate project management and control reflected in large cost and time over-runs, delays in closure of camps, low productivity per worker month, low drilling per drill month, delay in submission of geological reports and idleness of equipment and man power etc. For instance, in the case of Askot Multimetal Project (U.P.) the actual cost of 65% of the work done was Rs. 6245 per metre as against the estimated cost of Rs. 2500 per metre. Further, there, was delay of about 20 months in closing the camp resulting in additional expenditure on salaries etc. to the extent of Rs. 1.14 lakhs. Similarly, in the case of Kesarpur Copper Project, the actual cost per metre worked out to Rs. 983 against the estimate of Rs. 477 per metre, the variation being due to more time taken (44 months as against 30 months as estimated) and proportionately more expenditure incurred on salaries, wages, PCL etc. The geological report in this case which was to be submitted within 2 months of the completion of the project was submitted after 10 months. In the case of Baphlimali Bauxite Project, the Company took 33 months in completing the project as against 21 months stipulated in the sanctioned scheme. In the case of Siju Project, Meghalaya, the total expenditure on the project amounted to Rs. 32.84 lakhs as against the contract price of Rs. 19.40 lakhs resulting in a loss of Rs. 13.44 lakhs.

2.8 Asked to explain the various shortcomings and deficiencies pointed out by audit as a result of review of these projects, the director (Technical), MECL, stated in evidence as follows:—

"No doubt, there have been certain delays and cost escalations. To a large extent, this happened in the period 1979-80 to 1981-82. It was during that period that our rates for coal were revised downwards and our repeated requests for improvement in rates were not acceded to by the coal industry. The company was passing through a very serious financial crisis. It was also in that period that we had to undergo very serious financial constraints. We were facing a lot of internal management problems. To a certain extent, there have been certain inadequacies in planning and monitoring. These are some of the reasons why there have been delays and cost escalations.

Besides that, there have been certain unnatural conditions met within the mining projects like very bad earth conditions; certain strata were found to be harder than what we had anticipated. This also contributed to delay and cost escalation."

2.9 When the Committee desired to know the remedial action taken in this regard by the Company, the witness informed:—

"Based on our past experience, we have undertaken detailed planning and monitoring of all projects, whether it is promotional or otherwise. In 1983-84, we undertook a number of promotional projects. I think we have been able to complete most of them on schedule and at least in two cases we have been able to complete ahead of schedule which includes the project in Kolhapur and the other one was Hindustan Copper project. Both have been completed slightly ahead of schedule. In the case of all other projects, we have been well within the schedule."

2.10 Asked to state the measures taken for cost control, the witness stated:—

"First thing is that our promotional project rates in mining were not adequate. We have asked for revision in the rates from the Government based on the costs and certain norms of efficiency that has been studied in detail by the Government and we are expecting revision in the rates from the Government. We have fixed certain cost norms for various projects that we have been undertaking.... We have certain operations in hand and we are keeping escalation under control to the extent possible......."

C. Geological Reports

(i) Delay in submission of reports

2.11 According to the Audit Report results of investigations conducted for mineral exploration and the reserves established are embodied in the geological reports prepared by the Company on the closure of the project. Such reports are required to be submitted to the Government of India in the case of the promotional projects and to the concerned exploiting agency|State Government in the case of contractual projects. For delay in submission|non-submission of the report, the Company is liable to pay penalty as per the terms and conditions in the contract, besides a part of the total payment to be made to the Company is also withheld by the Government of India|client till the report is submitted.

2.12 During the period from 1973-74 to 1982-83, the Company completed 41 promotional and 133 contractual projects. Of these 174 projects, geological reports were not required to be submitted by the Company in respect of 28 projects. Out of remaining, the Company submitted 18 final geological reports in time; in respect of 21 projects, draft reports were submitted within the due dates and submission of final reports was delayed. There were delays of 1 to 6 months for submission of 36 geological reports and of 6 months and above in respect of 71 reports. Thus, there were delays in submission of reports in respect of 61.5 per cent of the projects. As on 31st March, 1983, there were 12 reports pending with the Company for submission to their clients.

2.13 When the Committee desired to know the reasons for delay in submission of geological reports, MECL informed in a note submitted after evidence that the main reasons were the delay in receipt of analytical reports from Central Fuel Research Institute/other laboratories, certain changes in the priority accorded to the blocks by the clients, change/enlargement of specifications of the investigations at the instance of the clients, delay in vetting our draft reports, etc. Besides these, there were also certain internal problems in the Company, particularly with regard to the availability of the skilled manpower consequent to repatriation of 17 Officers to GSI in 1976 and resignation of about 24 geological officers.

2.14 In this connection, the Director (Technical) of MECL stated in evidence:—

> "These reports were mostly delayed because of the coal exploration reports. We have a large number of cases where original proposals had to undergo a substantial change. There were as many as 15 reports at the exploration field where this sort of change in the quantum work took place. In case of 12 reports, the scope of work had to undergo substantial changes. For example, construction of underground mine was subsequently changed to open cast mine. In many cases, priority for exploration was changed because of certain production priorities

of the coal companies. According to the existing contract, within 4 months of the completion of the drilling, we are supposed to submit a geological report. Now the quantum of work which goes into the geological report in terms of number of maps and the text has substantially increased from 73 to 84. In the earlier days, each report used to contain 28 maps but now it has increased to 79 for mine planning. The text includes the annexure with about 253 pages which has gone to 1026 pages. Putting all this information in a cogent manner takes almost 4 months although the contract stipulates only 4 months period for such work. Besides this, we have our own internal problem."

2.15 Explaining the reasons for these delays, the Joint Secretary. Department of Mines stated in evidence:—

"After they complete the field work, the MECL submit a tentative report. That is examined by the Central Mine Planning & Design Institute. If they cannot agree they send it back and then there are discussions. All this is included within the period of four months. That is provided in the contract. In a way it was an unequal contract between these two organisations. Now MECL has submitted a draft contract in which it has said after the receipt of the final comments by the CMPDI, the period will be counted because the preparation of the report is a very laborious job. It runs into seven to eight volumes."

2.16 Asked whether the delay was also caused by shortage of geologists, the Secretary, Department of Mines stated in evidence:—

"MECL certainly felt shortage in the initial stages. Now they have recruited their own geologists."

2.17 The Committee desired to know whether the delays in submission of the reports did not result in locking up of funds for MECL and adversely affect the mineral exploitation programme of the clients. The Company stated in a note that the delay in submission of the geological reports did result in blocking of 10 per cent of the value of work which was released only on submission of the final geological reports. In cases where mineral exploration programme of the client agencies were likely to be affected because of non-submission of geological reports MECL supplied the interim reports, interim notes and draft geological reports to overcome this.

2.18 When asked about the pending reports, the Company informed in a note submitted after evidence that all the geological reports, both in coal and non-coal investigations had been submitted to the clients by 31.3.1984 and no reports were pending.

2.19 On being enquired about the remedial measures envisaged for timely submission of reports in future, the Committee were informed in a written reply by the Department of Mines that such steps included (i) development of computer graphics for accurate and fast preparation of plates, (ii) enhancing data processing capacity by computer, (iii) increasing the number of geologists in the company and offering them attractive salaries, (iv) introduction of modern drawing and reprographic facilities and providing additional manpower for Secretarial work and more intensive monitoring of the report preparation work, both at Area and CHQ levels.

(ii) *Penalty imposed by CMPDI*

2.20 Mineral Exploration Corporation Ltd. entered into a contract with erstwhile Coal Mines Authority Ltd. (now Coal India Ltd.) in March, 1975 for detailed exploration and submission of geological documentation complete with all data and plans for planning and designing of mines as per yearly schedule. The contract contained provisions for bonus for early and penalty for delay performance with reference to the dates stipulated in the schedule. The Company did not submit the reports in scheduled time in respect of 49 projects/blocks. The Central Mine Planning and Design Institute (CMPDI) who looks after the exploration work on behalf of its sister Coal companies, deducted Rs. 22.09 lakhs as penalty from the bills raised by the Company for delayed submission of reports as per contracts.

2.21 It was noticed by audit that while accepting the penalty of Rs. 7.73 lakhs as correct, the Chief Geologist had observed that the penalty of Rs. 13.24 lakhs imposed between July 1976 and November, 1981 was not acceptable to him. The Company, however, did not take up the matter with the CMPDI for a long time. In December, 1983, the Ministry informed audit that MECL was in contact with CMPDI and it was proposed to settle the issue by discussions. It was further noticed that the remarks of the Chief Geologist had not been obtained on the remaining penalty of Rs. 1.12 lakhs.

2.22 On enquiry about the settlement arrived at with CMPDI with regard to penalty imposed for delayed submission of Reports, the Committee were informed through a written note that CMPDI have agreed not to levy penalty of Rs. 2.49 lakhs in respect of 12 reports. As regards remarks of the Chief Geologist not being obtained on the remaining penalty amounting to Rs. 1.12 lakhs, it was stated that the matter was examined by a Committee of Officers of MECL alongwith officers of CMPDI and the penalty was found to be correct as per terms of contract.

(iii) *Consumer reactions*

2.23 The Committee desired to know the number of geological reports in respect of promotional and contractual work submitted by MECL so far and the use to which these reports have been put to. They were informed by the Ministry in a written reply that the Company has submitted 36 Geological Reports on promotional projects to Government upto March, 1984. Of these, the following 5 deposits were either under exploitation or were being considered for exploitation:—

(i) Panchpatmali Bauxite Deposits, Orissa.

(ii) Gandhamardhan Bauxite Deposit, Orissa.

(iii) Mehi Dam Graphite Deposit, Rajasthan.

(iv) Mallaram Copper Deposit, Andhra Pradesh.

(v) Korukonde Bauxite Deposit, Andhra Pradesh.

In addition, 111 reports on Contractual Projects—91 on coal and 20 on non-coal were also submitted.

2.24 On enquiry as to how many of these 147 reports have been utilised for implementation of the projects by Government agencies or by Public Undertakings, the Secretary, Department of Mines stated in evidence as follows:—

"Out of 147 reports, on 87 investment decision has already been taken. On 60, the decision has not been taken."

2.25 When the Committee desired to know the reasons for making use of only 5 geological reports out of 36 submitted by MECL for promotional projects, the witness stated:—

"A set of reports are kept on the shelf and as and when necessary, Government takes an investment decision. It basically depends on the economics of the project. That is how it is done."

2.26 When asked whether there was any system in the Company to ascertain whether geological reports submitted by it have been accepted by clients or whether any further processing is done on these reports by the clients, the Ministry informed in a written reply that "MECL officers are in touch with the exploiting agencies. Previously there were no formal arrangements to obtain feed back from the exploiting agency. This deficiency has now been removed and the exploiting agencies are being formally requested for their comments on the accuracy of the geological reports prepared by MECL".

2.27 In respeonse to a query of the Audit Report in this regard, the Company had stated in July, 1983:—

> "The suggestion made by the Audit Board about the post project coordination with the clients and association of our geologists at the stage of opening of deposits has been noted and will be implemented as this would provide feed back for increasing the confidence level of the working of exploration. Such a system does not, as yet, exist in a formal way......"

2.28 When the Committee desired to know whether the Company has since introduced such system of post project coordination, the Director (Technical) of MECL stated in evidence:—

> "After the decussion with the Audit Board sometime in May last year, 5 projects have been identified—three in coal area geographically and 2 in non-coal area in Madhya Pradesh and Andhra Pradesh for the purpose of project investigation. In this process, we are finding out what exactly is the geological condition met with in the actual mine work and we are trying to compare it with the report which we submitted 5 or 6 years back. Based on that, we propose to take corrective measures and interpretation, if the earlier one is not correct... We are taking another 5 projects at random. We intend to continue this process from year to year. We have established all the necessary coordination with the owners of the mines to get all the data that is needed. They have assured us full cooperation in this matter."

2.29 On enquiry as to why only 5 projects were selected, the witness stated:—

> "We have selected 5 projects because if you take all the projects, we will need a large number of geologists. That will make our operation uneconomical. That is really not necessary. If we take 5 projects at random, we will get

adequate data to improve the quality of work. So, we have taken that decision both on technical and economic considerations."

D. *Non-fixation of Norms*

2.30 The main activities of the Company as stated in Audit Report (1983), are drilling, mining and geology works. To perform these activities, the company deploys various machines such as drills, pumps, compressors and a large manpower to run these machines; transport vehicles are also maintained for transporting men, machines and materials. According to audit (June 1983), since the formation of the Company in 1972, it has not laid down norms of:—

(i) Consumption of POL by various drills, other machines and vehicles;

(ii) Consumption of bits including diamond bits and other accessories;

(iii) Productivity of various types of drills and other machines operating in a given strata/mineral;

(iv) Man-power to be deployed on various machines;

(v) Establishment of shifts at the project sites taking into ac-account vagaries of nature, location, etc.;

(vi) Maximum permissible down-time and cost of maintenance (corrective as well as preventive) of various types of equipment;

(vii) Levels of inventory in terms of cost and number of months consumption for different items of stores and spares;

(viii) Standard costs of operations.

2.31 The overall capacity of the Company to take up mineral exploration works and other ancillary jobs was also stated to have not been laid down. In the absence of these norms it had not been possible to analyse the performance of the Company in a systematic manner and varify whether the available resources had been utilised to their optimum capacity and the Company's working had been economical.

2.32 In regard to the non-fixation of norms for such a long time, the Ministry informed audit (November, 1983) as follows:—

> "MECL is a service organisation as distinct from a processing unit. Its performance depends on the nature of the mineral explored, the strata and the terrain where it has to operate and also on other geographical and environmental variables........in view of the diversity in the nature of jobs performed in the process of exploratory mining/drilling, it was extremely difficult to arrive at standard norms against which the performance of all the projects could be judged."

2.33 The Company informed audit that during 1983-84 an attempt was made in this regard and project-wise productivity for drills had been laid down and norms of major inputs and manpower had also been fixed. Asked to elaborate, the Director (Technical), MECL, stated in evidence before the Committee:—

> "For every project, we are fixing certain input and output norms. These norms are based on the individual projects by taking into consideration the terrain in which we are working, the depth of the barrows, the strata that we are working, all these things are taken into account and certain norms are fixed project by project.......In the last week, we had undertaken the exercise and it would further improve in 1984-85. Taking into account the input *vis-a-vis* input for individual projects for the year as a whole, we have also fixed norms for individual projects at the productivity level and we are monitoring them intensively. The idea is that we will have very strict control on inputs so that we make a reasonable progress and the productivity is increased. It would not be possible to fix single norm for the projects in view of the very wide variation from project to project."

