CHAPTER-2
REVIEWS RELATING TO GOVERNMENT COMPANIES

SECTION -2A

THE SINGARENI COLLIERIES COMPANY LIMITED

Highlights

The Singareni Collieries Company Limited was incorporated in December 1920 with the main objective of development of mines for extraction of Coal. The Company is engaged in extraction of coal through underground and opencast mines.

(Paragraph 2A.1)

Up to 31 March 1997, the Company accumulated losses to the extent of Rs.1219.48 crore. As a measure of relief Government of India approved a Financial Restructuring Package involving waiving interest on interest, penal interest, moratorium on payment of interest and rescheduled payment of outstanding loan instalments.

(Paragraph 2A.5 and 2A.6)

Since its inception to March 2002, the Company invested Rs.4405.50 crore in development of various working mines with an installed capacity of 34 million tonnes and other non-mining projects.

(Paragraphs 2A.7.2)

Implementation of three projects in violation of Government directive resulted in further investment of Rs.16.68 crore and loss of Rs.23.07 crore on uneconomic mining.

(Paragraphs 2A.7.4.1, 2A.7.4.2 and 2A.7.4.3)

Though production targets were substantially achieved, large number of underground mines incurred losses. The targeted and actual production during the five years ended 31 March 2002 in 8/9 areas out of 12 was below break-even production contributing to huge losses.

(Paragraphs 2A.8.2 and 2A.8.3)

Inability to use two longwall units at a time in Padmavathi khani resulted in over absorption of fixed overhead by Rs.62.43 crore during the five years ended 31 March 2002. The additional investment of Rs.17.75 crore made to increase the capacity of shield supports did not yield the anticipated benefit in GDK-9 Vakilpalli block.

(Paragraphs 2A.8.4.1.1 and 2A.8.4.1.2)

Under-utilisation of longwall equipment resulted in shortfall in production valued at Rs.153.41 crore. Similarly under-utilisation of plant and machinery under BG method of mining resulted in shortfall in production valued at Rs.92 crore.

(Paragraph 2A.9.3.1)

Non-deployment of surplus manpower resulted in idle wages of Rs.83.61 crore.

(Paragraph 2A.11)

Non-revision of prices as per Government of India directives, (after deregulation of prices) resulted in loss of revenue of Rs.46.55 crore up to December 1999.

(Paragraph 2A.12.1)

Non-control of expenditure within the additional price allowed resulted in loss of revenue of Rs.26.70 crore besides making RG OC-II Project continuously unviable.

(Paragraph 2A.12.2)

Non-limiting of despatches to the value of bank guarantee resulted in locking up of Rs.0.66 crore. Non-recovery of interest from APGENCO as per Umpire award resulted in blocking up of Rs.149.36 crore.

(Paragraphs 2A.14.2 and 2A.14.3)

Supply of the power free of cost/concessional rate beyond the limits specified in National Coal Wage Agreement resulted in additional expenditure of Rs.228.37 crore.

(Paragraph 2A.19.1)

Failure to show consumption of electricity by private parties separately, non-segregation of township consumption and uneconomic utilisation of power resulted in avoidable expenditure of Rs.62.69 crore.

(Paragraphs 2A.21.2.2, 2A21.2.3 and 2A21.2.4)

2A.1 Introduction

The Company was incorporated with the main objective of development of mines for extraction of coal

The Singareni Collieries Company Limited (SCCL) was incorporated in December 1920 with the main objective of development of mines for extraction of coal. The Company has two types of coal mines viz., open cast and underground mines spread over in Khammam, Karimnagar, Adilabad and Warangal Districts of Andhra Pradesh. As on 31 March 2001, the Company had 67 operative mines (11 open cast and 56 underground) with total proved geological reserve of 7729 million tonnes (MT♦) and extractable coal reserves of approximately 932.24 MT. To cope up with increased demand for coal, the Company introduced mechanised mining schemes viz., Long Wall (LW) mining, Deep shaft mining and Blasting Gallery method in addition to manual mining in underground mines.

2A.2 Organisational set up

The management of the Company is vested in a Board of Directors which, as on 31 March 2002 consisted of 10 Directors including the Chairman & Managing Director (CMD), who is the Chief Executive of the Company. Besides CMD, there were four functional Directors looking after Finance, Operations, Planning & Projects and Personnel, Administration & Welfare, five part time Directors; two representing Government of Andhra Pradesh and three representing Government of India.

2A.3 Scope of Audit

The working of the Company was last reviewed and the results were included in the Report of the CAG of India for the year 1974-75 (Commercial). During the period from 1975-76 to 1999-2000, some sectoral reviews were conducted and results included in the Audit Reports (Commercial) of respective years. The COPU examined the reviews conducted on the Company up to 1996-97 and its recommendations contained in its Second and Fifth Reports were presented to the State Legislature on 23 March 1996 and 6 September 2000 respectively. Action Taken Notes on the recommendations had not been received from the Government/Company (October 2002). The COPU is yet to examine the reviews included in the Reports for the years 1997-98 onwards.

The present review, conducted between December 2001 and March 2002, covers the activities of the Company's Corporate office at Kothagudem as well as 12 area offices (covering 67 operative mines and 15 ongoing projects) for the years 1997-98 to 2001-02 and the results of review are set out in the succeeding paragraphs.

♦ MT appearing in the review represents million tonnes.

2A.4 Capital Structure and Borrowings

2A.4.1 Capital Structure

Against the authorised capital of the Company of Rs.1800 crore as on 31 March 2002, the paid-up capital as on that date was Rs.1733.20 crore, jointly held by Government of Andhra Pradesh and Government of India in the ratio of 51:49. A small portion of equity capital of Rs.3.90 lakh (0.002 *per cent*) was also held by private individuals.

2A.4.2 Borrowings

The borrowings of the Company as on 31 March 2002 were Rs.1313.35 crore (Government of India funded interest Rs.663.34 crore, loans from commercial banks Rs.650.01 crore).

2A.5 Financial Position and Working Results

The financial position and working results of the Company during the last 5 years ending 31 March 2002 is given in **Annexures 12 and 13**.

The Company accumulated huge losses up to March 1997

An analysis of the financial results revealed that the accumulated loss of Rs.1118.05 crore as on 31 March 1998 got reduced to Rs.260.77 crore as on 31 March 2002 with the Company earning profits during the years 1997-98 to 2001-02. The profit during the year 2000-0l, was reduced mainly due to making a provision of Rs.307.07 crore towards liability on account of revision of wages under National Coal Wage Agreement (NCWA) VI in that year. The Company had started earning profits from the year 1997-98 mainly on account of deregulation of coal prices of A, B & C grades from March 1996 and D, E and F grades from March 1997 by Government of India. The Government of India further waived penal interest on its loans to the extent of Rs.66.19 crore (as discussed in para 2A 6 infra) and moratorium on payment of outstanding interest amounting to Rs.663.34 crore for a period of 10 years from 31 March 1997.

The Company's investments of Rs.1.06 crore as on 31 March 1998 had increased to Rs.1317.92 crore as on 31 March 2002 which mainly constituted bonds issued by Transmission Corporation of Andhra Pradesh Limited (APTRANSCO) and AP Power Finance Corporation Limited in discharge of dues for coal supplies.

2A.6 Financial Restructuring Package

Due to complete erosion of paid up capital and negative net worth, the Board of Directors of the Company referred (1992) the Company to Board for Industrial and Financial Reconstruction (BIFR), who had directed (March

1994) the joint shareholders of the Company i.e., Government of Andhra Pradesh and Government of India to prepare a turnaround package for revamping the Company's financial management so as to enable it to achieve its objectives. The Company became potentially sick Industrial Company within the meaning of Section 23 of Sick Industrial Companies (Special Provisions) Act 1985, on finalisation of its accounts for the year 1995-96. In the year 1996-97 the Company's losses accumulated to Rs.1219.48 crore as on 31 March 1997 against the paid up capital of Rs.1207.69 crore. Further, adverse law and order conditions prevailing in places where the Company was carrying on its mining activities also affected its operations. As a result, the Company was not able to generate adequate internal resources to meet the capital investment requirements of its mines. In 1997-98, the Company prepared a Financial Restructuring package for approval by the Government of India. As a measure of relief, Government of India approved (July 1999 & August 2000) a package waiving interest on interest due and penal interest amounting to Rs.66.19 crore (up to the end of 31 March 1999), granted moratorium on payment of interest of Rs.663.34 crore (accrued up to 31 March 1997) for a period of 10 years and permitted the Company to repay this outstanding interest in 10 equal instalments commencing from the financial year 2007-08. The Government of India also re-scheduled the outstanding loan instalments amounting to Rs.157.49 crore (repayable up to 31 March 1997) for payment in two equal instalments in the financial years 1999-2000 and 2000-01 along with regular interest. The package *inter alia* included certain commitments on the part of the Company namely-

As a measure of relief Government of India approved Financial Restructuring Package

- increase in production from 28.734 MT in 1996-97 to 34.01 MT in 2001-02
- to reduce manpower from 1.122 lakh as on 31 March 1998 to 1.064 lakh by the end of 31 March 2002
- to improve labour productivity i.e., output per man shift (OMS) from 1.09 tonnes in 1996-97 to the level of 1.32 tonnes in the year 2001-02
- to achieve a cumulative profit of Rs.238.79 crore by end of 31 March 2002 from the current losses of over Rs.1118.05 crore as on 31 March 1998.