2.34 The Committee desired to be furnished with norms of productivity, various inputs and manpower fixed in 1983-84 *vis-a-vis* the actuals during the last 3 years. From the information furnished by the Ministry for different projects, the Committee have observed as follows:—

Project		Norm	Actuals 1981-82	1982-83	1983-84
Narmada Sagar	Total cost/drill month	32000	32603	38784	36099
	Productivity	50	32	37·15	36·53
Namchik	Total cost/drill month	27200	42049	22613	27883
	Productivity	75	29·40	23·07	51·97
Gorubathan	Total cost/drill month	26500	No work	33376	33698
	Productivity	75		98·96	34·49
Pure Sear sole/Ramganj East	Total cost/drill month	32500	44580	40345	44327
	Productivity	125	90·98	97·75	99·13
Bagh Caves	Total cost/ drill month	24600	20270	29083	25561
	Productivity	100	32	150·29	93·44
Sialghori	Total cost/drill month	27200	28534	39554	36057
	Productivity	130	92·88	120·50	102·82

2.35 Audit was informed by the Company that a Committee had been set up by Department of Mines to study *inter-alia*, the question of fixing norms of the crew of various types of equipment in different public undertakings. The Committee desired to know when this Committee was set up and whether it had since submitted its report. They were informed by the Ministry in a written reply that this Committee was set up in December, 1983 under the Chairmanship of a senior officer of the Planning Commission and its report was expected to be submitted shortly.

E. *Utilisation of shifts*

2.36. The Committee were informed by audit that the Company did not prepare any programme, at the level of the Corporate Office, for the deployment of shifts on the basis of the number of drills, work-load and manpower at Project sites. In the absence of such a programme the Company was not in a position to exercise any control on the shifts established and on optimum utilisation of men, material and machines.

2.37. The following table shows the details of shifts available and shifts in operation during 1980-81 to 1983-84:—

	1980-81	1981-82	1982-83	1983-84
Shifts indicated by the Company as available for operation.	52807	67501	76502	81614
Shifts available on 2 shifts basis per drill in operation and 280 working days in a year (Drill X 2 X 280)	81760	84000	90720	101360
Shifts shown to have been lost in local shifting	3694	3965	4147	5241
Balance . .	78066	80035	86573	96119
Shifts lost due to breakdown Shortage of POL Shortage of accessories and other reasons.	7312	9347	8372	12675
Netshifts available for work . .	70754	70688	78201	83444
Shifts actually worked .	41801	53739	48646	52698
Shifts not worked	28953	16949	29555	30746

2.38. According to the Audit, the Management had neither investigated into the reasons for these heavy shift losses nor had it taken any corrective measures to arrest the shift losses. Even in the review of utilisation of drill shifts and shifts lost during 1981-82, put up to the Board in February, 1983, reasons for these excessive shift losses had not been analysed.

2.39. When the Committee desired to know the reasons for not investigating the heavy shift losses, the Director (Technical), MECL stated in evidence:—

> "There was a certain lapse on our part in middle 1982. We took corrective action. Audit also pointed this out. In addition to that there were certain deficiencies. We have been taking action even before it was brought to our notice and we have taken corrective action. Our Board is also looking into the shift losses regularly. This is being given in part on quarterly basis in the Report."

2.40. Asked to explain the steep rise in the number of shifts lost from 8372 in 1982-83 to 12675 in 1983-84, the Company stated in a note submitted after evidence that a decision was taken by the Company that whenever a drill was shifted from a closed project to a new project, it would be subjected to a thorough overhaul before despatching to the new site so that it could work continuously without failure. During 1983-84 a large number of drills were stated to have been shifted from closed projects to new projects and as such the overhauling of the drills before despatch took more time than in 1982-83.

2.41. When pointed out by Audit that the shifts indicated by the Company as available were considerably less than the shifts available on the basis of two shifts operation per drill and 280 working days in a year, the Ministry explained to Audit (November, 1983) as follows:—

> "The number of operational drills increases only gradually during the year and reaches the maximum number on 31st March. In other words, the drills shown with MECL on 31st March are not available throughout the year. It may also be mentioned that new drills require some time for their initial deployment and to become operational. There are also factors like shifting or drills from one place to another or operations in hazardous areas or maintenance jobs to be taken into account. In such situation, the Company counts only one shift as available. In certain areas like North-East India local conditions do not permit working after sun set."

2.42. According to audit, even considering the Ministry's reply that the drills shown with MECL on 31st March were not available throughout the year, the shifts available on the basis of average number of drills in operation during the year worked out to 75600, 82880 and 87360 respectively as against 52807, 67051 and 76502 shifts indicated as available by the Company during 1980-81, 1981-82 and 1982-83.

F. *Workshops*

2.43. The MECL has a central workshopat Nagpur. In addition, four field workshops at Godhur (Bihar), Parasia (near Nagpur), Raniganj (West Bengal) and Kolar Gold Fields (Andhra Pradesh) have been established to render assistance to field units for repairs of vehicles, drilling and mining equipment etc. in areas where exploration activities are concentrated.

2.44. The Central workshop taken over from GSI at the time of the formation of the Company with machines and accessories valued at Rs. 2.44 lakhs is equipped with facilities for manufacturing T.C. Bits, drilling accessories, casing, spare parts, threading of rods and fabricating hutments, drilling derricks, water tanks, vehicle bodies and racks and for undertaking reparis of drilling and mining equipment and vehicles of the Company and salvaging diamonds from used and worn out diamond bits. Four lathe machines valued at Rs. 5.32 lakhs were later added to it, one in 1976-77 and three in 1982-83.

2.45. According to audit, the Company had neither laid down the installed capacity of the workshops nor had it fixed targets of various jobs to be undertaken by the workshops during a particular year Therefcre, it had not been possible to verify whether the facilities available with the workshops had been utilised to their optimum capacity.

2.46. When asked to state the reasons for not fixing the targets of various jos, the MECL stated in a note submitted after evidence that workshops had been established for meeting the requirements of operating divisions. The type of equipments/spares manufactured or repairs carried out depended on the requirements of the field units engaged mainly on drilling and mining projects. However, certain month-wise targets for repairs and manufacture of spares were introduced in the middle of 1983. An yearly programme with quarterly break up for the year 1984-85 had been also finalised. This annual targets, however, might need certain changes depending on the needs of projects.

Production Performance of Workshops

2.47. A review conducted in audit of the production performance of the Central Workshop, Nagpur as well as field workshop, Godhur (Dhanbad) in terms of the items of work done for the period from April, 1977 to March, 1983 showed that the performance of the workshop had been registering a downward trend both in manufacture as well as repair year after year, as compared to its performance in 1977-78 excepting in cases of threading of rods/casing and adopter couplings during the years 1978-79 to 1981-82 and threading of rods|casings and T.C. Bits during 1982-83. The Management attributed (June 1983) the decline in performance to manpower constraints. However, it has been observed that the manpower deployed on these two workshops had declined only by 5 men in 1978-79 as compared to 1977-78. In other years it was substantially more than that in 1977-78.

Utilisation of Manpower (idle hours)

2.48. It has been pointed out by Audit that the Company did not make any analysis of man hours lost due to various reasons during 1977-78 to 1981-82. A review of 3205 time cards of various shops for the period October 1981 to March 1982 by audit revealed that 57 per cent of total hours lost were due to (i) union activities (30 per cent); (ii) want of raw materials (10 per cent); (iii) want of work (8 per cent); and (iv) machine break-down (9 per cent).

2.49. In this connection the Ministry informed in a written reply that from 1983-84 onwards, a regular analysis was being made of man-hours lost due to various reasons.

Utilisation of Machines

2.50. As regards utilisation of machines in the Central Workshop, Nagpur, a review conducted by audit has revealed as follows:—

Period	No. of machines	Actual hour available	Hours Actually utilised	(Balance idle machine hours) Due to machine breakdown	Due to non availability of operator
1977-78	19	91,200	80,256 (88%)	912 (1%)	10032 (11%)
1378-79	19	91,840	78,983 (86%)	1102 (1·20%)	11755 (12·80%)
1979-80	19	89,920	76,432 (83%)	1169 (1·30%)	12319 (13·70%)
1980-81	19	90,520	75,165 (83%)	1359 (1·50%)	13996 (15·46%)
1981-82	19	90,560	77,146 (85·19%)	1411 (1·56%)	12003 (13·25)%
1982-83	22	1,09,440	87,605 (80·05%)	1589 (1·45%)	20246 (18·50%)
1983-84	29	1,09,114	75,217 (68·96%)	2935 (2·69%)	30932 (28·35%)

2.51. The Committee enquired the reasons for heavy loss of machine hours year after year due to absence of operators and particularly the percentage of hours lost on this account having gone up from 13.25 per cent in 1981-82 to 28.35 per cent in 1983-84. They were informed by the Ministry in a written note that this was mainly due to paucity of requisite operative staff. When field workshops were established during 1983-84 to provide better maintenance and repairs of equipment at project sites, some personnel of Nagpur workshop were also transferred to other Projects. Besides, vacancies which arose on account of retirement and promotion of machinists to the supervisory cadre were not filled up immediately due to non-finalisation of recruitment rules. The resulting shortage of operative staff led to loss of machine hours. The recruitment rules have now been finalised and the vacancies filled up, and this would improve the utilisation of machine hours.

2.52. According to audit, the information regarding anticipated time and cost and actual total cost incurred and time taken in completing the jobs was not filled in the job cards. Consequently, the actual cost of production, cost of labour and machine hours etc. and the actual cost of production of each item could not be ascertained. When the Committee enquired about the latest position in the matter, the Ministry stated in a written reply:—

> "The Company felt that since its workshop is a small service unit, detailed maintenance of job cards was perhaps not essential. However, the Company has now been advised to maintain job cards also."

G. *Manpower*

per drill and per shift for the last seven years:—

2.53. The following table shows manpower employed in MECL

Particular	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84
1. Total drills available	142	154	157	162	174	177	199
2. Drills in operation	120	125	123	146	150	162	181
3. Total manpower employed .	2661	3332	3417	2878	31081	3529	3758
4. Manpower employed per drill available	19	22	22	18	18	20	19
5. Manpower employed per drill in operation .	22	27	28	20	21	22	21
6. Shifts available .				52807	67051	76502	81614
7. Shifts in operation				41801	53739	48646	52698
8. Manpower employed per shift available $\frac{\text{Manpower} \times 365}{\text{Shifts}}$				19·90	16·92	16·84	16·81
9. Manpower employed per shift in operation			..	25·13	21·11	26·48	26·03

2.54. The audit has pointed out that according to the norms of CMPDI one drill on an average was provided with 29 to 30 men for two shifts operations including the jobs connected with geology, watch and ward, repairs and maintenance, accounts, store, administrative works, roads building etc. in the camp. Employment of manpower per shift in MECL even excluding manpower employed on jobs connected with geology, repairs and maintenance etc. was on the higher side as compared to CMPDI. The employment of excess manpower by the MECL was also pointed out by the BPE in 1979. The MECL did not, however, fix any norms for deployment of manpower.

2.55. The Board of Directors directed the Company as early as in January 1974 to carry out work study and determine the manpower for each type of work and evolve an organisational chart by appointing consultants after inviting offers from National Productivity Council and other agencies. But no agency was appointed for this purpose.

2.56. When asked whether the non-compliance with the Board's directive was reported to the Board, the Company informed the Committee in a note furnished after evidence as follows:—

> "...It is a fact that NPC was not engaged for these specific jobs. Records also do not reveal whether the non appointment of NPC was brought to board's notice but it is also a fact that in the very next meeting held on 21-6-1974 it was informed to the board that personnel wing of the Company was formulating scientific manpower planning programme alongwith evolving of a dynamic organisation chart.....There is nothing on record (Minutes of board meeting) to show that when the board was informed of this position whether it stressed that the jobs should be done by a consultant.
>
> ......In the meeting held on 7th and 8th November, '75 manpower requirements *vis-a-vis* the work load and the role of the company *inter-alia* proposing for creation of a post of Chief Project Manager alongwith organisation chart was put up to the board. The Board approved creation of the post of Chief Project Manager, the Manpower requirements were also approved in general after discussion with the Heads of Divisions."

2.57. The note further stated that the question of engaging consultants for organisational study etc. again came up in September, 1981 and NPC alongwith other consultant were approached for the job and in mid January 1982 NPC gave a proposal which would have meant an expenditure of more than Rs. 2 lakhs and a waiting period of more than 6 months for completion of the study. It was management's decision that the job be done internally.

2.58. The Committee have also observed from the Audit Report (1983) that in February, 1982 a committee of the departmental heads including the FA&CAO was constituted to study and suggest changes necessary in the organisational structure. A Report on reorganisation indicating three tier management structure was accordingly put up to the Board of Directors and approved by them in the meeting held on 29th April, 1982. The Board appointed a sub-committee for finalising the manpower requirements arising out of reorganisation. The sub-committee met on 12th May 1982 and gave certain broad guidelines and authorised the Managing Director to create posts as necessary arising out of reorganisation and keeping in view the guidelines indicated. The Managing Director keeping in view the deliberations of the sub-committee created 144 posts to take care of the manpower requirements arising out of reorganisation.

2.59. The FA&CAO is reported to have reservations on these proposals and had observed that though 60 per cent to 70 per cent of the expenditure of the Company was on manpower yet demands for men were being raised. He felt that some sort of self control should be introduced by fixing percentage of manpower cost linked to breakeven output.

2.60. On enquiry about the action taken on the suggestion of the FA&CAO, the MECL stated in a note submitted to the Committee after evidence that the FA&CAO's suggestion was duly considered but was not found feasible and practical for the following main reasons:—

(i) A clear demarcation between the operating and service divisions in respect of overall responsibility and accountability was not possible.

(ii) Even if some break even point could be considered separately for each division and expenditure on manpower allocated division-wise, the FA&CAO's suggestion to leave number of posts and cadres to the heads of divisions within the limits prescribed would have led to unhealthy competition in regard to career development of personnel in different divisions.

(iii) The suggestions if implemented in the short run itself act against initiative to make profits since Heads of Divisions would have been put under pressure to promote and appoint people within the limits prescribed to them without any consideration on optimisation of Manpower.

(iv) In the type of job being undertaken by the company Manpower requirement was linked with modernisation and new technologies and equipment introduced from time to time. The concept of break even point would have to be determined afresh every time there was a change in technology and equipment. This apart from being cumbersome would lead to industrial relations problems as Unions were hardly likely to agree straight away for reduction in Manpower in specific areas linked with modernisation of equipment and technology.

2.61. It is further stated in the note that the advantage of having a centralised control over Manpower linked with actual minimum requirements is evident from the tabular statement given below where inspite of an increase every year in the number of men and Manpower cost, the percentage of Manpower expenses to total expenses have shown considerable downward trend from 1980-81 to 1983-84.