The package also included certain commitments on the part of the Company

As against the targets set out in Restructuring Package, achievements during 5 years up to 31 March 2002 were as given in the following table:

Accumulated losses were substantially reduced by March 2002

Particulars	1997-98		1998-99		1999-2000		2000-01		2001-02	
	RP*	Actual	RP	Actual	RP	Actual	RP	Actual	RP	Actual
1	2	3	4	5	6	7	8	9	10	11
Production in Million tonnes	28.94	28.94	27.33	27.33	31.00	29.56	32.43	30.27	34.01	30.81
Manpower in lakh	1.122	1.122	1.095	1.094	1.070	1.078	1.061	1.056	1.064	0.994
OMS in tonnes	1.17	1.17	1.14	1.14	1.24	1.24	1.25	1.25	1.32	1.34
Net profit before tax in Rs. Crore	128.03	128.03	109.00	141.56	234.90	302.35	233.04	98.36	392.68	326.30
Accumulated profit (+) / loss (-) (Rs. in crore)	-1118.05	-1118.05	-1009.05	-1004.92	-798.81	-647.76	-590.24	-565.94	238.79	-260.77

*** RP = Restructuring package**

Consequent to reduction in cumulative losses from Rs.1118.05 crore as on 31 March 1998 to Rs.260.77 crore as on 31 March 2002, the Company was no longer potentially sick.

2A.7 Project formulation and Status

2A.7.1 In order to exploit the available mining blocks with maximum conservation by adopting suitable technologies and practices with a view to ensure continuous supply of coal to customers, the Company had drawn up plans to produce annually 36.127, 35.397 and 35.447 MT of coal during the X, XI and XII five year plan periods respectively.

2A.7.1.1 Demand forecast/Proved Coal Reserves

As per the demand forecast prepared by the Company's consultant, Central Mine Planning and Design Institute Limited (CMPDIL), the coal demand during X, XI and XII plan periods ranged from 33.127 to 34.256 MTs per annum. In addition to the above, further estimated demand (from NTPC for their 7th, 8th and 9th units at Ramagundam and also for 1000 MW Power Station at Manuguru) would be 12.00 MTs per annum.

The Company, by the year 2001, had around 7700 million tonnes (MT) of proved coal reserves, out of which, 2300 MT was utilised and unviable. Out of the remaining 5400 MT of coal, about 1/3rd (1800 MT) would be extractable with the existing facilities. Of the balance reserves, 2500 MT are in the depth range of 300-600 metres and therefore, it is necessary to develop deep shaft mines to exploit these reserves.

With a view to meet the future demand, the Company proposed for Fuel Supply Agreements (FSAs) on cost plus basis or formation of joint ventures.

2A.7.2 Mining Projects

In order to establish a coal mining project, the Company identifies reserves, prepares a detailed feasibility report and analyses the same from technical, commercial, organisational, environmental and financial angles and after satisfying the same from all parameters, takes an investment decision. All projects valued up to Rs.50 crore are approved by the Board of Directors of the Company and projects valued above Rs.50 crore are approved by the Government of India.

Since inception the Company invested Rs.4405.50 crore in various mining and non-mining projects

Since its inception to March 2002, the Company invested Rs.4405.50 crore (with installed/assessed capacity of 34.00 MTs) in various working mines, non-mining projects and projects/mines under formulation as tabulated below:

(Installed Capacity in Million Tonnes)

Sl. No	Particulars	Mines / Projects						Non-mining Projects		Total		
		UG			OC							
		No	Capital expn. Incurred (Rs.Crore)	Installed capacity in MT	No	Capital expn. incurred (Rs. Crore)	Installed capacity in MT	No	Capital expenditure incured (Rs.Crore)	No	Capital expn. incurred (Rs.Crore)	Installed capa-city in MT
1	Existing mines♣	21	773.68	4.655	-	-	-	-	-	21	836.63	4.655
2	Completed mines♥	35	1001.04	10.725	11	1932.03	12.200	16	117.56	62	2988.46	22.925
3	Ongoing, new mines/ projects	12	143.74	2.100	3	170.94	3.700	17	142.61	32	456.51	5.800
4	Mines/Projects under formulation	4	0.73	Nil	3	5.99	0.620	6	117.18	13	123.90	0.620
	Total	72	1919.19	17.480	17	2108.96	16.520	39	377.35	128	4405.50	34.000

2A.7.2.1 Projects completed

During the period from 1997-98 to 2001-02, the Company commissioned three UG mines, one OC mine and started extraction of coal from extended block of one OC mine. The overall capacity of these five new mines was 2.85 million tonnes of coal per annum with an investment of Rs.65.85 crore. The new UG mines were Kasipet, KTK 2A and KTK.5. The new OC mines were Manuguru OC.4 and E Block of Yellandu OC 1.

♣ Existing Mines means working Mines as on the date of nationalisation of the Company in 1956.

♥ Completed Mines means Projects completed by the Company after nationalisation and working as on 31-03-2002.

2A.7.2.2 Projects closed

The Company closed down seven UG mines, 1 OC mine and one mini longwall project from VK.7 of Kothagudem area during the years 1997-98 to 2001-02 mainly due to depletion of coal reserves. The closed UG mines were MVK.2, Polampalli, RK.3, RK.4, Morgan`s pit, Hemachandrapuram Incline and MVK-6. The OC mine closed was OC I Manuguru.

Out of seven mining projects proposed for development by the Company during the years 1985 to 1991, three projects (Manuguru OC-III, SB-1 Manuguru, and Khairagura UG) with an estimated outlay of Rs.460.27 crore and with an installed capacity of 3.14 million tonnes per annum, were still to be approved by Government of India. Till the end of March 2002, the Company had incurred a total expenditure of Rs.0.69 crore on these projects.

2A.7.3 Non-Achievement of Production Capacity

The Company treats a mining project as completed when the mine achieves 25 *per cent* of rated production or on completion of a period of 2 years after touching coal, whichever is earlier.

As on 31 March 2002, seven out of 12 ongoing underground mines with a production capacity of 1.815 MT per annum, were far behind schedule of completion resulting in not only time overrun but also non-achievement of anticipated coal production. The details of original schedule of completion, revised schedule of completion, targeted production and shortfall in respect of these mines to the end of March 2002, were as given in the following table:

Sl. No.	Name of the Mine	Scheduled date of completion		Capacity per annum	Anticipated production up to 31-3-2002	Cumulative actual production up to 31-3-2002	Shortfall
		Original	Revised	In lakh tonnes			
1.	Chinnur 2	3/1994	3/2003	2.75	22.00	0.024	21.976
2	Chinnur 1 & 1A	3/1995	3/2003	2.75	19.25	4.683	14.567
3.	KTK.2	3/1995	3/2003	2.75	19.25	2.312	16.938
4.	KTK.5	3/1995	3/2002	2.75	19.25	6.309	12.941
5.	KTK.6	3/1997	3/2003	2.55	12.75	0.281	12.469
6	KTK.7	3/1997	3/2005	2.70	13.50	-	13.500
7.	Shanthi Khani (Ext)	3/1997	3/2002	1.90	9.50	1.382	8.118
Total					**115.50**	**14.991**	**100.509**

Delay in completion of 7 projects would result in cost overrun of Rs.98.53 crore

The Company originally contemplated to complete these projects at an estimated cost of Rs.122.67 crore. The cost of these projects was updated to Rs.221.20 crore indicating cost overrun of Rs.98.53 crore. The Company, however, had not prepared Revised Estimates in respect of all these projects

(April 2002). The Company incurred a total expenditure of Rs.97.73 crore to end of March 2002.

Delay in completion could have been overcome by contingency planning

The delay in completion of these 7 projects was attributed by the Management mainly to paucity of funds (7 cases), law and order problem (6 cases) delays in land acquisition (3 cases) and adverse geo-mining conditions (one case). Delays caused due to paucity of funds (7 cases) and adverse geo-mining conditions point out to lack of planning and improper survey on the part of the Management.