Year	Man Power Cost	Total Cost with depreciation	Total Cost without depreciation	Percentage of Manpower expenses to total expenditure: with depreciation %	without depreciation %
1980-81	487·75	1078·01	862·83	45·25	56·53
1981-82	586·83	1294·70	1063·37	45·33	55·19
1982-83	685·33	1600·60	1337·32	42·82	51·25
1983-84	817·97	2008·60	1703·32	40·72	48·02

H. *Productivity*

2.62. According to Audit, the productivity per man in respect of drilling and mining during the year 1977-78 to 1983-84 was as follows:—

Year	Index of Performance	
	Drilling metreage per man	Mining metreage per man
1977-78 .	42·968	6·191
1978-79 .	47·941	6·510
1979-80 .	35·659	5·238
1980-81 .	36·009	4·877
1981-82 .	35·339	5·336
1982-83 .	39·909	6·237
1983-84	41·126	6·627

2.63. The percentage of variations in the productivity of the employees in drilling and mining during 1979-80 to 1983-84 as compared to 1978-79 have been as follows:—

	Variation in productivity 1978-79—Base year	
	Drilling	Mining
1979-80 .	(—) 25·62	(—) 19·54
1980-81 .	(—) 24·89	(—) 23·01
1981-82 .	(—) 26·29	(—) 18·03
1982-83 .	(—) 16·75	(—) 4·19
1983-84	(—) 14·22	(+) 1·80

2.64. In this connection the Management stated in June 1983 as follows:—

> "In an organisation like MECL, where productivity and output per man month is controlled by a large number of factors, including the diverse location of work spots, availability of work, depth ranges of bore-holes, nature of mining operations, strata being worked, product mix etc.. it is difficult to make a straight comparison of output per man month from year to year. For example, when a deep bore-hole is taken by a heavy capacity

drill in the deeper depth ranges, the output per man month decreases not only because there is a fall in productivity at deeper levels, but also because for operating a heavy capacity drill more men are needed.''

2.65. The following table shows the details of number of drills available, number of drills in operation, their productivity etc.:—

Year	Drills available	Drills under break down/ major repairs/ shifting	Drills in operation	Productivity per drill month in metres
1977-78 .	142	22	120	110
1978-79 .	154	29	125	130
1979-80 .	157	40	117+6*	101
1980-81 .	162	18	144+2*	88
1981-82 .	174	27	147+3*	86
1982-83 .	177	17	160+2*	102
1983-84	199	18	181	114

*represents number of drills taken on hire from the clients.

2.66. As reported by Audit, the MECL did not fix any norms in respect of the deployment efficiency or productivity to exercise control on the productivity and efficiency of drilling operations. The Company also did not lay down any norms for the time required for preventive maintenance and for the number of drills required as standby. When the Committee desired to know the system of preventive maintenance in the company and how control was exercised to minimise the idle time of drills, the Ministry informed through a written note that preventive maintenance of drills was done at site once a week. The major overhaul schedules were drawn up drillwise depending on the strata and working conditions of the projects where the drills were deployed, number of shifts worked, depth of holes drilled etc. The Company did not have a system of maintaining standby drills. Depending on availability of assignments, as many drills as possible were deployed. Minimising of idle time of drills was attempted through close monitoring of each drill and its performance at project, area and CHQ levels.

2.67 From the details of productivity of various types of drills reported by audit, it was noticed that the productivity of wireline drill, though in operation since 1980, ranged from 90 to 117 metres per drill month during the period 1979-80 to 1982-83 as against 140 metres indicated in the Sixth Five Year Plan. Asked to explain the lower achievement of productivity of wireline drills, the Committee were informed in a written reply that the parameter of 140m. for wireline drilling was indicated only for the year 1983-84, and not for the entire Sixth Five Year Plan. The actual productivity of wireline drills in 1983-84 was 124m. This was because of acute shortage of good quality wireline drill rods in the country. Orders for imported rods had already been placed and the first consignment of these drill rods had arrived,

Incentive Scheme

2.68 With a view to increasing productivity per drill, the Company introduced an incentive payment scheme on an experimental basis with effect from 1st April, 1982. In terms of the scheme approved by the Board, the base line output in respect of all the projects covered under it was to correspond to the everage monthly progress achieved in 1978-79. In the case of new projects, the base line output was to be the monthly output as taken in cost input estimates. However, while prescribing base line output for the scheme, the Company took into consideration the average productivity achieved in previous three years correlated to any substantial change in the drilling conditions. The base line output was, however, revised further to the lower side side after negotiation with the trade unions.

2.69 On enquiry about the justification for lowering the base line output, the Committee were informed by MECL in a note furnished after evidence that since the incentive was introduced for the first time in 1982-83 and was based on certain past data, a need was felt to revise the base line productivity at a later stage in consultation with the representative of workmen.

2.70 A review of the working of incentive scheme in respect of five projects for the last quarter of 1982-83 indicated that the increase in output per drill month over the base line output ranged 10 per cent and 87 per cent. The overall increase in production and productivity and saving to the Company as a result of introduction of the scheme was however, not assessed.

2.71 On a query by the Committee in this regard, the Director (Technical) of MECL stated in evidence:—

"Briefly, we took the productivity for the year ending 1981-82 and we fixed that as the base line productivity beyond which alone certain incentive would be applicable if the productivity is at a higher level and we have no specific data to indicate how far it is successful. But our assessment is that the incentive scheme has played a definite role in improving the productivity. We have an incentive scheme for 1983-84 and we are revising this scheme upwards for 1984-85 taking into account the performance in the previous year."

2.72 The Committee are distressed to note that the company's achievement during the Fifth Five Year Plan as compared to the targets fixed was far from satisfactory. It was only 32.87 per cent in core drilling and 30.20 per cent in exploratory mining. Similarly, during the first four years of the Sixth Five Year Plan the company could achieve 77 per cent of the Plan targets in respect of drilling and 70 per cent in respect of mining. There was also a shortfall in drilling and mining programme even with reference to targets fixed every year at the time of formulation of budget estimates. The actual achievement during 1980—84 against the targets fixed ranged from 70 per cent to 86 per cent in the case of drilling (except 1982-83 when it was 104 per cent) and 54 per cent to 94 per cent in the case of mining. The Committee have also been informed that the firm programme of exploration work was not made available in advance to MECL by GSI and Government of India in the case of promotional projects and by the clients in the case of contractual projects. As a result, things could not be planned properly and many envisaged projects did not materialise. The Committee note from the evidence of the Secretary, Department of Mines that Hindustan Zinc Ltd. hold lease for tin deposits. As referred to earlier in this Report, a decision has been taken by the Department of Mines in 1979 that MECL would be permitted to undertake work in lease-hold areas of other agencies. The Committee, therefore, recommend that the work of detailed exploration of tin deposits should be assigned to MECL and the project of MECL for this work should be sanctioned without delay.

2.73 Now that a Coordination Committee consisting of representatives of all concerned Departments has been set up, the Committee expect that henceforth there would not be any delay in approval of promotional projects and work would be made available to MECL well in advance. They would also stress that the Ministry should also involve themselves actively for securing to MECL the contractual work from clients.

2.74 As a result of the review conducted by audit of certain promotional and contractual projects undertaken by MECL and also on examination of various aspects of functioning of the Company, the Committee have formed an unmistakable impression that there were a number of deficiencies in implementation of the projects. In the judgement of the Committee there was inadequate project planning, inadequate project management and control reflected in huge cost and time over-runs, delays in closure of camps, low productivity per worker per month, low drilling per drill month, delay in submission of geological reports and idleness of equipment and man power to say the least. Admittedly, some of these deficiencies can be attributed to inadequacies in planning and monitoring, resulting in consequential delays and cost escalations. The Committee would deal with some of these aspects in the succeeding paragraphs/chapter.

2.75 Results of investigations conducted for mineral exploration and the resources established are embodied in geological reports prepared by MECL which are required to be submitted to the Government of India in the case of promotional projects and to the concerned exploiting agency in the case of contractual projects. The Committee are constrained to observe that there were inordinate delays in the submission of such geological reports. During the period from 1973-74 to 1982-83, out of 174 projects, geological reports in respect of 28 projects were not required to be submitted. In respect of the remaining projects only in 18 cases geological reports were submitted in time by the company. Thus there were delays in submission of reports in respect of 61.5 per cent of the projects. As a result of this, the MECL had to pay a penalty of about Rs. 20 lakhs of CMPDI alone in respect of 49 projects/blocks. Besides, the delay also resulted in blocking of 10 per cent of the value of work which was released only on submission of the final geological reports.

2.76 The Committee are informed that according to the existing contract MECL are required to submit the final geological report within four months of the completion of the project. Since the quantum of work which goes into the geological report in terms of number of maps and text including annexures etc. has tremendously increased, it is practically difficult for MECL to submit the report within the stipulated time limit of four months. The Committee feel that the contracts between MECL and the clients should be made more equitable and realistic so as to allow reasonable time for submission of geological reports by MECL. The Committee hope that priorities would be laid down in future after careful consideration so as to avoid subsequent changes therein. Change/enlargement of specifications of investigations and change in scope of work should also be avoided as far as possible as such changes upset the plan of work of MECL and result in delays in submision of geological reports. At the same time, the Committee would like to stress that MECL on its part should make all out efforts to submit the Reports well in time since the delay results not only in imposition of heavy penalties and unnecessary blocking of funds but also affects adversely the exploitation programme of the clients.

2.77 The Committee are surprised to note that until recently the company had no system of post-project coordination with the clients and association of its geologists to assess the correctness or otherwise of the assessments made by it and to take corrective measures in the light of experience gained. It was only at the suggestion of audit that the company has started such a system by selecting 5 projects every year at random. The introduction of such system for all projects is stated to be uneconomical as it would require a large number of geologists. However, the Committee are of the view that data in respect of the actual mining could be obtained by MCEL from the clients for comparing it with that contained in the geological reports submitted by it without associating MECL's own geologists at the clients' site. The Committee would also suggest that this system should be tried with all the projects which are being implemented on the basis of the Reports submitted by MECL. Such comparative study would be highly useful in taking corrective measures for the future and improving the efficiency of performance of the Company in its exploratory tasks.

2.78 The Committee have been informed that during 1983-84, an attempt was made to fix project-wise productivity for drills and also norms for major inputs and manpower. The Director (Technical) of MECL also stated in his evidence before the Committee that "for every project, we are fixing certain input and output norms. These norms are based on the individual project by taking into consideration the terrain, the depth of burrows and the strata that we are working. We are monitoring them intensively." From the information about norms of productivity, various inputs and manpower furnished by the Ministry, the Committee have noted that in many projects the total cost per drill month has been higher while the productivity was lower during the last three years as compared to the norms prescribed in 1983-84.

2.79 The Committee are constrained to observe that even after more than 12 years of its formation the Company has not able to lay down any norms for consumption of POL/bits, productivity of machines operating in a given strata/mineral, deployment of man power, establishment of shifts, maximum and permissible down time and cost of maintenance (corrective as well as preventive), levels of inventory and standard costs of operation etc. The overall capacity of the company to take up the mineral exploration work and other ancillary jobs has also not been laid down. The Committee wonder how in the absence of such norms any effective control on the production cost, profits, optimum utilisation of man power, machinery and material could be exercised. Although it may not have been possible to fix single norms for all the projects, the Committee feel that with its long experience in exploration, the Company should not have found difficulty in evolving some norms for purposes mentioned above at least for individual projects depending upon the nature of the mineral to be explored, the strata and the terrain where it has to be explored. Therefore, in the opinion of the Committee, MECL should aim at fixing norms of consumption, productivity, manpower and cost of operation etc. in respect of each project before it is taken up for execution. This will enable evaluation of the actual performance and taking corrective action where necessary.

2.80 The Committee find that the number of shifts as indicated by the Company being available during the years 1980-81 to 1983-84 were respectively 52807, 67051, 76502 and 81614 only while on the basis of two shifts operation per drill and 280 working days in a year it should have been 81760, 84000, 90720 and 101360 respectively. Even considering the Company's plea that the drills shown as available on 31st March are not available throughout the year, the audit has worked out that the number of shifts available on the basis of average number of drills in operation during these years were considerably higher than the figures indicated by the company. The discrepancy in figures of audit and the Company needs to be resolved. The Committee would like to know the correct position.

2.81 The Committee are unhappy to note that the number of shifts lost due to break-down, shortage of POL, shortage of accessories and other reasons rose from 7312 during 1980-81 to 12675 during 1983-84. Not only that, the number of shifts actually worked by the Company was much lower than even the shifts available after taking into account the shifts lost due to all these factors. Thus, the percentage of shifts actually worked to net shifts available ranged from 60 to 76 during 1980-81 to 1983-84.

2.82 In this connection, the Committee have also observed that for considerable period the Management had neither investigated the reasons for the heavy shift losses nor had it taken any corrective measures to arrest these losses. Even in review of the utilisation of drill shifts and shifts lost during 1981-82 placed before the Board in February, 1983, reasons for excessive shift losses have not been analysed/highlighted. Representative of the Company during his evidence before the Committee also admitted that there was a certain lapse on their part in the year 1982 and they had taken corrective action and their Board was looking into shift losses regularly. The Committee desire that the reasons for such heavy shift losses should be thoroughly investigated and Committee informed of the results and also of the preventive measures taken in that regard. The Committee also desire that the figures of shift losses, result of analysis of those losses and the preventive measures taken should be suitably incorporated in the Annual Report of the Company.

2.83 The Committee note that the Company did not prepare any programme at the level of corporate office for the deployment of shifts on the basis of number of drills, workload and manpower at project site. Keeping in view the need for increased production, the Committee desire that a detailed programme with regard to the deployment of shifts should immediately be worked out by the Company which, in the opinion of the Committee, would go a long way not only in exercising control on the established shifts but also on the optimum utilisation of men, material and machines. The Committee would like to be informed of the specific steps taken in this regard.

2.84 The Committee regret to note that the Company has neither laid down the installed capacity for the workshop nor has it fixed targets of various jobs to be undertaken during a particular year by its Central Workshop a Nagpur and four field workshops at Godhur (Bihar), Parasia (near Nagpur), Raniganj (West Bengal) and Kolar Gold Fields (Andhra Pradesh) though a period of 12 years has passed since the take-over/establishment of these workshops. These lapses have adversely affected the production performance of these workshops as could be seen from the declining performance of the Central Workshop, Nagpur and field workshop at Godhur after 1977-78, both in terms of manufacture as well as repairs. However for the year 1984-85, a programme of work is reported to have been finalised for these workshops.

2.85 It is difficult to imagine how in the absence of fixed installed capacity or targets of production/repairs, the Company was assessing the requirement of facilities, quantum of equipment/spares required and in fact determining the budget/financial support for these workshops or making a systematic programme of work for them for all these years. The Committee would like to be informed of the actual performance of these workshops as against the projected programme for 1984-85. They will also stress the immediate need for determination of installed capacity so that the extent of utilisation of the workshop capacities could be properly assessed.

2.86 There appears to have been no system of ensuring optiumum utilisation of manpower and machinery in the workshops. Upto 1983-84, the Company did not make any analysis of the man-hours lost. The Committee view with concern the increase in the percentage of the idle machine hours to total available hours from 15 in 1981-82 to 31 in 1983-84. The percentage of machine-hours lost on account of absence of operators also increased from 13.25 per cent to 28.35 per cent during this period.

The Committee are also distressed to note that the Company did not make any analysis of the man-hours lost during 1977-78 to 1981-82. A review of 3205 time cards of the various shops, conducted by Audit, from October, 1981 to March 1982 has revealed that 57 per cent of the total hours lost were due to union activities; want of raw material; want of work; and machine break-down. The Committee would, therefore, urge that the factors responsible for the steep increase in the idle hours should be analysed and remedial action taken to arrest the adverse trend.

2.87 The Committee also note that the information with regard to the anticipated time and cost, actual total cost incurred, and the time taken in completing the jobs was not filled in job cards. Consequently, the actual cost of production, cost of labour & machine hours etc., and actual cost of production of each item could not be ascertained. The Committee are also not satisfied with the reply of the Ministry that "the Company felt that since its workshop is a small service unit, detailed maintenance of job cards was perhaps not essential". The Committee cannot but emphasise the urgent need for proper maintenance of job cards, as suggested by Audit, as it would help the Company to compare the anticipated time and cost with the actuals in respect of each job.

2.88. The Committee note that the manpower employed in MECL increased from 2878 in 1980-81 to 3758 in 1983-84. Besides, manpower employed per drill in operation ranged from 20 to 28 during 1977-78 to 1983-84 and per shift it was 25.13, 21.11, 26.48 and 26.03, respectively during the years 1980-81 to 1983-84. Against this, as per the norms of CMPDI, one drill on an average was provided with 29 to 30 men for two shifts operations including the jobs connected with geology, watch and ward, repairs and maintenance, accounts, store, administrative works, road building etc. in the camp. Thus, employment of man power per shift in MECL even excluding manpower employed on jobs connected with geology, repairs and maintenance etc. was on the higher side compared to norms prescribed by CMPDI. The employment of excess manpower by MECL was also pointed out by the BPE in 1979 and inspite of this the MECL did not fix any norms for deployment of manpower.

2.89. The Committee regret to note that although the Board of Directors of MECL had directed the Company as early as in 1974 to carry out work study and determine the manpower for each type of work and evolve an organisational chart by appointing consultants after inviting offers from National Productivity Council and other agencies, no agency was appointed for this purpose. Not only that, this fact was also not specifically brought to the notice of the Board. It was only in early 1982 that the feasibility of engaging NPC or some other consultant for the job was explored but it was then decided to have the job done internally. A sub-Committee was finally appointed by the Board in April, 1982 for finalising the manpower requirements arising out of the reorganisation of management structure recommended by a Committee of departmental heads. The Committee feel that even this Sub-Committee does not appear to have studied in depth this matter as, after indicating some broad guidelines, it authorised the Managing Director himself to create posts as considered necessary as a result of reorganisation. Accordingly, 144 posts were created by the Managing Director to which even the FA & CAO of the company had expressed reservations and observed that though 60 to 70 per cent of the expenditure of the company was on manpower yet demands for men were being raised. He felt that some sort of self control should be introduced by fixing percentage of manpower cost linked to breakdown point. The Committee are not happy about the casual manner in which the important issue of determining the manpower of the company has been handled by the Company.

2.90. The Committee feel that the administrative Ministry has also not exerted any influence over the undertaking for entrusting the job of laying down norms for deployment of manpower in various projects of MECL in a scientific manner to an expert body like the National Productivity Council rather than allowing the Managing Director to create posts as he liked. The Committee are also not sure whether the guidelines laid by the Sub-Committee of MECL covered all aspects and were on scientific lines and whether the reorganisation effected by the Managing Director was in the best interests of the Company. They, therefore, urge the Ministry that work of reorganisation and deployment of manpower may be entrusted to an expert body without any delay after consultation with labour of MECL.

2.91. The Committee are distressed to note that the drilling metreage per man which was 47.94 during 1978-79 ranged from 35.34 to 41.12 during the subsequent period between 1979-84. Similarly, the mining metreage per man which was 6.51 during 1978-79 ranged from 4.87 to 6.23 during 1979—83 though during 1983-84 it reached 6.62. Thus the Company could not achieve the 1978-79 level of productivity per man during any of the subsequent years except in 1983-84 and that too only in respect of mining.

2.92. In the opinion of the Committee there seems to be no system in MECL to exercise control either on the deployment efficiency or productivity of drills. Nor any system of preventive maintenance to minimise the idle time of drills is followed. As many drills as possible are deployed depending upon the availability. As a result the productivity per drill month which was 130 metres in 1978-79 ranged only between 86 to 102 metres during 1979-80 to 1982-83 though the Company was able to achieve 114 metres per drill month during 1983-84. The Committee need hardly emphasis that suitable norms in respect of deployment efficiency and productivity of drills as also schedule for their preventive maintenance should be fixed by the Company. The Committee find that the actual productivity of wireline drills was 124 metres/drill month during 1983-84 against a parameter of 140 metres/drill month fixed for that year. The shortfall in productivity was mainly due to shortage of good quality wireline drill rods. The Committee feel that if timely action for procurement of wireline drill rods had been taken by the Company/ Government, the loss in productivity of wireline drills could have been avoided or reduced to some extent. The Committee need hardly emphasise that suitable measures should be taken on priority basis to ensure adequate supply of wireline drills to meet the requirements of the Company and to enable it to achieve the parameters fixed, without depending on imports.

2.93. The Committee are glad to note that MECL have introduced an incentive payment scheme on an experimental basis with effect from 1st April, 1982 to increase productivity per drill. While prescribing base line output for the scheme, the company took into consideration the average productivity achieved in previous three years correlated to any substantial change in drilling conditions. What the Committee are unable to appreciate is that the base line output was revised further to the lower side without any valid justification. The overall increase in production and productivity and resulting savings as a result of introduction of the scheme have not been assessed by the company. In the absence of any such assessment, the efficacy of the incentive scheme cannot be judged. Attention in this connection is invited to the 97th Report of the Committee on Public Undertakings presented to Parliament on 30 April, 1984 wherein the Committee have observed that in many of the undertakings which already have productivity linked incentive schemes, the incentive appears to have degenerated into additional wage, having been linked to production even below the threshold level. In order to ensure that this does not happen in MECL, the Committee recommend that a proper assessment of the effect of the incentive scheme on productivity should be made and if found necessary, it should be made more scientific and result-oriented.

CHAPTER III

FINANCIAL MATTERS

A. Working Results

3.1 The working results of MECL for the years 1976-77 to 1983-84 were as follows:—

(Rs. in lakhs)

Year	Profit (+) Loss (—) of the year		Effect, on profit or loss, of Prior period adjustments, provisions writiten back and other adjustments		Profit (+) Loss (—) after adjustments	
1976-77 . .	(+)	108·27	(—)	3·15	(+)	105·12
1977-78 . .	(+)	128·80	(—)	26·36	(+)	102·44
1978-79 . .	(+)	221·57	(—)	36·78	(+)	184·79
1979-80 . .	(—)	2·34	(+)	7·46	(+)	5·12
1980-81 . .	(—)	262·32	(+)	24·53	(—)	237·79
1981-82 . .	(—)	353·84	(+)	108·82	(—)	245·02
1982-83 . .	(—)	355·38	(—)	41·35	(—)	396·73
1983-84 . .	(+)	72·86	(+)	517·73	(+)	590·59

3.2 The Committee desired to know the reasons for heavy losses incurred by the company during the years 1980-81 to 1982-83. They were informed in a note submitted by the Company that the bulk of the drilling work of MECL was done for Coal India Ltd. through Central Mine Planning & Design Institute Ltd. (CMPDIL) on contractual basis. Payments in 1982-83 were made at the rates fixed for 1979-80 which were very unremunerative even for 1979-80 itself. Efforts had been made for the last 4 years to get these rates revised. The case was ultimately referred to the Cost Accounts Branch of the Ministry of Finance whose recommendations were received in February, 1983. These recommendations were given effect to during 1983-84 and therefore the Corporation's accounts showed losses during 1982-83 also.

3.3 Losses during 1980-81, 1981-82 and 1982-83 were attributed to non-revision of coal exploration rates to the extent of Rs. 92 lakhs, Rs. 151 lakhs and Rs. 298 lakhs, respectively. It was stated that the un-revised rates for promotional work in mining contributed to loss of Rs. 4 lakhs, Rs. 14 lakhs and Rs. 9 lakhs during these three years. Interest to the tune of Rs. 4 lakhs and Rs. 45 lakhs was paid during 1981-82 and 1982-83. The amount of Rs. 42 lakhs in 1980-81, Rs. 76 lakhs in 1981-82 and Rs. 45 lakhs in 1982-83 was, however, largely due to less than the anticipated productivity in a number of projects. Since much of the operational expenditure was of a fixed nature the fall in productivity sharply added to loss.

3.4 The contractural works are undertaken by MECL on behalf of Public Sector Undertakings and other parties. The company prepares the estimates for drilling, mining and geological work and adds to it a margin of profit. However, the final rates for such works are decided after negotiations with the contracting parties.

3.5 According to audit, the loss on contractual drilling done on behalf of CMPDI, the main client of MECL, has varied between 1.32 per cent and 35.42 per cent during 1977-78 to 1983-84 except during 1978-79 when there was a marginal profit of 1.22 per cent. Explaining the losses suffered by the Company on contractual work in spite of the rates being fixed on cost plus profit margin basis, the Ministry informed audit (November, 1983) as follows:

> "There have been some losses in the contractual drilling done by MECL for CMPDI, the payment rates were originally settled by MECL with BCCL in 1973 and the Coal Mines Authority Ltd. in 1975. In 1978-79, at the Instance of CMPDI, the rates payable for coal drilling were referred to BPE for arbitration as CMPDI was of the view that the rates fixed earlier were on the higher side. BPE recommended a rate of Rs. 377 per metre drilling in respect of CIL areas and Rs. 349 per metre in respect of BCCL areas effective from 1-4-1979 and valid for one year. The rates which should be paid for subsequent years were referred to the Cost Accounts Branch of the Ministry of Finance. The Cost Accounts Branch recommended revised rates which have been accepted by CMPDI with some modifications. The rates recommended by BPE in 1979 were in the nature of an award and were accepted by the company even though these rates were not remunerative."

3.6 In February, 1983 the Cost Accounts Branch recommended the rates of Rs. 492, Rs. 533 and Rs. 608 respectively for 1980-81, 1981-82 and 1982-83 both for CIL and BCCL areas. The rates recommended included *inter alia* 15 per cent return on capital employed. The rate of return on capital employed was later reduced to 10 per cent by the Department of Coal.

3.7 The Committee desired to know the reasons for referring the fixation of rates to a third party in the case of CMPDI instead of fixing it on the basis of estimated cost plus profit margin subject to negotiations, as was done in the case of other clients. The Secretary, Department of Mines stated in evidence:—

> "..... The rate should be negotiated between the client and the exploration agency. This is done across the Board. In the case of coal where negotiations failed we had to go to a third party for the arbitration."

3.8 On a query about the actual rate accepted by the CMPDI. the withness informed the Committee that these were Rs. 468, Rs. 508 and Rs. 579 respectively for the years 1980-81, 1981-82 and 1982-83.

3.9 During a meeting with the Audit Board, the Secretary, Department of Mines had stated that the report of cost Accounts Branch which was accepted unanimously by the Secretary (Expenditure), Secretary (Coal), Secretary (Mines) and Director General (BPE) should be implemented to ensure that the Company became financially viable. The Committee enquired when this decision was taken and why in spite of this unanimous decision, the lower rate of 10 per cent was accepted by MECL. The Secretary. Department of Mines stated in evidence as follows:—

> "This decision was arrived at on 23rd December, 1982...... (but) CMPDI does not agree. We argued with them and ultimately we thought that there was no point in arguing ....Our bills would be pending and the Company's condition would become precarious and there will be no fund for running the Company and therefore we had to accept that."

3.10 Subsequently, the Department of Mines in a note submitted to the Committee after evidence stated that when the CMPDI did not agree to the rates including profit margin of 15 per cent the matter was taken up by the Department of Mines with the Department of Coal. The decision to reduce the rate of return from 15 per cent as recommended by the Cost Accounts Branch to 10 per cent was arrived at a meeting attended by the Secretary, Department of Mines, Secretary (Coal) and the Chairman-cum-Managing Director, Mineral Exploration Corporation Ltd., to avoid further delay in the settlement of the issue. As compensation for reduction of the rate of return from 15 per cent to 10 per cent, it was agreed at that meeting that CMPDI would make an advance payment of 10 per cent to MECL for the works taken up by the Company.

3.11 In response to a query by the Committee, the Director (Technical), MECL stated in evidence that the Company expected an escalation of around 7 to 8 per cent between 1982-83 and 1983-84. The Committee desired to know whether a built-in mechanism could not be evolved whereby escalation was allowed automatically. The Ministry informed in a note submitted after evidence that the formula suggested by Cost Accounts Branch contained a built-in provision for cost escalation. However, in this connection, the Director (Technical) MECL stated in evidence:—

> "The escalation clause by itself can be agreed to. But the condition of increasing productivity every year by 10 or 15 per cent is something which is very difficult to accept...... This is not applied to any other contract. It has been once again referred to the Cost Accounts Branch."

3.12 When confronted with this statement, the Secretary, Department of Mines stated in evidence:—

> "I think the Company should improve the productivity and reduced their cost....The rates for 1983-84 is Rs. 627 as recommended by the cost Accounts Branch. The rate accepted by CMPDI is Rs. 598 and the cost of drilling by MECL is Rs. 685."

3.13 The Committee find that unlike the contractual works, the Company had generally made profit on promotional work done on behalf of the Government of India. In promotional drilling (including Geology) MECL made profit during the years 1977-78 to 1983-84 ranging from 10.07 to 106.13 per cent of total cost. In promotional mining also the Company made profit from 1977-78 to 1980-81 though losses were incurred during the next three years.

3.14 The Committee have observed that the schedule of rates for promotional works undertaken by MECL on behalf of Government of India is prescribed by the Government. Till 31st December, 1975, Geological Survey of India schedule of rates were adopted for promotional work. In September, 1975 the Government indicated to the Company that the GSI Schedule of rates was essentially meant for charging the outside parties for the work carried out by the Government agencies like GSI. The Company was further advised to make an exercise to study the actual cost involved including the direct and indirect costs on the promotional work so that a suitable criterion could be evolved which might form the basis of payment by the Government.

3.15 The cost data furnished by the Company to the Ministry in 1976 for evolving a criterion for fixing rate for promotional work was found inadequate. Consequently, the GSI rates prevaling in 1976 continued to form the basis for promotional rates for MECL with some escalations allowed by the Government in the cost of inputs etc. The Ministry had informed audit in November 1983 that MECL had been asked to draw up adequate cost data so that rates for promotional work could be fixed suitably.

3.16 The Committee desired to know the reasons for the delay in submission of adequate cost data. The Director (Technical), MECL stated in evidence:—

> "We submitted the proposals. They referred the matter to the Cost Accounts Branch which asked for detailed information on cost for the first 100 or 200 metres. This data was not available with us. We should have an army of accountants and other personnel in the projects to collect the data."

3.17 The Committee then enquired whether the matter was taken up with the Government and if so, what was their reaction. The witness stated:—

> "From 1980 onwards, we have been requesting the Ministry for revision of cost for the years 1980-81, 1981-82 and 1982-83.......The Ministry wanted detailed information for every project. It was not possible for us to frunish such information. We have informed the Ministry to this effect. The Ministry wanted detailed cost of every project which we are now maintaining......We have worked out a proposition in consultation with the Ministry. We submitted it to the Ministry. It has been examined....and they have agreed with our proposition. We are expecting an official communication from the Minis-

try to us to that effect in time which should be normally valid for the next three years."

3.18 In this connection the Secretary, Department of Mines, informed the Committee in evidence as follows:—

"These rates were decided by the Cost Accounts Branch as far back as 1976. In 1977-78 and 1978-79, the same rates have continued and MECL did not press for a revision. MECL asked for escalation after 1979 and it was given to them for the year 1980-81. After 1980-81, the rates were discussed again by Government with MECL and the rates have been firmed up for 2 years from 1-4-1983."