2A.7.4 Implementation of projects

2A.7.4.1 Ravindra Khani

Ravindra Khani – 7 (RK-7) incline in Srirampur area was a working mine deploying conventional [1]'bord and pillar method' of mining. To meet the increased demand for power grade coal (D&E), a Reconstruction Report for RK-7A incline was prepared in June 1983 which envisaged extraction of coal from 1A seam. The Reconstruction Project was later (May 1984) split into RK-7 project for conventional method of mining and RK-New Tech (RK-NT) project for introduction of Longwall technology at an estimated outlay of Rs.62.77 crore. This was followed by a Feasibility Report of December 1986 envisaging introduction of two Longwall units. The Feasibility Report was revised six times thereafter, increasing the outlay to Rs.242.94 crore in May 1995, with an annual production of 12.20 lakh tonnes. The Internal Rate of Return (IRR) was assessed at 5.72 *per cent* at 85 *per cent* performance level.

While the project was being implemented, Government of India (GOI) directed (October 1996) all the Coal PSUs that status of all financially unviable ongoing projects approved in the past where the IRR was less than 16 *per cent* at 85 *per cent* performance level were to be reviewed, with a view to drop them forthwith. By the end of 1996-97, the Company had incurred an expenditure of Rs.10.21 crore on the project. The committee constituted to review the financial viability of RK-NT reported (May 1998) that in view of adverse geo-mining conditions:

(a) introduction of capital intensive Longwall technology would not be financially viable;

(b) the Project would not attain the required IRR and

(c) any other alternative technology could not be introduced because of steeper gradient and nature of roof and floor.

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[1] Bord and Pillar method of Mining Coal Seams involves driving of a series of narrow headings in the seam to form pillars of square/rectangular shape (development) extracted subsequently (De pillaring).

The Board of Directors referred (April 1999) the matter to the CMPDIL, for an expert opinion on alternative technology options for financial viability. CMPDIL suggested (June 2000) that as an amount of Rs.17.82 crore (consisting of mine development Rs.4.55 crore, plant and machinery Rs.12.92 crore, land and service buildings Rs.0.35 crore) was already spent up to 1998-99 on the project, the probable alternative would be to continue present conventional method of mining and make efforts to enter into a cost plus arrangement with the linked consumer to ensure financial viability. Incidentally, GOI had also advised (October 1996) the Company for a similar arrangement. However, the technical committee advised (February 2001) that the possibility of introducing Side Dump Loaders (SDLs) be explored while withdrawing Longwall technology as the Hand Section Mining was becoming costly due to wage revision in every five years. The Board agreed (February 2001) for the withdrawal of Longwall technology but decided to introduce 10 SDLs at a capital outlay of Rs.33.82 crore. The Company incurred a total expenditure of Rs.14.79 crore (total expenditure Rs.20.33 crore less mine development written off Rs.1.81 crore, plant and machinery written off Rs.3.70 crore and assets transferred Rs.0.03 crore) on this project up to 31 March 2002.

Audit observed that:

The project was continued against Government directives

i) continuation of the Project was in violation of the directives of GOI and recommendations of the CMPDIL and committee constituted by the Company itself.

ii) the Company did not evaluate the project afresh *ab initio*, as to continue or abandoning but continued with the project and incurred an expenditure of Rs.10.12 crore from 1997-98 to 2001-02. It was also decided to introduce SDLs, though their operation was a failure in the past. The Company initiated (October 2002) action for procurement of three SDLs (estimated cost Rs.0.69 crore).

The Company replied (April 2002) that keeping in view the already built up capacity, discontinuance of the project was not considered appropriate and the option of conventional mining and SDLs was proposed, though it was not yielding the stipulated IRR.

The reply is not tenable, as the SDLs were not successful in the past. Hence, the Company should have planned only for conventional mining as recommended by CMPDIL/technical committee.

2A.7.4.2 Introduction of Blasting Gallery method in 21 Incline

CMPDIL opined that BG method was not suitable in 21 incline

The Company identified (June 1994) MM 1,3,4 and 7 panels of 21 incline at Yellandu area along with coal in queen seam under goaved out index seam for introducing the Blasting Gallery Method (BG Method) and sought the opinion from CMPDIL, who opined (May 1997) that the BG Method in 21 Incline was not suitable. In the meantime, Government of India (GOI) directed (October

1996) all the coal Companies not to approve new projects not meeting the criteria of financial viability and only those projects, which give at least 16 *per cent* IRR at 85 *per cent* capacity utilisation, should be considered viable.

Approval of an unviable project lacked justification

In spite of non-suitability of BG Method, output of coal being of 'G-grade' as well as the IRR being 8.83 *per cent* at 85 *per cent* capacity utilisation, the Company approved the project (February 2000) at a cost of Rs.29.78 crore (Plant and Machinery Rs.24.48 crore, training and technical assistance Rs.4.21 crore and other expenses Rs.1.09 crore). Decision to approve the project in spite of unviability lacked justification.

Implementation of unviable BG method resulted in huge idle investment

To implement the BG method, the Company had incurred Rs.2.44 crore up to March 2002 towards purchase of equipment. Due to poor quality of coal, the project was kept in abeyance since March 2001 and the equipment procured was diverted to GDK 8, 10 and 10A inclines in Ramagundam area. Besides, the Company incurred Rs.2.71 crore towards wages and training expenses. Thus, implementation of an unviable project resulted in an additional expenditure of Rs.2.44 crore and payment of idle wages of Rs.2.71 crore.

The Company could not put forth any convincing reasons for implementation of the project despite being unviable and also against the Government directions.

2A.7.4.3 Execution of Goleti Longwall and Marginal Scheme

Based on the recommendations (December 1985) of USSR experts, a Feasibility Report (FR) for extraction of coal from depths of 150 to 300 Metres was prepared (May 1987). The FR envisaged deployment of Barrierless Mechanised Longwall (BML) technology at a capital outlay of Rs.102.07 crore which envisaged drivage of three inter-seam tunnels to cross the two faults delineated. The project envisaged consultancy from USSR.

The work on the project commenced in April 1992. The project could not progress as envisaged because of financial crunch. Besides, the expected tie-up did not materialise due to political changes in USSR. BML technology was also not available with any other country. Meanwhile, Government of India directed (June 1994) that all delayed projects where funding was sparse i.e., only five *per cent* expenditure was incurred over a 60 *per cent* gestation period as of March 1994, be shelved. By March 1995, the Company had incurred an expenditure of Rs.3.13 crore, which was three *per cent* of the approved capital outlay and had used up 62.5 *per cent* of the gestation period. The Board decided (March 1996) to shelve the scheme. However, the Board accorded sanction for another scheme called "Marginal Scheme-Goleti-1 Extension". The Feasibility Report (January 1996) envisaged drivage of a pair of tunnels to gain entry into the dip side. The capital outlay was estimated at Rs.7.47 crore (including the expenditure of Rs.3.13 crore already incurred under the Longwall scheme till March 1995). The work on Marginal Scheme commenced in April 1996 and was scheduled to be completed by March 1999.

After drivage up to a length of 60 m as against 810 m envisaged, the tunnels, excavated till July 1996 had collapsed due to extremely disturbed ground conditions and drivage of tunnel was found (June 1999) to be impossible because of highly disturbed geo-mining conditions. The committee constituted (September 1999) to review the Scheme recommended (October 1999) shelving the project. The Board approved (December 1999) closure of the Marginal Scheme and decided to write off Rs.1.41 crore incurred on drivage of tunnel and to charge Rs.3.13 crore to existing Goleti-I mine.

Project was not closed as per Government directives

Project was continued under a new name in spite of adverse geo-mining conditions

Audit observed that the Company while shelving (March 1996) Goleti Longwall scheme, sanctioned (March 1996) Marginal scheme despite knowing the adverse geo mining conditions and incurred further expenditure of Rs.1.41 crore, which was rendered infructuous.

2A.7.4.4 GDK 9 Vakilpalli Project

The Company approved (March 1993) a Feasibility Report (FR) for drivage of two tunnels of 1104.52 metres (belt tunnel 608.72 m and haulage tunnel-495.8 m) in III and IV seams of Vakilpalli block of GDK-9 at a total estimated cost of Rs.5.58 crore to be completed by March 1997. The extraction of coal from the III seam would be by Blasting Gallery method (BG) and IV seam by Longwall method (LW). As against the scheduled date of commencement of work in March 1993, the drivage of belt tunnel commenced in October 1994 and haulage tunnel in October 1996. The work was completed in March 2001 at a cost of Rs.13.72 crore as against the scheduled date of completion of March 1997. The delay in completion was due to non-availability of spares, frequent machine traction problems, roof collapse near fault zone, execution of re-supporting work, reluctance of workmen to lift the muck manually which could have been avoided had the Company took timely action in procurement of spares and by proper planning. The increase in cost was on account of delay in completion of work associated with roof collapse near fault zone; execution of re-supporting work and low work turnout by workers in removal of muck. Though the work was completed, the Management had not yet (March 2002) finalised the technology to be adopted for extraction of coal in both the seams.