3.19 The Committee enquired whether any profit margin was included in the rates so fixed and whether the escalation of costs was taken into account. while fixing the rates for the second year. They were informed in a note submitted by the Department of Mines after evidence that the rates for promotional works had been worked out by providing for a profit margin of 15 per cent on the capital employed except in the case of the geological work, taken up independently. In the case of such geological work, a profit margin of 10 per cent had been included. The schedule of charges for promotional work approved by Government for 1983-84 and 1984-85 provided for payment of escalation charges.

B. *Inventory Control*

3.20 Mineral Exploration Corporation Ltd. has not drawn up any long term plan for the purchase of stores and equipment. The Company has also neither laid down any maintenance schedule nor has it done the condification and standardisation of stores.

3.21 In June, 1983 the Company informed audit as follows:—

"In the peculiar circumstances attending to our organisation, the material planning and programming in the strict sense is not perhaps possible. The forecasting of requirements is difficult since firm indication for possible work for the year is not available at any one time. However, efforts to have annual material planning and programming are underway and if our efforts to know our involvement in coal exploration work say for next five years bear fruit we will concentrate on material planning also. The basic exercises on coding and standardisation have been carried out and await implementation."

3.22 Asked to state the progress made in this regard, the Committee were informed by the Ministry in a written reply that the corporation has commenced annual material planning and programming from the year 1984-85 and has initiated procurement action on the basis of this planning, codification and standardisation of stores was also being introduced in the corporation during the year 1984-85.

3.23 The Stores Manual of MECL requires fixation of maximum and minimum limits for all items in the stores in order to avoid unnecessary accumulation of stores. However, the Company did not fix the maximum and minimum levels of individual store items. It informed the audit in June, 1983 as follows:—

> "....classic methods of fixation of minimum and maximum limits do not appear to be strictly applicable to our type of working............maximum/minimum limits are difficult to be prescribed in the first instance and if prescribed, difficult to be adhered to."

3.24 According to audit ABC Analysis of inventories had not been done in the Company so far. The Management stated (December, 1982) that efforts were being made for making the analysis in this direction. The Company had also not prescribed any system of reconciling the inventory at projects with the financial control accounts maintained at the Headquarters (November, 1983). The figures of stores & spares appearing as closing stock at the end of each year from 1978-79 to 1983-84 as recorded in the books of accounts and the figures as reported by the Projects as stock in hand at the end of each year based on their physical verification showed difference as noted below:—

Year	Difference between physical inventory and financial ledger (Rs. in lakhs)
1978-79	2·62
1979-80	16·57
1980-81	28·06
1981-82	4·13
1982-83	14·75
1983-84 (Prov.)	5·04

These discrepancies were written-off as consumption at the end of each year without any reconciliation.

3.25 When asked to explain deficiencies in the inventory control system, the Director (Technical), MECL stated in evidence:—

"The requirement of materials varies very considerably from year to year. They (ABC system of analysis and maximum and minimum limits for stores) are not strictly applicable. However, keeping in view the sort of stores we need on year to year basis, we have to fix up internal norms which in no case is less than three months since most of the projects are in far flung areas. So this takes a lot of time. We take reasonably three months on this account. No work was affected for want of materials. But in no case more than six months' period has been taken. So, we have done it in a more precise manner in 1984-85 estimate based on the various projects that we have to undertake, the quantum of work we have to do, procurement action and the delivery have been so scheduled that we need not have to bother about the position of stores. One of the steps we undertook in the previous year was that we had brought down the number of inventories by about 35 to 40 lakhs. But what we feel is that a situation should not arise where it will seriously affect the work for either want of material or excess availability of inventories. We also carried excess inventories in the last one year and we have been able to bring down the inventory by about 30 lakhs in the year 1984-85 and in the internal product we are bringing it down by another 15 to 20 lakhs, if possible."

3.26 The Committee have been informed by Audit that the Company had surplus stores and spares of the value of Rs. 12.26 lakhs and non-moving/slow moving capital stock items of the value of Rs. 37.30 lakhs as on 31st March, 1982. When the Committee desired to know the action taken by the Company to dispose of the surplus and slow moving items, they were informed by the Department of Mines in a written reply that a large number of these items had been inherited from GSI, and were of obsolete type. As these items could not be put to alternative use, tenders had been invited for their disposal. As on 31.3.1984, the value of slow moving capital items had been reduced from Rs. 37.30 lakhs to Rs. 15.39 lakhs.

3.27 In this connection, the Director (Technical) of the Company informed the Committee in evidence as follows:—

"Rs. 12.26 lakhs refers to those imported items which were imported from Russia in 1976-77. Some of those items could not be readily used. We have ~~made some modifi-cations~~ and we have been able to consume ~~bulk of them~~. We have since checked up and none of the imported items are unused."

C. *Costing and Management Information Systems*

3.28 According to audit during 1975-76 the Company introduced a system of costing under which cost data was prescribed to be furnished monthly by each project to Headquarters. The cost centres in case of drilling mining and geology were the activity; in case of workshop, each job was the cost centre. However, the system did not provide for classification of the costs into fixed costs and variable costs, ascertainment of idle time for labour and machinery, comparison of the actual cost with the estimated cost and analysis of the variations. Fixation of Standard costs keeping in view the mineral strata, depth of borehole etc. was also not considered. Further, the headquarters expenses were to be apportioned on the basis of financial expenditure incurred on a project and not on the basis of physical performance of the project. A review of the costing records also revealed that the cost statements were not reconciled with the financial accounts till 1978-79. Further, cost sheets were neither received regularly nor were these received in time from the projects and workshops. Estimated cost were adopted for compiling the annual cost in such cases where monthly cost sheets were not prepared. There was also no system of putting up the cost statements to the Management/Board.

3.29 In the workshops, no standard costs were prescribed though the workshops were manufacturing limited number of accessories and fabricating items like vehicle bodies, water tanks etc. No analysis of idle man-power and machinery hours was made. Though the cost of manufacturing the same items differed widely, yet no analysis was made to find out reasons therefor. The overheads were charged at 130 per cent of the labour cost without any regard to actual production either in physical quantities or financial cost thereof. The Company introduced a modified costing system on 1st April, 1982. But even the modified system did not provide for classification of the costs into fixed and variable costs and fixing of standard costs.

3.30 The Company introduced a comprehensive management information system comprising of internal management information as also the outgoing reports to the Ministry only in October 1982. Majority of the reports prescribed prior to this date were to the nature of progress reports indicating the state of work in the units and did not supply information needed by the Management for effective control on costs and functions of the Company. These reports were also not received regularly.

3.31 The Committee desired to know whether the absence of an effective system of costing and a comprehensive management system in the Company were not responsible for poor performance of the Company. The Director (Technical), MECL stated in evidence:

> "Certain drawbacks were there. Even before the C.&A.G. pointed them out, we realised the mistakes and we started taking our own corrective action. We took administrative action. Management system did exist. Perhaps we did not make full use of it after having collected the information. That may be a charge against us. Perhaps it would be correct. It is not really correct to say that the management information did not exist. We now make full use of the management information and we have also taken some corrective action already."

3.32. In this connection, the Department of Mines informed in a note submitted to the Committee after evidence as follows:—

> "Absence of effective system of costing and comprehensive Management Information System (MIS) were factors leading to below average performance of the Company. It so happened that the revision of Ministry's MIS coincided with organisational changes in the Company both of which took place in June, 1982 and thus a comprehensive MIS, meeting the internal as well as external requirements was evolved. Lack of communication facilities with the projects and within the projects also was responsible to a large extent for non-availability of Management information on time.
>
> The lacunae noticed in the costing system introduced by the Company in 1975-76 are gradually being eliminated by strengthening costing and internal audit system.
>
> The Department will take such steps as are necessary for improving these systems. Recently, during quarterly performance review meetings some additional information on

production data has been included in the MTS for the Company."

3.33 When the Committee desired to know the steps being taken to introduce classification of the costs into fixed and variable costs, the Secretary, Department of Mines stated in evidence:—

"I had a long discussion with the Company Management. I do not agree with them that because of the variation of the norms for each project and for each job there is no alternative to historical cost. I said that classification of the costing into fixed and variable costs should be possible...and we will ensure that they introduce this."

D. *Outstandings*

3.34 The total outstanding dues to MECL as on 31.3.1984 were Rs. 601.39 lakhs*. Details of Party-wise dues outstanding are given in Appendix I. An amount of Rs. 74.06 lakhs was outstanding for more than three years . When the Committee desired to know the party-wise break-up of this amount, the Company furnished the following information in a note submitted after evidence:—

Sl. No.	Name of Party	Amount outstanding (Rs. in lakhs)
1	Central Mine Planning & Design Institute.	39·00
2	Hindustan Zinc Limited.	5·95
3	Hindustan Copper Limited	2·97
4	Brahmaputra Flood Control Corporation.	6·67
5	Manganese Ore (India) Ltd.	0·91
6	Singareni Collieries Company Ltd.	4·12
7	Government of India.	12·00
8	Other Miscellaneous parties.	2·50
		74·06

3.35 On the question of charging interest on the outstandings, the company has stated that its contracts were generally with public undertakings who did not agree to the charging of interest on outstanding claims.

*At the time of factual verification, Audit have pointed out that this figure does not include Rs. 126.85 lakhs due from Government of India. Thus the total outstanding dues to MECL as on 31-3-1984 were Rs. 728.24 lakhs.

3.36 The Committee enquired about the steps taken by the Company for early realisation of its debts. They were informed in a note by the Department of Mines that the Commercial Division of the Company has now been made fully responsible for realisation of debts. An officer of the Finance Division would be posted to the Commercial Division, and would maintain a record of all the bills raised by MECL, the realisation of dues and the details of outstanding debts. In cases where there was no response from the client, the help of the Ministry would be sought immediately. While executing contracts with the clients, attempts would be made to insert a clause for payment of interest on delayed payments beyond one month of the submission of the bills.

3.37 In this connection, the Secretary, Department of Mines stated in evidence that out of Rs. 6.01 crores* almost Rs. 5 crores had been cleared due to Ministry's intervention. However, the outstandings again got built up towards the last quarter of the financial year. When the Committee suggested adoption of a progressive billing system instead of billing after the completion of the work they were informed by the witness that such system was in vogue now. On the question of incorporating interest-clause in the agreement, the witness stated:—

> "We will keep this in mind....the point about adding interest on non-payment of Bills. We have already written to these companies. We will again write. I will myself write to the Chief Executives of these companies. Secondly, we are going to revise the contractual term to make sure that interest is paid for non-payment or delay of bills. These two steps, we shall certainly take."

Work-in-Progress—Work done but not billed

3.38 The total amount in respect of work-in-progress—work done but not billed by the corporation for the years 1977-78 to 1983-84 is given below:—

Year	(Rs. in lakhs)
1977-78	86·60
1978-79	159·87
1979-80	228·81
1980-81	236·33
1981-82	191·08
1982-83	235·68
1983-84	567·19

*At the time of factual verification, Audit have pointed out that this figure does not include Rs. 126.85 lakhs due from Government of India. Thus the total outstanding dues to MECL as on 31-3-1984 were Rs. 728.24 lakhs.

The work in progress-work done but not billed-of the Company is increasing year after year and the amount involved on this account stood at Rs. 567.19 lakhs as on 31.3.1984 as compared to Rs. 86.60 lakhs as on 31.3.1978.

3.39 Asked to state the reasons for a large amount being involved in work-in-progress, the Director (Technical) MECL, informed in evidence:—

"We carry out a large amount of work in diamond exploration along with GSI. From time to time additional work is also awarded, but the nature of deposits and how good the deposits are not known. We undertake such work pending the approval of the Government. If we wait for the sanction, our units will be idle, but we know that the payments would be made. We carry out this work in anticipation of the formal approval. Pending approval, the Finance does not release the money.... This problem will be resolved as and when the new Coordination Committee which was set up at the Government level would function. Financial sanction, etc. will be done simultaneously and this sort of situation would not come in the future."

3.40 Subsequently, in a note submitted to the Committee after evidence, the Committee were informed by the Company that according to the contract with CMPDI, only 90 per cent of the value of work done was paid monthly while balance 10 per cent was paid only after submission of Geological Reports. This balance amount of 10 per cent was billed only after submission of Geological Reports. Work of report preparation could be started only after completion of drilling work and completed within four to eight months depending on the volume of work involved for each project. Hence the amount of work done but not billed went on accumulating until reports were submitted. In addition there was a retrospective revision of rates from 1980-81 and hence the value of balance 10 per cent also increased correspondingly. The value of work done for CMPDI which could not thus be billed amounted to Rs. 177.05 lakhs on 31.3.1984.

3.41 Other main reasons for the large amount of work-in-progress were stated to be delay in sanction for excess amount of work done than that originally sanctioned (Rs. 122.68 lakhs), escalation bills raised subsequently due to rise in cost index etc. The reconstituted Coordination Committee has, however, decided that bills for promotional work should be paid if work exceeds up to 20 per cent of original sanction.

3.42 According to audit, in respect of contractual works, a sum of Rs. 29.14 lakhs from Bharat Coking Coal Ltd. and Rs. 69.61 lakhs from CMPDI was lying under 'work done but not billed' as on 31.3.1982. The Ministry had asked the company at the performance review meeting held in August, 1981 to improve the billing system.

3.43 When the Committee desired to know the remedial steps taken in this direction, the Secretary, Department of Mines stated in evidence as follows:—

> "They withhold 10 per cent of the payment and go on asking various questions, the result is that the payment is delayed and it starts accummulating. What MECL is trying to say is that the terms of bills should be changed; they should be allowed to provide a bank guarantee for 10 per cent and the whole amount of the bill should be paid. They have not agreed as yet, it is under negotiation."

3.44 The Committee regret to note that the profitability of MECL showed a sharp decline after 1978-79. During 1978-79, the Company earned a profit of Rs. 184.79 lakhs which dropped to Rs. 5.12 lakhs the very next year. From 1980-81 to 1982-83, the Company incurred a loss of Rs. 237.79 lakhs, Rs. 245.02 lakhs and Rs. 396.73 lakhs, respectively. But in 1983-84 the MECL made a profit of Rs. 590.59 lakhs mainly on account of payments received from CMPDI as a result of revision of rates for contractual works from 1980-81 onwards.

3.45 The Committee are informed that one of the reasons for losses during 1980-81 to 1982-83 was the loss on contractual drilling done on behalf of CMPDI, the main client of MECL, which varied between 1.32 per cent to 35.42 per cent during 1977-78 to 1983-84 (except during 1978-79 when there was a marginal profit of 1.22 per cent). The loss suffered was stated to be due to the unremunerative rates paid by CMPDI. Payments in 1982-83 were made at the rates fixed for 1979-80 which were unremunerative even for 1979-80. The payment rates for coal drillings were originally settled by MECL with BCGL in 1973 and the Coal Mines Authority Ltd. in 1975 (now Coal India Ltd. on whose behalf CMPDI looks after the coal exploration work). But in 1978-79, at the instance of CMPDI, the question of fixation of rates was referred to BPE who recommended a rate of Rs. 377 per metre drilling in respect of CIL areas and Rs. 349 per metre in respect of BCGL areas. As the rates recommended were in the nature of award they were accepted by MECL despite their being unremunerative.