Technology to be used was not decided though mine was completed

Management stated (February 2002) that in view of changed economic scenario and IRR stipulated by Government, no firm proposal was finalised with regard to the method of working and technology to be used till today. The reply is not tenable, as the Company had incurred a total expenditure of Rs.13.72 crore without studying the economics of exploitation of coal in GDK 9 Vakilpalli project.

2A.8 Production Performance

2A.8.1 Targets and Achievements

The Company has been operating underground (UG) mines and open cast (OC) mines for extraction of coal. Details of target vis-a-vis actual production achieved during 5 years ended 31 March 2002 are given in **Annexure 14**. It may be seen therefrom that production achieved was lower (88.15 *per cent*) during 1998-99 and higher (99.39 *per cent*) during 2001-02 as against respective targets. The shortfall in production during the above five years was attributed by the Company to

- power failure (2.86 lakh tonnes),
- break down of machinery/shortage of machinery/lack of equipment (31.32 lakh tonnes),
- major strike by workmen of the Company (54.72 lakh tonnes)
- other reasons (67.13 lakh tonnes).

Loss of production was due to inadequate planning

It would be observed that the losses on account of break downs of machinery, shortage of machinery and lack of equipment could have been controlled with adequate advance planning.

2A.8.2 Performance of Mines

Though the Company had achieved targeted production of over 88 *per cent* during the 5 years ended March 2002 and earned profit in all the 5 years, the under ground mines of the Company incurred huge losses of Rs.1926.67 crore while the OC mines incurred losses to the extent of Rs.77.73 crore as shown in the below table:

Year	No. of working mines		No. of profitable mines		No. of loss incurring mines		Net Loss incurred (Rs. in crore)	
	UG	OC	UG	OC	UG	OC	UG	OC
1997-98	59	11	6	9	53	2	292.60	37.88
1998-99	58	11	5	9	53	2	307.34	23.20
1999-2k	57	11	2	10	55	1*	346.62	2.34
2000-01	56	11	0	11	56	0*	582.00	6.34
2001-02	56	11	4	9	52	2*	398.11	7.97
Total							1926.67	77.73

* In addition, a part of OC-I mine of Yellandu area viz., Block ‘C’ of OC-I had also incurred loss in these years.

Large number of under ground mines incurred loss, though production targets were substantially achieved

Audit observed that during five years ended March 2002, losses in 15 mines (UG) were more than Rs.25 crore. The total operating loss incurred was Rs.604.37 crore. Though production targets were substantially achieved in these mines, the average sales realisation did not cover even operating cost and the Company continued to incur cash losses year after year.

Management did not take any action to bring down continuous cash losses.

2A.8.3 Targets lower than Break-even Production

Actual production in many areas was below breakeven production and contributed to losses

A review of the area-wise details of break-even production, targeted and actual production during the years 1997-98 to 2001-02 indicated that in 8/9 areas out of 12, the actual production was far below the break-even production contributing to losses as indicated in **Annexure 15**.

It could be seen from the details in **Annexure,** that targets were fixed much below break-even capacity. It was stated by the management (November 2001) that, in general, OC mines were profitable and in many of the UG mines break-even production was much higher than the capacity of the mines, and was not attainable (like mines in Bellampalli area, Mandamarri, Ramakrishnapur, Srirampur areas which were mostly UG hand section mines). It was further stated that with a view to reduce cost of production, steps like substitution of manual coal filling by mechanisation, identification and redeployment of surplus manpower, closing of heavy loss making mines etc., were being taken.

2A.8.4 Methods of Mining

The Company had been extracting coal by hand section mining and machine mining in underground mines and opencast mining in OC mines. Details of technology-wise production during the last 5 years ending March 2002 were as given in the following table:

(In lakh tonnes)

Year	Underground Mines						Total Under ground mining	Total Open cast mining	Total
	Hand Section Mining	Machine mining							
		Road Headers	Load Haul Dumpers	Blasting Gallery method	Long wall method	Total machine mining			
1997-98	103.05	2.34	2.03	9.59	19.20	33.16	136.21	153.20	289.41
1998-99	104.96	1.84	0.31	6.01	16.42	24.58	129.54	143.72	273.26
1999-2k	104.43	1.76	0.83	5.10	15.80	23.48	127.91	167.65	295.56
2000-01	114.56	1.34	1.00	7.31	13.66	23.31	137.87	164.87	302.74
2001-02	112.93	1.36	2.56	9.35	11.27	24.54	137.47	170.64	308.11

Audit observed that though the Company had earned a profit of Rs.3027.52 crore under opencast mining during the 5 years period ending March 2002, it suffered losses to an extent of Rs.1792.11 crore on account of its underground mining under various technologies excluding longwall. Under longwall technology mining, the Company suffered a loss of Rs.90.53

crore during the said period. Longwall mining being major output yielding method under machine mining, its performance is discussed in the following paragraphs.

2A.8.4 1 Longwall Mining

The implementation of Longwall mining in VK-7 and JK-5 was examined and included in the Report of the CAG of India for the year ended 31 March 1998 (Commercial). The working of PVK and GDK 9 was reviewed and the findings are discussed in the succeeding paragraphs.

2A.8.4.1.1 Padmavathi Khani (PVK)

The Company procured two longwalls in February 1995 at a cost of Rs.84.81 crore and commissioned in August 1995 and June 1996. During the performance guarantee period (135 days), under the supervision of supplier's representatives, the targets of production as per Feasibility Report (FR) were achieved. During the subsequent period from 1996-97 to 2000-01, the targets were never achieved even though they were scaled down compared to FR. The Company had not taken any action to increase the performance of longwall in this mine like seeking the advice of the machinery suppliers or imparting training to the employees at supplier's works in handling the machinery etc.

In Padmavathi Khani of Kothagudem area the *percentage* of utilisation of Longwall I unit was 16, 12,18,12 and 36 of its Scheduled Shift Hours (SSH) and 20, 14, 25, 16 and 75 of its Machine available hours (MAH) while the *percentage* of utilisation of Longwall II was 30, 29, 18, 28 and 18 of its SSH and 44, 42, 23, 58 and 27 of its MAH during the years 1996-97 to 2000-2001 respectively. The under utilisation of both the longwalls was due to delay in preparation of longwall panels and roadways.

Inability to use two longwalls at a time resulted in over absorption of fixed overheads

Audit observed that the Company was not able to utilise and deploy the two longwall units at a time into the mine to get maximum production. Due to low utilisation of equipment, the average per day production came down from 3354 tonnes to 1242 tonnes in respect of LW I and from 3147 tonnes to 1032 tonnes in respect of LW II. This resulted in over absorption of wages by Rs.13.68 crore, depreciation by Rs.29.27 crore and interest by Rs.19.48 crore during the five years ended 31 March 2002.

It was replied (June 2001) that the decision had been taken to divert one longwall equipment to other needy mines.

It is clear from the reply that the decision to divert the longwall equipment to other needy mines was taken only on the basis of audit observations so as to avoid idleness of the equipment at PVK mine.

2A.8.4.1.2 GDK.9 Vakilpalli Block

The Company prepared (February 1988) Feasibility Report (FR) for extraction of 4.50 lakh tonnes of coal per annum with two Road Headers (0.60 lakh

tonnes) and a longwall (3.90 lakh tonnes) from I Seam of Vakilpalli Block (Project), an extension mine of GDK 9 at a cost of Rs.32.03 crore. Life of the mine was 12 years. The project costs were revised several times taking into account upgraded support capacities of longwall and finally revised (April 1994) to Rs.88.80 crore which was approved (December 1995) by Government of India. The life of the mine was revised to 13 years. The project was completed in February 1996 at a cost of Rs.88.00 crore.

Audit observed that:

Increase in capacity of shield support did not increase coal production

- though the capacity of shield supports was increased by 0.60 lakh tonnes per annum at an additional cost of Rs.17.75 crore, actual production ranged between 0.43 and 2.81 lakh tonnes per annum against target of 4.50 lakh tonnes during the years 1997-98 to 2001-02. The reasons for low production were abnormal strata problems and roof cavities.
- as against 23732 available machine-hours (after allowing for maintenance and breakdowns), the Longwall worked for only 3649 hours (15.37 *per cent*) during the period from February 1997-98 to 2001-02. Low utilisation of longwall resulted in loss of production of coal by 14.96 lakh tonnes valued Rs.137.90 crore. Consequently, the overheads amounting to Rs.34.07 crore were over-absorbed during the period from 1997-98 to 2001-02. The reasons for low utilisation were attributable to delay in shifting Longwall in respect of four panels (10326 hours), lay-off (2044 hours), shift change (2742 hours), roof support (2849 hours) and other reasons (2122 hours). Unduly long time was taken for shifting of the Longwall from one panel to another, which ranged from 161 to 191 days as against 60 days stipulated in the FR (February 1988). As such, delays could have been avoided had the Company made advance planning and ensured preventive maintenance including discipline among workmen/employees etc.

Thus, the additional investment of Rs.17.75 crore made in increasing the capacity did not yield the anticipated benefit.

2A.8.5 Uneconomical working of mines

2A.8.5.1 Most of the underground mines and a few opencast mines were incurring losses. A review in audit of the working of such mines revealed that the operations of certain mines were continued though uneconomical, while certain other mines were closed belatedly. The details are discussed in the succeeding paragraphs.

2A.8.5.2 Closure of PK.OC-I Project, Manuguru area

Prakasham Khani Open cast-I Project, (PK OC I) in Manuguru Area started production during the year 1979-80. As per the Project Report (July 1979) the saleable reserves of coal were estimated at 143 lakh tonnes and the corresponding overburden (OB) to be stripped worked out at 256 lakh bench

Reasons for abnormal extraction of coal and OB were not analysed

cubic metres (lbcm) with a stripping ratio of 1 tonne coal : 1.80 cubic metres OB. The Project was closed with effect from 30 June 2000 due to exhaustion of reserves. In this connection, Audit observed that the Company extracted coal to the extent of 178.48 lakh tonnes, which was 35.48 lakh tonnes more than the estimated 143 lakh tonnes. It was also observed that the Company incurred Rs.5.47 crore on excavation of 901500 cum of OB beyond the stripping ratio. Without analysing the reasons for increase in OB removal, the additional expenditure was written off in the accounts for the year 2000-2001.

Non re-deployment of excess manpower resulted in idle wages

Though the mine was closed in June 2000, out of 288 workmen at the mine, only 245 workmen were re-deployed in April/May 2001 leaving the remaining 43 workmen redundent (February 2002). Retention of this excess man power at the closed mine without redeployment resulted in payment of idle wages of Rs.3.00 crore. The Company accepted (April 2002) the delay in redeployment and stated that surplus workmen would be absorbed against future vacancies.

2A.8.5.3 Closure of Underground Mine at Hemachandrapuram

The unviability of the mine due to high cost of production was commented upon in para 4A.3.2 of Report of CAG of India for the year ended 31 March 1998 (Commercial)-Government of Andhra Pradesh. Due to geological disturbances, non-availability of working places, unsafe working and recurring losses, the Company decided to stop production from this mine from 01 April 2001 and write off outstanding development expenditure of Rs.4.85 crore. The actual loss per tonne during the years 1997-98 to 2000-01 ranged between Rs.461 and Rs.1870.

Continuation of uneconomic mine resulted in a loss of Rs.28.36 crore

A review of performance of the project for the years 1997-98 to 2000-01 revealed that the Company produced 3.54 lakh tonnes of coal from the mine and suffered a further loss of Rs.28.36 crore (Rs.801 per tonne) due to continuance of this uneconomical mine. It was further observed that the total production from this mine was meagre and the Company could not realise even operating cost excluding depreciation and interest during all these four years. In spite of a comment made by CAG in the report for the year ended 31 March 1998, the Company continued operation of the mine up to March 2001 and incurred further loss of Rs.28.36 crore.

2A.8.5.4 Continuance of Underground Mine Mahavir Khani-6

The underground (UG) mine Mahavir Khani-6 (MVK-6) in Bellampally Area was under operation since 1984. As per the FR of the mine, the extractable coal reserves were 7 lakh tonnes with the rated capacity of one lakh tonnes, per annum.

Since inception (1984), the quantity of coal extracted was far below the rated capacity and the mine was also incurring losses. In view of the low productivity, it was proposed in December 1989 to hand over the entire area to the nearby existing OC mine . However, only a part of the mine was handed over to the OC mine during 1993 (after a delay of 4 years), by which time a quantity of 492903 tonnes of coal was already extracted. Though the

quantities indicated in the FR were extracted by the end of 1996-97, coal was continued to be extracted (August 2000) extending the mining activity to the dip side of the mine. Proposals for discontinuance of working of the mine because of uneconomical working were submitted (July 2000) and the mine was finally closed in February 2001.

Continued operation of mine without recovery of variable cost resulted in loss of Rs.18.51 crore

Operation of an UG mine even without recovery of variable cost in 3 out of 4 years from 1997-98 to 2000-01 resulted in loss of Rs.18.51 crore.

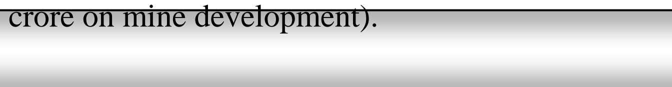
2A.8.5.5 Open Cast Block 'E' Project at Yellandu

Incorrect assumption in feasibility report resulted in idle investment of Rs.4.05 crore and idle wages of Rs.0.87 crore

The Company approved (May 1999) the project with an investment of Rs.12.17 crore for extraction of 7.43 MT of 'G' grade coal with 18 years of mine life with an yearly target production of 0.45 MT at 100 *per cent* capacity utilisation. The total manpower requirement was 193. Though 'G'grade coal was anticipated, the Company proposed to maintain 'F' grade by mixing coal produced from other mines in the area and incurred an expenditure of Rs.4.05 crore up to the end of March 2000 towards Mine Development (Rs.33.38 lakh), Plant and Machinery (Rs.3.68 crore) Service Buildings (Rs.2.16 lakh) and Factory Buildings (Rs.1.63 lakh). After commencement of revenue production (August 2000), the Company felt that it might not be possible to convert 'G' grade coal into 'F' grade coal. From August 2000 to August 2001, a quantity of 364755 tonnes of coal was extracted as against envisaged production target of 485000 tonnes as per FR. Further, due to conclusion of Fuel Supply Agreements (FSAs) with linked/core sector customers, the production was completely stopped from September 2001. The plant & machinery were shifted to adjacent mines. Besides, the Company incurred idle wages of Rs.0.87 crore on 193 workmen from September 2001 to February 2002.

It was replied (April 2002) that, as per the Fuel Supply Agreements (FSAs) with power sector consumers, the management was required to supply certain percentage of 'G' Grade coal and any slippage of grade would lead to payment of high penalties and as such the Company decided to temporarily stop production from Block E mine till sweetening arrangements were made at CSP.

Thus, taking up the project without proper examination resulted in infructuous expenditure of Rs.1.20 crore (Rs.0.87 crore towards idle wages and Rs.0.33 crore on mine development).



2A.9 Plant & Machinery utilisation

2A.9.1 Draglines, Shovels, Dumpers, Dozers and Drills are the Heavy Earth Moving Machinery (HEMM) used in opencast mining for removal of overburden and extraction of coal. As on 31 March 2002, the Company had 2 Draglines, 68 Shovels, 393 Dumpers, 76 Dozers and 57 Drills. The table

below indicates the available excavation capacity of HEMM and utilisation thereof for the last five years ended 2001-02.

Year	Excavation capacity in lakh tonnes	Actual production in lakh tonnes	*Percentage* of utilisation
1	2	3	4
1997-98	**710.12**	**483.20**	**68**
1998-99	**754.21**	**483.89**	**64**
1999-00	**782.34**	**553.12**	**71**
2000-01	**798.59**	**623.75**	**78**
2001-02	**782.07**	**629.46**	**80**

It could be seen from the above that the capacity utilisation during the five years ended March 2002 ranged between 64 and 80 *per cent*.

2A.9.2 Analysis of down time to HEMM

The following table indicates the standard vis-a-vis actual down time (breakdown) and idle time after allowing normal maintenance hours during the period from 1997-98 to 2001-02.