3.46 In February, 1983, the Cost Accounts Branch of the Ministry of Finance, to whom the matter was referred for fixation of rates for subsequent years recommended rates of Rs. 492, Rs. 533 and Rs. 608 for the years 1980-81, 1981-82 and 1982-83, respectively, both for CIL and BCCL areas. These rates included inter alia 15 per cent return on capital employed. Even though the Report of Cost Accounts Branch was accepted unanimously by the Secretary (Expenditure), Secretary (Coal), Secretary (Mines) and Director General (BPE), the rate of return on capital employed was later reduced to 10 per cent by the Department of Coal as CMPDI did not agree to 15 per cent return. Thus against the rates of Rs. 492, Rs. 533 and Rs. 608 recommended by the Cost Accounts Branch for 1980-81, 1981-82 and 1982-83, respectively, both for CIL and BCCL areas, the rates actually agreed to be paid were Rs. 468, Rs. 508 and Rs. 579 respectively for these years. Obviously, the lower rates contributed to a great extent to the company's losses as the MECL is stated to have received payments on the basis of 10 per cent return on capital for the years 1980-81 to 1982-83. With a view to enabling the MECL to be run on commercial lines, the Committee recommend that the matter with regard to the increase in the rate of return on the capital should be taken up by the Department of Mines at the highest level so as to secure for MECL a remunerative rate of return. The Committee desire that a remunerative rate of return on capital employed should be fixed once for all and the Department of Coal should be in a position to prevail upon CMPDI to agree to that rate of return.

3.47 Admittedly, apart from lower rate of return, there was less than anticipated productivity in a number of projects which obviously increased costs and added to losses. Thus, for 1983-84, while the rate recommended by the Cost Accounts Branch was Rs. 627, the cost of drilling by MECL was Rs. 685. The finalisation of rates for 1983-84 is stated to have again been referred to the Cost Accounts Branch. As already emphasised by the Committee elsewhere in this Report the productivity of the corporation needs to be improved substantially. The Committee expect that the Company will make all-out efforts in this direction.

Further, it may be desirable to finalise the rate of return before the close of the financial year so that final accounts of the Company are ready in time for being laid on the Table of the House as required under the Companies Act.

3.48. The Committee find that the rates for promotional work done by MECL on behalf of Government of India were not fixed on any scientific basis. Till 1975, GSI schedule of rates were adopted for promotional work. In September, 1975, Government advised the Company to make an exercise to study the actual cost involved including the direct and indirect costs on the promotional work so that a suitable criterion could be evolved which might form the basis of payment by the Government. The cost data furnished by the Company in 1976 was found inadequate and the GSI rates prevailing in 1976 continued to form the basis for promotional rates for MECL with some escalations allowed by the Government in the cost of inputs etc. The Committee have been informed that MECL was asked by the Ministry to draw up a detailed cost data for every project so that rates for promotional works could be fixed suitably. The Company has, however, stated that it was not possible to furnish such information as it would involve engagement of a large number of accountants and other personnel in projects for collecting the required data. The MECL is stated to have worked out a proposal which has been agreed to by the Ministry and on the basis of which the rates have been firmed up for two years i.e. for 1983-84 and 1984-85. The Committee are greatly exercised over this avoidable delay for the settlement of remunerative rates for undertaking promotional work of the Government by MECL. The Committee desire that such delays should be avoided in future.

3.49. The Committee also urge upon the Government to evolve a scientific and foolproof formula for fixing rates for promotional work done by the Company. For this purpose, it may be necessary for the Company to maintain certain data contemporaneously with execution of work, rather than collecting it at a later date. The Government may impress upon the Company the desirability of evolving suitable procedures.

3.50. The Committee note that though MECL has introduced annual material planning and programming as well as codification and standardisation of stores from the year 1984-85, there are still serious deficiencies in the inventory control system. Even though the store manual of MECL requires fixation of minimum and maximum limits for all items in the stores to avoid unnecessary accumulation, the Company has not fixed maximum and minimum limits of individual store items. ABC analysis of the inventories has also not been done by the Company so far. The discrepancies between the figures of stores and spares appearing as closing stock at the end of each year as recorded in the books of accounts and the figures as reported by the projects as stock in hand at the end of the year based on physical verification, are written off as consumption at the end of each year without any reconciliation. Such discrepancies varied between Rs. 2.62 lakhs in 1978-79 to Rs. 28.06 lakh sin 1983-84.

3.51. During evidence, the Director (Technical) of MECL contended that requirement of material varied very considerably from year to year. The ABC system of analysis and minimum and maximum limits for stores are not strictly applicable. He also stated that keeping in view the sort of stores needed on year to year basis they have to fix up internal norms which in no case were less than 3 months' stock. The Committee feel that it should be possible for the Company to fix some broad norms for all items of stores to ensure that neither the work is adversely affected for want of material nor there is excess of inventories. The Committee are surprised to note that the discrepancies in figures of stores and spares as recorded in books of accounts and the figures reported by projects after physical verification are written off as consumption at the end of each year without reconciliation. This is highly objectionable from all cannons of accounting and is an open invitation for malpractices by persons handling the stores and equipment. The Committee, therefore, recommend that MECL should introduce a workable system of reconciling the inventory at projects with the books of accounts maintained at the headquarter and internal test audit and ensure that both are worked scruplously and effectively.

3.52. As regards desirability of introducing ABC Analysis for inventory control in public undertakings, the Committee would like to draw attention of the Company/Ministry to their 40th Report (3rd Lok Sabha) on Materials Management in Public Undertakings wherein it was emphasised that by this system of inventory control, it was possible to achieve twin objectives, namely to minimise the risk of stockouts and to reduce blocking of funds in inventories. The Committee had, therefore, recommended that ABC Analysis of inventories should be introduced by all those undertakings who had not yet introduced this system. Necessary instructions in this regard were also issued by the Bureau of Public Enterprises as far back as on 16th October, 1967. The Committee, therefore, urge that the MECL should seriously consider introducing ABC system of analysis of inventories immediately.

3.53. The Committee have noticed many deficiencies in the costing system introduced by MECL in 1975-76. The system did not provide for classification of costs into fixed and variable costs, ascertainment of idle time for labour and machinery, comparison of actual costs with the estimated costs and analysis of variations and fixation of standard costs. Further the headquarters expenses were to be apportioned on the basis of financial expenditure incurred on a project and not on the basis of physical performance of projects. A review of the costing record also revealed that the cost statements were not reconciled with financial accounts till 1978-79. The cost sheets were neither received regularly nor were received, in time from Projects and Workshops. Estimated cost was adopted for compiling the annual cost in all those cases where the monthly cost sheets were not prepared. There was no system of putting up the cost statements to the Management/Board.

3.54. The Committee have also observed that even though the workshops were manufacturing limited number of accessories and fabricating items like vehicle bodies, water tanks etc. no standard costs were prescribed therefore. No analysis of the idle man-power and machine hours was also made. Although the cost of manufacturing the same items differed widely, yet no analysis was made to find out reasons therefor. The overheads were charged at 130 per cent of the labour cost without any regard to actual production either in physical quantities or financial cost thereof. A comprehensive management information system comprising of internal management information as also the outgoing reports to the Ministry was also not introduced by the Company until October, 1982. Majority of the reports prescribed prior to this date were in the nature of progress reports indicating the state of work in the units and did not supply information needed by the Management for effective control on costs and functions of the Company. These reports were also not received regularly. Admittedly, the absence of an effective system of costing and also the comprehensive Management Information, System were factors leading to below acerage performance of the Company. The Committee are concerned over the glaring deficiencies in the costing system as pointed out above. Even the representative of the Company admitted this during his evidence and stated that they were taking corrective action. The Committee are also distresed to note that even the modified costing system introduced by the Company on 1st April, 1982 could not provide for classification of costs into fixed and variable and also for the fixing of standard costs. The Committee have, however, been assured by the Department of Mines that it would take necessary steps to improve the Management Information System and also the system of classifying costs in the Company. The Committee would watch with keen interest the action Government would take in this regard and hope that the lacunae noticed in the costing system and also the Management Information System would soon be eliminated effectively. The Committee would like to be apprised of the specific steps taken by the Government in this regard.

3.55. The Committee are concerned over the heavy outstandings due to MECL. The major defaulters are reported to be public undertakings and Central/State Governments. The total outstanding dues to the Company, as on 31-3-1984 amounted to Rs. 601.39 lakhs* out of which Rs. 74.06 lakhs was outstanding for more than three years of which CMPDI alone accounted for Rs. 39 lakhs. The very fact that MECL had to seek the intervention of the Ministry for getting a major portion of the outstandings cleared indicates that the debt collection machinery of the company is not adequate and effective and needs to be streamlined and strengthened. The MECL should also consider the feasibility of inserting a bank guarantee clause in agreement with the parties for ensuring payment of whole amount of the bill within a prescribed time.

3.56. As regards charging of interest on the outstandings, the Committee are informed that contracts of MECL were generally with public undertakings who were not agreeable to the charging of interest on outstandings. The Committee strongly feel that the public undertakings and other clients should be treated alike in the matter of charging interest on delayed payment of bills. They feel that there is no reason why the public undertakings should be treated differently in this matter. The Committee, therefore, recommend that in all future contracts, a clause should be specifically inserted for the payment of interest by all defaulters on delayed payments beyond a particular period of the submission of bills by MECL.

3.57. The Committee also find that a large amount of the Company was also blocked under work-in-progress i.e. the work done but not billed. The amount outstanding on this account stood at Rs. 567.19 lakhs as on 31-3-1984. This mainly represents 10 per cent of the value of work done which is billed only after submission of the Geological Reports, the preparation of which starts only after completion of drilling work and is completed within four to eight months, depending upon the volume of the work. The other main reasons for large amount of work-in-progress were stated to be delay in sanction for excess amount of work done than that of the originally sanctioned, escalation bills raised subsequently due to rise in cost index etc. The reconstituted Coordination Committee is reported to have now decided that bills for promotional works should be paid if work exceeds upto 20 per cent of original sanction and in pursuance of this decision the Committee expect that the amount for work done but not billed would come down substantially. The Committee are also of the view that if billing system in MECL is streamlined

*At the time of factual verification, Audit have pointed out that this figure does not include Rs. 126.85 lakhs due from Government of India. Thus the total outstanding dues to MECL as on 31-3-1984 were Rs. 728.24 lakhs.

it will go a long way not only in improving the financial position of the Company but also it would increase the internal resources generation of the Company.

NEW DELHI;
August 6, 1985
Sravana 15, 1907 (*S*)

K. RAMAMURTHY,
Chairman,
Committee on Public Undertakings.

APPENDIX—I

(*Vide para* 3·34)

STATEMENT SHOWING DETAILS OF PARTY-WISE DUES OUTSTANDING ON WORK DONE UPTO 31ST MARCH, 1984.

Sl. No.	Name of the Clients	Total Amount due as on 31-3-1984 (Rs. in lakhs)
1	2	3
1	Central Mine Planning & Design Institute Ltd.	219·35
2	National Hydroelectric Power Corporation Ltd.	18·01
3	Bharat Aluminium Compnay Limited	51·20
4	North Eastern Council	41·91
5	Neyveli Lignite Corporation Limited	41·91
6	Hindustan Zinc Limited	31·53
7	Hindustan Copper Limited	60·35
8	Brahamaputra Flood Control Commission	6·67
9	Manganese Ore (India) Limited	9·06
10	Government of Madhya Pradesh	30·62
11	Government of Orissa	32·51
12	Government of Assam	13·27
13	Uttar Pradesh State Mineral Development Corpn.	0·19
14	Rajasthan State Mineral Development Corpn.	9·33
15	Madhya Pradesh Electricity Board	8·60
16	Sengareni Colliery Company Limited	11·52
17	Steel Authority of (India) Limited	2·65
18	Sikkim Mining Corporation	4·50
19	Andhra Pradesh Mining Corporation	2·98
20	Gujarat State Electricity Board	0·06
21	Indian Iron & Steel Co. Ltd.	1·33

1	2	3
22	Central Public Works Department, Jairampur .	0·90
23	National Aluminium Co. Limited	0·80
24	Central Ground Water Board . . .	0·18
25	Uttar Pradesh State Mineral Development Corporation .	0·79
26	Bharat Gold Mines Limited . .	0·22
27	Other Misc. . .	0·95
28	*Government of India	126.85
		**728·24

*Added on the basis of information furnished by Audit at the time of factual verification.

**Corrected after addition of item 28.

APPENDIX II

STATEMENT OF CONCLUSIONS/RECOMMENDATIONS OF THE COMMITTEE ON PUBLIC UNDERTAKINGS CONTAINED IN THE REPORT

Sl. No.	Reference to Para No. in Report	Statement of Conclusions/Recommendations
(1)	(2)	(3)
1	1.23	The Committee are distressed to note that though at the time of setting up of Mineral Exploration Corporation Ltd. in October, 1972, the Company was conceived as a sole agency of the Government of India to carry out detailed exploration of the minerals throughout the country, various other public sector undertakings like Coal India Ltd. and its subsidiaries, National Mineral Development Corporation Ltd., Hindustan Copper Ltd., Hindustan Zinc Ltd. etc. continue to carry out exploration through their own agencies. The exact line of demarcation between the functions of public sector exploiting agencies and MECL which was to be determined in consultation with the concerned interests has not so far been done in clear terms in spite of the fact that more than 12 years have lapsed in between. Admittedly, this has created a situation where the company was not clear of its future role which naturally affected its plans for modernisation and investment besides creating a situation where it had to face avoidable competition.

2	1.24	The Committee observe that the belated decision (1979) authorising MECL to undertake detailed exploration work in the leasehold areas of other agencies, was confined to organisations under the Department of Mines. In respect of undertakings under other Ministries, a separate notification has to be issued to authorise GSI or any other central organisation to undertake exploration in the lease-hold areas of such undertakings. The Committee desire that the Mineral Exploration Corporation Ltd. should be the main agency to undertake detailed exploration of minerals in the leasehold areas of all organisations under the Central Government.
3	1.25	MECL is also not very clear about its role in coal exploration. In the opinion of the Committee, the functions of Central Mine Planning and Design Institute and MECL are definitely overlapping. The Fazal Committee recommended that the CMPDI should be developed as a specialised agency for design and consultancy in the coal sector just as MECON was a consultancy agency in the steel sector. However, the Committee feel that the matter did not receive the attention of the Government it deserved. They, therefore, recommend that the feasibility of assigning exploration of coal solely to MECL and converting CMPDI into a purely consultancy organisation in the coal sector should be examined urgently.
4	1.26	The Committee note that the main activities of the company are exploratory drilling, mining, mine construction along with the requisite geological and analytical works and finally preparation and submission of geological reports containing results of the investiga-

(1)	(2)	(3)
		tions and reserves established. However, in recent years the company, without obtaining the specific approval of Government, has extended its activities to geotechnical investigations for dam foundation and ground water resources simply because a number of low capacity drills were transferred to it as assets of GSI which could not be used for exploration purposes by MECL. The Committee do not appreciate MECL undertaking extraneous work not falling strictly within its scope of functions simply because of some equipment handed over to it by GSI being in its possession. The departure on the part of MECL from its main objectives is all the more unhealthy when there is already an apex body at national level viz. Central Ground Water Board to conduct systematic hydrogeological surveys, ground water exploration, studies on special ground water problems etc. and much remains to be done in the sphere of its own activity of mineral exploration wherein its performance is very insignificant. The Committee would suggest that the equipment with MECL which is not found suitable for mineral exploration should be disposed of or transferred to Central Ground Water Board instead of making it a base for undertaking works not connected with the company's main objectives and clearly beyond its defined functions.
5	1.27	The Committee are unhappy to note that till recently no long term national plan in mineral exploration was prepared by Government indicating the share of various agencies. The MECL in

turn was not certain of its share in the exploration. It continued to prepare from time to time different plans covering different periods. The first exercise was the preparation of a draft 10 year plan in 1976-77. In July, 1980, however, it was recast and the company was asked to prepare basic approach papers for 20 years development programmes for certain minerals. Later, the position was again reviewed and MECL was asked to take up preparation of a 10 year perspective plan covering the period 1983-84 to 1992-93. Hardly had this plan been finalised when the working groups for preparing approach paper for development and exploration of minerals during Seventh Plan period were set up by the Planning Commission. The MECL's plan was also incorporated in this for 1985—90. A more definite basis for long term forecasting upto 2000 A.D. is expected to be available only after finalisation of the 7th Plan document. The Committee view with concern the frequent changes effected by Government in the formulation of long term plans for mineral exploration. They desire that firm estimates of the demand of various minerals and the resultant requirement of exploration inputs on a long term basis, at least upto the year 2000 A.D. should be made soon and made available to MECL so as to provide a more definite basis for its future activities and planning therefor.

6 | 2.72—2.73 | The Committee are distressed to note that the company's achievement during the Fifth Five Year Plan as compared to the targets fixed was far from satisfactory. It was only 32.87 per cent in core drilling and 30.20 per cent in exploratory mining. Similarly, during

the first four years of the Sixth Five Year Plan the company could achieve 77 per cent of the Plan targets in respect of drilling and 70 per cent in respect of mining. There was also a shortfall in drilling and mining programme even with reference to targets fixed every year at the time of formulation of budget estimates. The actual achievement during 1980—84 against the targets fixed ranged from 70 per cent to 86 per cent in the case of drilling (except 1982-83 when it was 104 per cent) and 54 per cent to 94 per cent in the case of mining. The Committee have also been informed that the firm programme of exploration work was not made available in advance to MECL by GSI and Government of India in the case of promotional projects and by the clients in the case of contractual projects. As a result, things could not be planned properly and many envisaged projects did not materialise. The Committee note from the evidence of the Secretary, Department of Mines that Hindustan Zinc Ltd. hold lease for tin deposits. As referred to earlier in this Report, a decision has been taken by the Department of Mines in 1979 that MECL would be permitted to undertake work in lease-hold areas of other agencies. The Committee, therefore, recommend that the work of detailed exploration of tin deposits should be assigned to MECL and the project of MECL for this work should be sanctioned without delay.

Now that a Coordination Committee consisting of representatives

		of all concerned Departments has been set up, the Committee expect that henceforth there would not be any delay in approval of promotional projects and work would be made available to MECL well in advance. They would also stress that the Ministry should also involve themselves actively for securing to MECL the contractual work from clients.
7	2.74	As a result of the review conducted by audit of certain promotional and contractual projects undertaken by MECL and also on examination of various aspects of functioning of the Company, the Committee have formed an unmistakable impression that there were a number of deficiencies in implementation of the projects. In the judgement of the Committee there was inadequate project planning, inadequate project management and control reflected in huge cost and time over-runs, delays in closure of camps, low productivity per worker per month, low drilling per drill month, delay in submission of geological reports and idleness of equipment and man power to say the least. Admittedly, some of these deficiencies can be attributed to inadequacies in planning and monitoring, resulting in consequential delays and cost escalations. The Committee would deal with some of these aspects in the succeeding paragraphs/ chapter.
8	2.75—2.76	Results of investigations conducted for mineral exploration and the resources established are embodied in geological reports prepared by MECL which are required to be submitted to the Govern-

1	2	3
		ment of India in the case of promotional projects and to the concerned exploiting agency in the case of contractual projects. The Committee are constrained to observe that there were inordinate delays in the submission of such geological reports. During the period from 1973-74 to 1982-83, out of 174 projects, geological reports in respect of 28 projects were not required to be submitted. In respect of the remaining projects only in 18 cases geological reports were submitted in time by the company. Thus there were delays in submission of reports in respect of 61.5 per cent of the projects. As a result of this, the MECL had to pay a penalty of about Rs. 20 lakhs to CMPDI alone in respect of 40 projects/blocks. Besides, the delay also resulted in blocking of 10 per cent of the value of work which was released only on submission of the final geological reports. The Committee are informed that according to the existing contract MECL are required to submit the final geological report within four months of the completion of the project. Since the quantum of work which goes into the geological report in terms of number of maps and text including annexures etc. has tremendously increased, it is practically difficult for MECL to submit the report within the stipulated time limit of four months. The Committee feel that the contracts between MECL and the clients should be made more equitable and realistic so as to allow reasonable time for submission of geological reports by MECL. The Committee hope that priorities

would be laid down in future after careful consideration so as to avoid subsequent changes therein. Change|enlargement of specifications of investigations and change in scope of work should also be avoided as far as possible as such changes upset the plan of work of MECL and result in delays in submission of geological reports. At the same time, the Committee would like to stress that MECL on its part should make all out efforts to submit the Reports well in time since the delay results not only in imposition of heavy penalties and unnecessary blocking of funds but also affects adversely the exploitation programme of the clients.

9 2.77 The Committee are surprised to note that until recently the company had no system of post-project coordination with the clients and association of its geologists to assess the correctness or otherwise of the assessments made by it and to take corrective measures in the light of experience gained. It was only at the suggestion of audit that the company has started such a system by selecting 5 projects every year at random. The introduction of such system for all projects is stated to be uneconomical as it would require a large number of geologists. However, the Committee are of the view that data in respect of the actual mining could be obtained by MECL from the clients for comparing it with that contained in the geological reports submitted by it without associating MECL's own geologist at the clients' site. The Committee would also suggest that this system should be tried with all the projects which are being implemented on the basis of the Reports submitted by MECL. Such comparative study would be highly useful in taking corrective

(1)	(2)	(3)
		measures for the future and improving the efficiency of performance of the Company in its exploratory tasks.
10	2.78-2.79	The Committee have been informed that during 1983-84, an attempt was made to fix project-wise productivity for drills and also norms for major inputs and manpower. The Director (Technical) of MECL also stated in his evidence before the Committee that "for every project, we are fixing certain input and output norms. These norms are based on the individual project by taking into consideration the terrain, the depth of barrows and the strata that we are working. We are monitoring them intensively." From the information about norms of productivity various inputs and manpower furnished by the Ministry, the Committee have noted that in many projects the total cost per drill month has been higher while the productivity was lower during the last three years as compared to the norms prescribed in 1983-84. The Committee are constrained to observe that even after more than 12 years of its formation the Company has not been able to lay down any norms for consumption of POL/bits, productivity of machines operating in a given strata/mineral, deployment of man power, establishment of shifts, maximum and permissible down time and cost of maintenance (corrective as well as preventive), levels of inventory and standard costs of operation etc. The overall capacity of the company to take up the mineral exploration work

and other ancillary jobs has also not been laid down. The Committee wonder how in the absence of such norms any effective control on the production cost, profits, optimum utilisation of man power, machinery and material could be exercised. Although it may not have been possible to fix single norms for all the projects, the Committee feel that with its long experience in exploration, the Company should not have found difficulty in evolving some norms for purposes mentioned above at least for individual projects depending upon the nature of the mineral to be explored, the strata and the terrain where it has to be explored. Therefore, in the opinion of the Committee, MECL should aim at fixing norms on consumption, productivity, manpower and cost of operation etc. in respect of each project before it is taken up for execution. **This will enable evaluation of the actual performance and taking corrective action where necessary.**

11 2.80 The Committee find that the number of shifts as indicated by the Company being available during the years 1980-81 to 1983-84 were respectively 52807, 67051, 76502 and 81614 only while on the basis of two shifts operation per drill and 280 working days in a year it should have been 81760, 84000, 90720 and 101360 respectively. Even considering the Company's plea that the drills shows as available on 31st March are not available throughout the year, the audit has worked out that the number of shifts available on the basis of average number of drills in operation during these year were considerably higher than the figures indicated by the company. **The discrepancy in figures of audit and the Company**

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		needs to be resolved. The Committee would like to know the correct position.
12	2.81	The Committee are unhappy to note that the number of shifts lost due to break-down, shortage of POL, shortage of accessories and other reasons rose from 7312 during 1980-81 to 12675 during 1983-84. Not only that, the number of shifts actually worked by the Company was much lower than even the shifts available after taking into account the shifts lost due to all these factors. Thus, the percentage of shifts actually worked to net shifts available ranged from 60 to 76 during 1980-81 to 1983-84.
13	2.82	In this connection, the Committee have also observed that for considerable period the Management had neither investigated the reasons for the heavy shift losses nor had it taken any corrective measures to arrest these losses. Even in review of the utilisation of drill shifts and shifts lost during 1981-82 placed before the Board in February, 1983, reasons for excessive shift losses have not been analysed/highlighted. Representative of the Company during evidence before the Committee also admitted that there was a certain lapse on their part in the year 1982 and they had taken corrective action and their Board was looking into shift losses regularly. The Committee desire that the reasons for such heavy shift losses should be thoroughly investigated and Committee in-

		formed of the results and also of the preventive measures taken in that regard. The Committee also desire that the figures of shift losses, result of analysis of those losses and the preventive measures taken should be suitably incorporated in the Annual Report of the Company.
14	2.83	The Committee note that the Company did not prepare any programme at the level of corporate office for the deployment of shifts on the basis of number of drills, workload and manpower at porject site. Keeping in view the need for increased production, the Committee desire that a detailed programme with regard to the deployment of shifts should immediately be worked out by the Company which, in the opinion of the Committee, would go a long way not only in exercising control on the established shifts but also on the optimum utilisation of men, material and machines. The Committee would like to be informed of the specific steps taken in this regard.
15	2.84—2.85	The Committee regret to note that the Company has neither laid down the installed capacity for the workshop nor has it fixed targets of various jobs to be undertaken during a particular year by its Central Workshop at Nagpur and four field workshops at Godhur (Bihar), Parasia (near Nagpur), Raniganj (West Bengal) and Kolar Gold Fields (Andhra Pradesh) though a period of 12 years has passsed since the take-over/establishment of these workshops. These lapses have adversely affected the production perfor-

1	2	3
		mance of these workshops as could be seen from the declining performance of the Central Workshop, Nagpur and field workshop at Godhur after 1977-78, both in terms of manufacture as well as repairs. However for the year 1984-85, a programme of work is reported to have been finalised for these workshops. It is difficult to imagine how in the absence of fixed installed capacity or targets of production/repairs, the Company was assessing the requirement of facilities, quantum of equipment/spares required and in fact determining the budget/financial support for these workshops or making a systematic programme of work for them for all these years. The Committee would like to be informed of the actual performance of these workshops as against the projected programme for 1984-85. They will also stress the immediate need for determination of installed capacity so that the extent of utilisation of the workshop capacities could be properly assessed.
16	2.86	There appears to have been no system of ensuring optimum utilisation of manpower and machinery in the workshops. Upto 1983-84, the Company did not make any analysis of the man-hours lost. The Committee view with concerned the increase in the percentage of the idle machine hours to total available hours from 15 in 1981-82 to 31 in 1983-84. The percentage of machine hours

		lost on account of absence of operators alone increased from 13.25 per cent to 28.35 per cent during this period. The Committee are also distressed to note that the Company did not make any analysis of the man-hours lost during 1977-78 to 1981-82. A review of 3205 time cards of the various shops, conducted by Audit, from October, 1981 to March, 1982 has revealed that 57 per cent of the total hours lost were due to union activities; want of raw material; want of work; and machine break-down. The Committee would, therefore, urge that the factors responsible for the steep increase in the idle hours should be analysed and remedial action taken to arrest the adverse trend.
17	2.87	The Committee also note that the information with regard to the anticipated time and cost, actual total cost incurred, and the time taken in completing the jobs was not filled in job cards. Consequently, the actual cost of production, cost of labour & machine hours etc., and the actual cost of production of each item could not be ascertained. The Committee are also not satisfied with the reply of the Ministry that "the Company felt that since its workshop is a small service unit, detailed maintenance of job cards was perhaps not essential." The Committee cannot but emphasise the urgent need for proper maintenance of job cards, as suggested by Audit, as it would help the Company to compare the anticipated time and cost with the actuals in respect of each job.
18	2.88	The Committee note that the manpower employed in MECL increased from 2878 in 1980-81 to 3758 in 1983-84. Besides, manpower

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		employed per drill in operation ranged from 20 to 28 during 1977-78 to 1983-84 and per shift it was 25.13, 21.11, 26.46 and 26.03, respectively during the years 1980-81 to 1983-84. Against this, as per the norms of CMPDI, one drill on an average was provided with 29 to 30 men for two shifts operations including the jobs connected with geology, watch and ward, repairs and maintenance, accounts, store, administrative works, road building etc. in the camp. Thus, employment of man power per shift in MECL even excluding manpower employed on jobs connected with geology, repairs and maintenance etc. was on the higher side compared to norms prescribed by CMPDI. The employment of excess-manpower by MECL was also pointed out by the BPE in 1979 and inspite of this the MECL did not fix any norms for deployment of manpower.
19	2.89	The Committee regret to note that although the Board of Directors to MECL had directed the Company as early as in 1974 to carry out work study and determine the manpower for each type of work and evolve as organisational chart by appointing consultants after inviting offers from National Productivity Council and other agencies, no agency was appointed for this purpose. Not only that, this fact was also not specifically brought to the notice of the Board. It was only in early 1982 that the feasibility of engaging NPC or some other consultant for the job was explored but it was then decided to have the job done internally. A sub-Committee

was finally appointed by the Board in April, 1982 for finalising the manpower requirements arising out of the reorganisation of management structure recommended by a Committee of departmental heads. The Committee feel that even this Sub Committee does not appear to have studied in depth this matter as, after indicating some broad guidelines, it authorised the Managing Director himself to create posts as considered necessary as a result of reorganisation. Accordingly, 144 posts were created by the Managing Director to which even the FA&CAO of the company had expressed reservations and observed that though 60 to 70 per cent of the expenditure of the company was on manpower yet demands for men were being raised. He felt that some sort of self control should be introduced by fixing percentage of manpower cost linked to breakeven point. The Committee are not happy about casual manner in which the important issue of determining the manpower of the company has been handled by the company.