Category of HEMM	Standard *percentage* of down time as per CIL norm	Actual *percentage* of down time	*Percentage* of idle hours to machine available hours
Dragline	15	5 – 11	18 – 27
Shovels	20	22 –29	47 – 52
Dumpers	33	32 –45	53 – 62
Dozers	30	36 – 46	41 – 51
Drills	22	23 – 44	61 – 71

It would be seen from the table above that the *percentage* of actual down time during all the 5 years period ending 31 March 2002 was higher than the norms of Coal India Limited (CIL) except in the case of Dragline, in spite of the fact that the Company was equipped with Regional workshops and had long term contract with M/s Cummins Diesel Sales and Service (India) Ltd., for reconditioning of engines relating to Dumpers, Shovels and Dozers since 1994.

On the report of CAG of India for the year ended 31 March 1997 (Commercial), though COPU had recommended segregation of controllable and non-controllable factors in breakdown of HEMM, the Company had not segregated the same and taken action to fix responsibility for breakdowns due to controllable reasons.

A further review of availability and utilisation of HEMM in respect of Ramagundam and Bellampally regions revealed that-

i) the *percentage* of availability was generally less than the norm prescribed by Central Mine Planning and Design Institute Limited (CMPDIL);

ii) the available hours were not utilised;

iii) the meagre utilisation of available hours involved an additional payment in the form of overtime allowance amounting to Rs.14 crore during the period from 1997-98 to 2001-02;

iv) reasons for idle hours were not analysed to ascertain whether these were avoidable or otherwise; and

Low utilisation of HEMM had resulted in off loading of OB removal at cost of Rs.331 crore

v) because of poor utilisation of HEMM, targets for removal of OB could not be achieved resulting in backlog which, in turn, resulted in off-loading of OB removal work to contractors by incurring an expenditure of Rs.331 crore in Ramagundam and Bellampally opencast mines during the period from 1997-98 to 2001-2002 which could have been reduced to a large extent by optimum utilisation of available HEMM.

2A.9.3 Under-utilisation of Underground Machine Mining Equipment

2A.9.3.1 RG II area of Ramagundam region of the Company had been operating four underground (UG) mines to the end of March 2002. As at the end of March 2002, the investment on plant and machinery in all the above mines stood at Rs.133.78 crore (written down value Rs.33.40 crore).

Audit noticed that:

i) the utilisation of LW, RH and LHD (BG) was very low which ranged between 12 and 41 *per cent* during the period from 1997-98 to 2001-02;

Under utilisation of Longwall mining equipment resulted in short fall in production valued at Rs.153.41 crore

ii) the *percentage* of idle hours was very high and accounted for 77, 88 and 59 in respect of LWs, RHs and LHDs (BG) respectively.

Underutilisation of BG equipment resulted in shortfall in production valued at Rs.92 crore

iii) Against the targeted production of 47.73 lakh tonnes of coal under LW method for the five years ended March 2002, the actual production of coal was 31.18 lakh tonnes only due to under-utilisation of under ground machine mining equipment, which consequently resulted in short fall in production by 16.55 lakh tonnes valued at Rs.153.41 crore and similarly, against the targeted production of 40.55 lakh tonnes of coal under BG method, the actual production of coal was 30.57 lakh tonnes due to underutilisation of plant and machinery resulting in a shortfall of production of 9.98 lakh tonnes valued at Rs.92.00 crore.

The Company stated (April 2002) that under-utilisation of underground machine mining equipments was mainly due to age of equipment (Road Headers), delay in preparation of long wall panels, occurrence of fire in four different panels at GDK 8 and 10 leading to premature sealing of panels,

increased depth working and proximity of faults in GDK 8. The reply of the Management is not tenable as the delay in peparation of long wall panels was due to inadequate planning and the feasibility report of the mine was prepared after taking into account the depth workings of the mine.

2A.9.4 Avoidable Expenditure towards Shunting Charges

The Company was loading coal into Rail wagons at various Coal Handling Plants (CHPs) with the help of endless hauler system. In Kondapur CHP (KCHP) at Manuguru, out of the two lines where the loading of coal was being made into the rail rakes, while in one line there was endless hauler system, on the second line, creep speed engine of Railways was being used. For using the creep speed engine, the Company had paid shunting charges to an extent of Rs.4.65 crore from 1992-93 to March 2002 at specified rates.

Non-installation of endless hauler system resulted in avoidable expenditure of Rs.2.30 crore

The Company proposed (March 2002) installation of endless hauler rope system on second line at an estimated cost of Rs.0.70 crore at a recurring operating expenditure of Rs.23.51 lakh per annum. Had the Company installed the endless hauler rope system on second line of KCHP also, it would have saved Rs.2.30 crore (Rs.4.65 crore minus Rs.23.51 lakh X 10 years) during the years 1992-93 to 2001-02. The Company accepted the observation (April 2002).

2A.9.5 Unnecessary procurement of 35 tonne Dumpers

A Committee of officers formed (May 2000) to study the HEMM configuration and identify the mismatch in excavation and transport equipment in the Company concluded (July 2000) that there was no mismatch in respect of 85 tonne Dumpers and 50 tonne Dumpers. The Committee, however, stated (July 2000) that the 28 number of "35 tonne Dumpers" (12 in Yellandu OCPs, 12 in Manuguru OCPs and 4 in Bellampalli OCPs) had completed their life and were beyond economical repairs and were to be surveyed off without replacement. The proposal for procurement of 40 Nos of 35 tonne Dumpers was placed before the Board (February 2001), without informing the Board either about the existence of mismatch or the findings of the Committee, which was highly irregular. Orders were placed (February 2001) for procurement of 40 numbers of 35 tonne Dumpers valued at Rs.23.95 crore. Management stated (June 2002) that the procurement was to meet the production targets based on the lead distances projected for the year 2000-01. Audit, however, observed that, out of these 40 Dumpers, procurement of 11 Dumpers valued at Rs.6.59 crore was not in conformity with the findings of the Committee and was in excess of requirements.

2A.10 Overburden removal

2A.10.1 Non-introduction of selective mining by surface miner

Non-removal of coal by selective mining resulted in loss of revenue of Rs.9.19 crore

In the top seams of overburden (OB), two coal layers viz., Horizon-II and Horizon-III existed in Block-D Prakasam Khani of opencast project-2 (PK OC 2) of Manuguru. The quantity of coal of different grades contained in these two layers was estimated at 3.18 lakh tonnes, which can be extracted by selective mining i.e., by using surface mining technology. The contractor removing OB in this mine, was not removing the coal between the two layers of OB as it was interfering with their progress of work. By removing this coal, the Company would earn additional revenue of Rs.17.40 crore. The Company, therefore, identified M/s Wirtgen India (P) Ltd., who were doing similar job at Mahanadi Coal fields since June 1999 and placed (September 2000) an order on them for mining these coal layers, on nomination basis at a rate of Rs.62.30 per bank cum, with a stipulation to complete the work within eight months. The contractor did not take up the work. However, at the request of the Company the existing OBR contractor excavated 1.50 lakh tonnes of coal from the above layers, without any extra cost. The balance quantity of 1.68 lakh tonnes of coal was mixed up with OB and was not in a position to retrieve the same which resulted in loss of revenue of Rs.9.19 crore.

2A.10.2 Backlog in removal of Overburden

Non adherence to calendar programme for removal of OB resulted in accumulation of backlog

The Feasibility Report (1994) for OC mine II in Ramagundam region stipulated a Calendar programme, which envisaged uniform removal of OB throughout the life of the mine. The mine was taken into revenue in 1995-96. A review of the quantities of OB removed up to 1995-96 revealed that, with reference to the Calendar programme, there was a shortfall in removal of OB, which represented two years' effort. The backlog was not reduced but was increased to four years' effort by 1997-98. Management's proposal to supplement the efforts of the Company for removal of OB was approved by Board (March 1998) and the Company off-loaded part of removal of OB to contractors from 1998-99 onwards.

For removal of backlog in OB there would be an additional expenditure of Rs.9.73 crore

Audit observed that there was a delay of two years in taking corrective action and quantities off-loaded during the period from 1998-99 to 2001-02 at a cost of Rs.123.72 crore were not sufficient to clear the backlog and backlog of 97.74 lbcm existed as on 31 March 2002. Removal of this quantity would entail an expenditure of Rs.59.44 crore, including an additional expenditure of Rs.9.73 crore (representing the difference between current cost of removal of OB and the cost prevalent in the previous year).

It was replied (February 2002) that the delay was on account of efforts made to stabilise the system. The reply is not tenable as the Company could have commenced off-loading to clear the backlog swiftly since any shortfall in removal of OB would result not only in extra expenditure subsequently but also in non-achievement of targets for extraction of coal.