20 2.90 The Committee feel that the administrative Ministry has also not exerted any influence over the undertaking for entrusting the job of laying down norms for deployment of manpower in various projects of MECL in a scientific manner to an expert body like the National Productivity Council rather than allowing the Managing Director to create posts as he liked. The Committee are also not sure whether the guidelines laid by the Sub-Committee of MECL covered all aspects and were on scientific lines and whether the reorganisation effected by the Managing Director was in the best interests of the Company. They, therefore, urge the Ministry that work of

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		reorganisation and deployment of manpower may be entrusted to an expert body without any delay after consultation with labour of MECL.
21	2.91	The Committee are distressed to note that the drilling metreage per man which was 47.94 during 1978-79 ranged from 35.34 to 41.12 during the subsequent period between 1979—84. Similarly, the mining metrage per man which was 6.51 during 1978-79 ranged from 4.87 to 6.23 during 1979—83 though during 1983-84 it reached 6.62. Thus the Company could not achieve the 1978-79 level of productivity per man during any of the subsequent years except in 1983-84 and that too only in respect of mining.
22	2.92	In the opinion of the Committee there seems to be no system in MECL to exercise control either on the deployment efficiency or productivity of drills. Nor any system of preventive maintenance to minimise the idle time of drills is followed. As many drills as possible are deployed depending upon the availability. As a result the productivity per drill month which was 130 metres in 1978-79 ranged only between 86 to 102 metres during 1979-80 to 1982-83 though the company was able to achieve 114 metres per drill month during 1983-84. The Committee need hardly emphasise that suitable norms in respect of deployment efficiency and productivity of drills as also schedule for their preventive maintenance should be fixed by the Company. The Committee find that the

		actual productivity of wireline drills was 124 metres/drill month during 1983-84 against a parameter of 140 metres/drill month fixed for that year. The shortfall in productivity was mainly due to shortage of good quality wireline drill rods. The Committee feel that if timely action for procurement of wireline drill rods had been taken by the Company/Government, the loss in productivity of wireline drills could have been avoided or reduced to some extent. The Committee need hardly emphasise that suitable measures should be taken on priority basis to ensure adequate supply of wireline drills to meet the requirements of the Company and to enable it to achieve the paramenters fixed, without depending on imports.
23	2.93	The Committee are glad to note that MECL have introduced an incentive payment scheme on an experimental basis with effect from 1st April, 1982 to increase productivity per drill. While prescribing base line output for the scheme, the company took into consideration the average productivity achieved in previous three years correlated to any substantial change in drilling conditions. What the Committee are unable to appreciate is that the base line output was revised further to the lower side without any valid justification. The overall increase in production and productivity and resulting savings as a result of introduction of the scheme have not been assessed by the company. In the absence of any such assessment, the efficacy of the incentive scheme cannot be judged. Attention in this connection is invited to the 97th Report of the Committee on Public Undertakings presented to Parliament on

1	2	3
		30 April, 1984 wherein the Committee have observed that in many of the undertakings which already have productivity linked incentive schemes, the incentive appears to have degenerated into additional wage, having been linked to production even below the threshold level. In order to ensure that this does not happen in MECL, the Committee recommend that a proper essessment of the effect of the incentive scheme on productivitiy should be made and if found necessary, it should be made more scientific and result-oriented.
24	3·44	The Committe regret to note that the profitability of MECL showed a sharp decline after 1978-79. During 1978-79, the Company earned a profit of Rs. 184.79 lakhs which dropped to Rs. 5.12 lakhs the very next year. From 1980-81 to 1982-83, the Company incurred a loss of Rs. 237.79 lakhs. Rs. 245.02 lakhs and Rs. 396.73 lakhs, respectively. But in 1983-84 the MECL made a profit of Rs. 590.59 lakhs mainly on account of payments received from CMPDI as a result of revision of rates for contractual works from 1980-81 onwards.
25	3·45-3·46	The Committee are informed that one of the reasons for losses during 1980-81 to 1982-83 was the loss on contractual drilling done on behalf of CMPDI, the main client of MECL, which varied between 1.32 per cent to 35.42 per cent during 1977-78 to 1983-84 (except during 1978-79 when there was a marginal profit of 1.22 per cent). The loss suffered was stated to be due to the unremunerative rates

paid by CMPDI. Payments in 1982-83 were made at the rates fixed for 1979-80 which were unremunerative even for 1979-80. The payment rates for coal drillings were originally settled by MECL with BCCL in 1973 and the Coal Mines Authority Ltd. in 1975 (now Coal India Ltd. on whose behalf CMPDI looks after the coal exploration work). But in 1978-79, at the instance of CMPDI, the question of fixation of rates was referred to BPE who recommended a rate of Rs. 377 per metre drilling in respect of CIL areas and Rs. 349 per metre in respect of BCCL areas. As the rates recommended were in the nature of award they were accepted by MECL despite their being unremunerative.

In February, 1983, the Cost Accounts Branch of the Ministry of Finance, to whom the matter was referred for fixation of rates for subsequent years recommended rates of Rs. 492, Rs. 533 and Rs. 608 for the years 1980-81, 1981-82 and 1982-83, respectively, both for CIL and BCCL areas. These rates included *inter alia*, 15 per cent return on capital employed. Even though the report of Cost Accounts Branch was accepted unanimously by the Secretary (Expenditure), Secretary (Coal) Secretary (Mines) and Director General (BPE), the rate of return on capital employed was later reduced to 10 per cent by the Department of coal as CMPDI did not agree to 15 per cent return. Thus against the rates of Rs. 492, Rs. 533 and Rs. 608 recommended by the Cost Accounts Branch for 1980-81, 1981-82 and 1982-83, respectively, both for CIL and BCCL areas, the rates actually agreed to be paid were Rs. 468, Rs. 508 and Rs. 579 respectively for these years. Obviously, the lower rates contributed to a great extent to the company's

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		losses as the MECL is stated to have received payments on the basis of 10 per cent return on capital for the years 1980-81 to 1982-83. With a view to enabling the MECL to be run on commercial lines, the Committee recommend that the matter with regard to the increase in the rate of return on the capital should be taken up by the Department of Mines at the highest level so as to secure for MECL a remunerative rate of return. The Committee desire that a remunerative rate of return on capital employed should be fixed once for all and the Department of Coal should be in a position to prevail upon CMPDI to agree to that rate of return.
26	3.47	Admittedly, apart from lower rate of return, there was less than anticipated productivity in a number of projects which obviously increased costs and added to losses. Thus, for 1983-84, while the rate recommended by the Cost Accounts Branch was Rs. 627, the cost of drilling by MECL was Rs. 685. The finalisation of rates for 1983-84 is stated to have again been referred to the Cost Accounts Branch. As already emphasised by the Committee elsewhere in this Report, the productivity of the corporation needs to be improved substantially. The Committee expect that the Company will make all-out efforts in this direction.
		Further, it may be desirable to finalise the rate of return before the close of the financial year so that final accounts of the Company are ready in time for being laid on the Table of the House as required under the Companies Act,

27	3.48	The Committee find that the rates for promotional work done by MECL on behalf of Government of India were not fixed on any scientific basis. Till 1975, GSI schedule of rates were adopted for promotional work. In September, 1975, Government advised the Company to make an exercise to study the actual cost involved including the direct and indirect costs on the promotional work so that a suitable criterion could be evolved which might form the basis of payment by the Government. The cost data furnished by the Company in 1976 was found inadequate and the GSI rates prevailing in 1976 continued to form the basis for promotional rates for MECL with some escalations allowed by the Government in the cost of inputs etc. The Committee have been informed that MECL was asked by the Ministry to draw up a detailed cost data for every project so that rates for promotional works could be fixed suitably. The Company has, however, stated that it was not possible to furnish such information as it would involve engagement of a large number of accountants and other personnel in projects for collecting the required data. The MECL is stated to have worked out a proposal which has been agreed to by the Ministry and on the basis of which the rates have been firmed up for two years i.e. for 1983-84 and 1984-85. The Committee are greatly exercised over this avoidable delay for the settlement of remunerative rates for undertaking promotional work of the Government by MECL. The Committee desire that such delays should be avoided in future.
28	3.49	**The Committee also urge upon the Government to evolve a scientific and fool proof formula for fixing rates for promotional**

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		work done by the Company. For this purpose, it may be necessary for the Company to maintain certain data contemporaneously with execution of work, rather than collecting it at a later date. The Government may impress upon the Company the desirability of evolving suitable procedures.
29	3.50	The Committee note that though MECL has introduced annual material planning and programming as well as codification and standardisation of stores from the year 1984-85, there are still serious deficiencies in the inventory control system. Even though the store manual of MECL requires fixation of minimum and maximum limits for all items in the stores to avoid unnecessary accumulation, the Company has not fixed maximum and minimum limits of individual store items. ABC analysis of the inventories has also not been done by the Company so far. The discrepancies between the figures of stores and spares appearing as closing stock at the end of each year as recorded in the books of accounts and the figures as reported by the projects as stock in hand at the end of the year, based on physical verification, are written off as consumption at the end of each year without any reconciliation. Such discrepancies varied between Rs. 2.62 lakhs in 1978-79 to Rs. 28.06 lakhs in 1983-84.
30	3.51	During evidence, the Director (Technical) of MECL contended that requirement of material varied very considerably from year to year. The ABC system of analysis and minimum and maximum

		limits for stores are not strictly applicable. He also stated that keeping in view the sort of stores needed on year to year basis they have to fix up internal norms which in no case were less than 3 months' stock. The Committee feel that it should be possible for the Company to fix some broad norms for all items of stores to ensure that neither the work is adversely affected for want of material nor there is excess of inventories. The Committee are surprised to note that the discrepancies in figures of stores & spares as recorded in books of accounts and the figures reported by projects after physical verification are written off as consumption at the end of each year without reconciliation. This is highly objectionable from all cannons of accounting and is an open invitation for mal-practices by persons handling the stores & equipment. The Committee, therefore, recommend that MECL should introduce a workable system of reconciling the inventory at projects with the books of accounts maintained at the headquarter and internal test audit and ensure that both are worked scruplously and effectively.
31	3.52	As regards desirability of introducing ABC Analysis for inventory control in public undertakings, the Committee would like to draw attention of the Company/Ministry to their 40th Report (3rd Lok Sabha) on Materials Management in Public Undertakings wherein it was emphasised that by this system of inventory control, it was possible to achieve twin objectives, namely to minimise the risk of stockouts and to reduce blocking of funds in inventories. The Committee had, therefore, recommended that ABC Analysis of inventories should be introduced by all those undertakings who had

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		not yet introduced this system. Necessary instructions in this regard were also issued by the Bureau of Public Enterprises as far back as on 16th October, 1967. The Committee, therefore, urge that the MECL should seriously consider introducing ABC system of analysis of inventories immediately.
32	3·53	The Committee have noticed many deficiencies in the costing system introduced by MECL in 1975-76. The system did not provide for classification of costs into fixed and variable costs, ascertainment of idle time for labour and machinery, comparison of actual costs with the estimated costs and analysis of variations and fixation of standard costs. Further the headquarters expenses were to be apportioned on the basis of financial expenditure incurred on a project and not on the basis of physical performance of projects. A review of the costing record also revealed that the cost statements were not reconciled with financial accounts till 1978-79. The cost sheets were neither received regularly not were received in time from Projects and Workshops. Estimated cost was adopted for compiling the annual cost in all those cases where the monthly cost sheets were not prepared. There was no system of putting up the cost statements to the Management|Board.
33	3·54	The Committee have also observed that even though the workshops were manufacturing limited number of accessories and fabricating items like vehicle bodies, water tanks etc. no standard costs

were prescribed therefor. No analysis of the idle man-power and machinery hours was also made. Although the cost of manufacturing the same items differed widely, yet no analysis was made to find out reasons therefor. The overheads were charged at 130 per cent of the labour cost without any regard to actual production either in physical quantities or financial cost thereof. A comprehensive management information system comprising of internal management information as also the outgoing reports to the Ministry was also not introduced by the Company until October, 1982. Majority of the reports prescribed prior to this date were in the nature of progress reports indicating the state of work in the units and did not supply information needed by the Management for effective control on costs and functions of the Company. These reports were also not received regularly. Admittedly, the absence of an effective system of costing and also the comprehensive Management Information System were factors leading to below average performance of the Company. The Committee are concerned over the glaring deficiencies in the costing system as pointed out above. Even the representative of the Company admitted this during his evidence and stated that they were taking corrective action. The Committee are also distressed to note that even the modified costing system introduced by the Company on 1st April, 1982 could not provide for classification of costs into fixed and variable and also for the fixing of standard costs. The Committee have, however, been assured by the Department of Mines that it would take necessary steps to improve the Management Information System and also the system of classifying costs in the Company. The Committee would watch with keen in-

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		terest the action Government would take in this regard and hope that the lacunae noticed in the costing system and also the Management Information System would soon be eliminated effectively. The Committee would like to be apprised of the specific steps taken by the Government in this regard.
34	3·55	The Committee are concerned over the heavy outstandings due to MECL. The major defaulters are reported to be public undertakings and Central/State Governments. The total outstanding dues to the Company, as on 31-3-1984 amounted to Rs. 601.39 lakhs* out of which Rs. 74.06 lakhs was outstanding for more than three years of which CMPDI alone accounted for Rs. 39 lakhs. The very fact that MECL had to seek the intervention of the Ministry for getting a major portion of the outstandings cleared indicates that the debt collection machinery of the company is not adequate and effective and needs to be streamlined and strengthened. The MECL should also consider the feasibility of inserting a bank guarantee clause in agreement with the parties for ensuring payment of whole amount of the bill within a prescribed time.

35	3.56	As regards charging of interest on the outstandings, the Committee are informed that contracts of MECL were generally with public undertakings who were not agreeable to the charging of interest on outstandings. The Committee strongly feel that the public undertakings and other clients should be treated alike in the matter of charging interest on delayed payment of bills. They feel that there is no reason why the public undertakings should be treated differently in this matter. The Committee, therefore; recommend that in all future contracts, a clause should be specifically inserted for the payment of interest by all defaulters on delayed payments beyond a particular period of the submission of bills by MECL.
36	3.57	The Committee also find that a large amount of the Company was also blocked under work-in-progress *i.e.* the work done but not billed. The amount outstanding on this account stood at Rs. 567.19 lakhs as on 31-3-1984. This mainly represents 10 per cent of the value of work done which is billed only after submission of the Geological Reports, the preparation of which starts only after completion of drilling work and is completed within four to eight months, depending upon the volume of the work. The other main reasons

*At the time of factual verification, Audit have pointed out that this figure does not include Rs. 126.85 lakhs due from Government of India. Thus the total outstanding dues to MECL as on 31-3-1984 were Rs. 728.24 lakhs.

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		for large amount of work-in-progress were stated to be delay in sanction for excess amount of work done than that of the originally sanctioned, escalation bills raised subsequently due to rise in cost index etc. The reconstituted Coordination Committee is reported to have now decided that bills for promotional works should be paid if work exceeds upto 20 per cent of original sanction and in pursuance of this decision the Committee expect that the amount for work done but not billed would come down substantially. The Committee are also of the view that if billing system in MECL is streamlined it will go a long way not only in improving the financial position of the Company but also it would increase the internal resources generation of the Company.

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