2A.10.3 Loss due to incorrect check survey

A contract for removing 100 lakh bank cubic metres (lbcm) of OB subject to plus or minus 10 *per cent* variance was awarded (September 1998) to a contractor. The work was to be completed by July 1999. The contractor removed only 89 lbcm by end of July 1999 and requested to foreclose the contract under force majeure conditions. The Company did not accede to the request on the grounds that the leftover work was mostly in the lower horizon and the execution of which would be costly at a later date. Though non-acceptance of the Company was intimated to the contractor (September 1999), the contractor refused to execute the balance work. The Company check-measured (December 1999) the quantities executed up to July 1999 as 90.68 lbcm (though the contractor estimated it as 88.84 lbcm) and as this was within the stipulated variance, accepted to foreclose the contract. The final bill was also settled (February 2000).

The Company awarded next contract of OB removal (February 2000) to another contractor, which included 9.32 lbcm left over OB by previous contractor. As certain discrepancies in reduced levels were noticed (March 2000) by the second contractor while executing the work, the Company conducted a joint survey (April/May 2000) and found that the quantity of OB removed by the previous contractor was only 88.84 lbcm and not 90.68 lbcm. The Company attempted (June 2000) to recover Rs.0.57 crore being the value of differential quantity of 1.84 lbcm from the contractor, but could not do so, as the contractor obtained (July 2000) an ex parte injunction order restraining the Company from withholding any amount payable to him. The case was subjudice (September 2002).

Incorrect check survey resulted in loss of Rs.1.85 crore

Audit observed that though the actual aggregate quantity of OB removed was within the stipulated limit, the shortages in the lower benches were as high as 57 *per cent*. In the absence of suitable clause in the agreement, the Company could not levy/recover penalties for short excavation of OB at individual reduced levels. The Company accepted (March 2002) the contention of Audit and stated that suitable clause would be included in future. Further, though the terms of the contract provided for recovery of any extra expenditure incurred in removal of quantities of OB left over, the Company neither recovered nor claimed such recovery of Rs.1.28 crore towards extra expenditure on the removal of left over quantities through the subsequent contractor. The reasons for the same were not on record.

2A.10.4 Diversion of HEMM for OB removal

The Gowthamkhani Open cast mine (GKOC) was not provided with any HEMM for removal of OB. However, HEMM was provided for extraction of coal. A review in Audit of the contracts for removal of OB awarded to outside agencies revealed that in respect of GKOC the work relating to calling for tenders, scrutinising the tenders received and finalising the contract was delayed and not properly planned.

After completion of contract for removal of OB in March 1997, there was a delay of 7 months in awarding the subsequent contract (November 1997). Consequently the Company had to deploy between April 1997 and November 1997 its own HEMM (meant for extraction of coal) for removal of OB of 2.78 lbcm. As a result the Company failed to achieve the targets both for removal of OB as well as extraction of coal. Since the opportunity cost of OB removal with the Company's HEMM was higher than that of off-loading rate, the Company incurred an additional expenditure of Rs.1.42 crore.

Delay in award of contract resulted in additional expenditure of Rs.2.50 crore

Further, after completion of another contract for removal of OB in May 2000, there was a delay of 5 months in awarding the subsequent contract (October 2000). During the interim period, the Company deployed its HEMM meant for extraction of coal for removal of OB. Since the unit cost of OB removal by the Company's HEMM was higher than that of off-loading, the Company incurred an additional expenditure of Rs.1.08 crore.

Due to delay in award of OB contracts as stated above, there was shortfall in production of coal by 5.80 lakh tonnes valued at Rs.39.33 crore during the years 1997-98 and 2000-2001. The Company accepted (April 2002) the loss of production due to not awarding OB removal contracts in time.

2A.10.5 Non-levy of penalty in OB removal contracts

The contracts awarded for removal of OB, *inter alia*, included terms and conditions stipulating month wise schedules for the work, viz., the levels, depths and the quantities to be achieved by the contractor as fixed by the Company. If these quantities were not achieved, they would be liable for penalty at one *per cent* per week subject to a maximum of 15 *per cent* of the value of incomplete quantum of work.

Foreclosure of contracts resulted in loss of Rs.0.85 crore

(a) A review of three contracts (viz., KOC-3 dated 16 May 1998, KOC-2 dated 13 April 1999 and KOC-7 dated 31 May 1999) for removal of OB in Kothagudem Area revealed that the contractors were allowed to foreclose the contracts without approval of the Board of Directors and without levy of penalty to the extent of Rs.0.85 crore. In respect of benches 1, 8 and 9 of contract dated 16 May 1998, benches 6 and 7 of contract dated 13 April 1999 and benches 1, 2 and 8 of contract dated 31 May 1999 bench-wise production was not achieved and unjustified closure of contracts, thus, resulted in loss of Rs.0.85 crore.

(b) A contract for removal of 42.50 lbcm of OB was awarded in September 1998. The work commenced in November 1998, and based on representation (November 1998) of the contractor, the quantity was reduced to 35.30 lbcm. The work was to be completed by May 1999. The contractor could remove OB of only 31.50 lbcm up to June 1999.

Audit observed that the Company closed (July 1999) the contract and did not levy penalty on the ground that the contractor had completed more than 90 *per cent* of the work though it worked out to 89 *per cent* only and agreed to carry out the left over work by deploying its HEMM. The penalty leviable (as

computed by Audit) worked out to Rs.13.99 lakh. Thus, a quantity of 3.80 lbcm of OB was removed deploying Company's own HEMM. This resulted in extension of undue benefit to the contractor to the extent of Rs.13.99 lakh.

2A.11 Manpower utilisation

The requirement of manpower in each mine and department is assessed by the Industrial Engineering Department (IED) of the Area during the last quarter of the financial year for the forthcoming financial year taking into consideration production schedules, type of technology deployed, layouts like pumping, coal evacuation system and statutory requirements. The mine authorities engage piece-rated workers on time rated jobs whenever there was a shortfall of time-rated workers.

Audit observed that:

Non-deployment of surplus man power resulted in idle wages of Rs.83.61 crore

a) continuance of surplus manpower over and above the requirement had resulted in payment of idle wages of Rs.83.61 crore for 5 years ended 31 March 2002;

Non-deployment of surplus man power in needy mines resulted in loss of production valued at Rs.803.27 crore

b) the Company failed to re-deploy surplus manpower to the needy mines where shortage existed. As a result, the Company had to incur idle wages and also suffered loss of production valued at Rs.803.27 crore (for five years ending 31 March 2002).

Production target valued at Rs.274.25 crore was not achieved in spite of existence of surplus man power

An analysis of some of the mines where excess manpower was existing during the last 5 years ended 2001-02 revealed that, in spite of existence of excess manpower in all the 7 mines during all the 5 years, production targets fixed for these mines could not be achieved. The total quantity of targets not achieved was 33.19 lakh tonnes of coal valued at Rs.274.25 crore (at average cost per tonne during the respective years).

Management stated (May 2002) that, surplus manpower was due to (i) closure of some mines because of depletion of reserves, geological disturbances and reduction of production activity, (ii) reduction of activity in the supporting departments due to change in technology and (iii) off-loading of certain activities i.e., removal of overburden, repairs to Machinery etc.

2A.12 Pricing Policy

2A.12.1 Pricing Policy

Government of India (GOI) deregulated prices of A, B and C grades of non-coking coal in March 1996, D grade coal in March 1997 and allowed (March 1997) the coal companies to fix prices of E, F and G grades of non-coking coal to a level not exceeding the prices as determined by updating the cost indices as per the escalation formula contained in the Report of the Bureau of

Industrial Cost and Prices, 1987 (BICP) with reference to the indices obtained from time to time. GOI further directed that first such revision of prices could be done immediately (March 1997) and thereafter up to 1 January 2000 on or about 1 July and 1 January every year. Consequently, the Company revised the prices of B and C grades of coal in April 1996 and in November 1996 and B to G grades of coal in March 1997, August 1998, September 1999, March 2000 and April 2001.

As per BICP formula, the increase in prices of E and F grades of coal was of the order of 43 *per cent* over the prices prevailing on 17 June 1994. However, the management increased prices of these grades of coal by 40 *per cent* only with effect from March 1997. Lesser increase in prices of these grades of coal not only resulted in loss of revenue in this revision but also had an impact on revision in prices made subsequent to March 1997.

It was replied (April 2002) that the deregulation order did not make it mandatory to review the prices once in six months or to make price revision to the extent of increase as contained in the BICP escalation formula. The reply is not tenable since the Government of India's directive was mandatory.

Non-revision of prices as per GOI directives resulted in loss of revenue of Rs.46.55 core

Thus, non-revision of prices of E and F grades of coal at regular intervals and as per GOI directives had resulted in loss of revenue of Rs.46.55 crore up to December 1999.

2A.12.2 Non-recovery of additional / actual price

Ramagundam Open Cast-II (RGOC II) project is a high capital-intensive project involving "in pit" crushing technology. The operating cost at full capacity utilisation of 20 lakh tonnes per annum was Rs.876.78 per tonne while sale realisation was Rs.660 per tonne. To make the project financially viable, GOI permitted (January 1996) the Company for levy of an additional price of Rs.216.78 per tonne in addition to the regular price of coal on despatches from this mine to NTPC, till the project became viable. While submitting the proposal to GOI, the Company considered only the additional cost per tonne on the basis of estimated cost of operation vis-à-vis sale price in 1995-96. As the actual cost of operation and sale price each year are subject to variation, the Company should have obtained orders from the Ministry of Coal for recovery of difference in total cost minus sale value each year, by way of additional cost.

The additional price was charged by the Company and paid by NTPC from January 1996 to 14 March 1997. When prices of coal were deregulated and the Company was empowered to fix coal prices, it revised the price but withdrew the additional price under the presumption that the revised price would cover the loss. Despite revision of prices the project sustained losses. When the loss of Rs.130.17 crore suffered by the Company (due to non levy of additional price) was commented in the report of the CAG of India for the year ended 31 March 1999 (Commercial)- Government of Andhra Pradesh, the additional levy was restored while revising prices w.e.f. 19 September 1999.

There was loss of revenue of Rs.26.70 crore due to non-control of expenditure within the additional price allowed

The uncovered cost of coal of RGOC-II mine over the sale price worked out to Rs.312.71 per tonne, for the year 1999-2000 (as on 18 September 1999), while the additional charge levied was only Rs.216.78 per tonne. On the despatches made to NTPC from 1999-2000 to 2001-2002 (November 2001), the Company suffered a loss of Rs.26.70 crore due to non-levy of actual cost as additional price.

Thus, obtaining orders of GOI for levy of additional price for future years on the basis of cost of operation of one year had resulted in a loss of revenue of Rs.26.70 crore besides making the project continuously unviable.

It was replied (April 2002) that with the revision of the basic price of relevant grades mined in RG OC-II the project could become viable. As this did not materialise as expected, a review was made during 1999-2000 and it was decided by the Board to charge the additional price of Rs.216.78 per tonne for the coal supplies from RG OC-II over and above the price applicable for relevant grades being mined and despatched from RG OC-II project. Accordingly, additional price of Rs.216.78 per tonne was being charged from 19 September 1999.

The reply is not acceptable since the Company could not control the expenditure within the additional price allowed and this resulted in loss of revenue of Rs.26.70 crore.

2A.13 Fuel Supply Agreements

The Company concluded Fuel Supply Agreements (FSAs) with APGENCO effective from 1 August 2001, Karnataka Power Corporation Limited (KPCL) effective from 1 September 2000, M/s Navabharat Ferro Alloys Limited, (NFA) Paloncha effective from 22 March 2000 and 02 November 2001 and M/s ITC Bhadrachalam Paper Boards Limited, (ITC) Sarapaka effective from 22 March 2000. However, the Company did not conclude FSA with its major customer viz., National Thermal Power Corporation.

A review of FSAs concluded with the above 4 customers revealed that as per article 6.3.1 and 6.3.2 of FSA concluded with NFA and Articles 6.3.A and 6.3.B of FSA entered into with ITC, the Company could, at the time of issue of delivery orders, levy 5 *per cent* of basic price of coal as guarantee charges and 1 *per cent* towards sampling and analysis charges representing expenditure on services provided by the seller. In case of any variation in grade in joint sampling, bill amount will be increased/reduced accordingly by raising debit/credit notes for the differential amount. However, these clauses were not incorporated in the FSAs concluded with major customers like APGENCO and KPCL. The reasons for the same were not on record.

2A.14 Credit Control

2A.14.1 Sundry Debtors

The Company supplies coal to its linked/unlinked customers both on cash and credit basis. The sales vis-à-vis debtors during the last five years ended 31 March 2002 along with the debtors considered doubtful were as under:

(Rupees in crore)

Year	Sales	Debtors		Total	Debtors considered doubtful	Sundry debtors as a *per centage* of sales	*Percentage* of doubtful debtors to debtors
		More than one year	Less than one year				
1997-98	2323.74	122.49	325.45	447.94	16.54	19.3	3.69
1998-99	2297.50	55.09	321.58	376.67	16.48	16.4	4.38
1999-2k	2650.98	53.45	113.26	166.71	16.95	6.3	10.17
2000-01	2741.32	53.59	222.54	276.13	18.88	10.1	6.84
2001-02	2949.02	86.44	183.09	269.50	23.54	9.1	8.73

As on 31 March 2002, the Company identified Sundry Debtors to an extent of Rs.23.54 crore as doubtful and made provisions in the books of accounts. The above amount represented:

- Rs.1.71 crore due from Tamil Nadu Electricity Board disputed on account of quality, quantity and presence of stone;
- Rs.8.48 crore due from Fertilizer Corporation of India not realisable due to supply of coal on credit basis;
- Rs.6.06 crore due from Indian Drugs and Pharmaceuticals Limited for supplies which was unrealisable on account of closure of the unit and referred to BIFR; and
- Rs.7.29 crore due from others.

Besides the above, the Company was treating the following disputed amounts as realisable and no provision was made there against:

- Rs.3.15 crore due from Karnataka Power Corporation Limited (KPCL) on account of grade slippage;
- Rs.9.31 crore towards freight element on short supply of coal which was already deducted by KPCL from its payments based on the Umpire award in the year 2000;
- Rs.7.66 lakh towards sales tax on transport charges disputed by Railways and

- Rs.5.24 crore towards differential sales tax amount from October 1990 to January 1997, as recoverable from Government of Andhra Pradesh.

Apart from the above, the Company was to realise an amount of Rs.3.05 crore towards house rent, electricity and water supply charges from the tenants which was more than six months old. However, no confirmations from the parties (Debtors) in respect of balances under Sundry Debtors were received.

2A.14.2 Inadequate Bank Guarantee against Credit Sales

Credit sales were not linked to value of Bank guarantee

The Company entered (April 1999) into an agreement with M/s. Kumar's Metallurgical Corporation Limited (KMCL) for supply of coal on credit basis. The terms of agreement *inter alia* included that for (i) all despatches, payment should be made by post-dated cheques payable within 30 days from the date of invoice (ii) the purchaser was to provide bank guarantee/letter of credit stating that post-dated cheques would be honoured on due dates and (iii) interest at the rate of 16.5 *per cent* would become payable for additional days of credit availed. KMCL furnished bank guarantee for Rs.32 lakh valid up to the end of June 2000.

The Company did not restrict the despatches to the extent of bank guarantee, but continued supplies beyond credit limit against issue of post-dated cheques. Further, 52 post-dated cheques issued by KMCL during February and March 2000 with dates of payment falling between 8 March 2000 and 26 April 2000 amounting to Rs.1.39 crore (including Rs.22 lakh for which despatches were stopped) were dishonoured. After encashment of two pay orders valued at Rs.19 lakh and bank guarantee of Rs.32 lakh, an amount of Rs.0.66 crore (excluding interest) was still outstanding (March 2002). The Company filed suits under Section 138 of Negotiable Instrument Act for bouncing of the cheques involving Rs.34.16 lakh and the same was pending in the court of law. Cases could not be filed in respect of all the cheques bounced in view of the court fee and incidental expenditure involved. Even after a lapse of 4 years, the entire amount together with interest of Rs.29.63 lakh was pending recovery (March 2002). Thus, non-limiting of despatches to the value of bank guarantee resulted in loss of Rs.0.66 crore to the Company.

2A.14.3 Non-Recovery of Interest from APGENCO as per Umpire Award

For delay in payment of dues by the customers, the Company was charging interest at rates ranging between 16.5 and 19.5 *per cent* per annum i.e. the rates at which the Company paid interest to its bankers on borrowed funds. As per the above practice, the Company charged interest on amounts due from APGENCO (erstwhile APSEB) also. Since APGENO did not agree to pay interest, the matter was referred to Umpire appointed by Ministry of Coal, GOI. The Umpire gave an award (September 1998) in favour of the Company to charge interest at the rate of 12 *per cent* per annum. The interest recoverable from APGENCO from 1982-83 to 2000-01 worked out to

As per Umpire award, interest due from APGENCO was not recovered

Rs.149.36 crore. In the Fuel Supply Agreement signed with APGENCO in August 2001, APGENCO agreed to clear interest dues within four months. However, the amount had not been realised (April 2002).

It was replied (February 2002) that the Company was adjusting the amount received from APGENCO through bonds against dues.

The reply is silent about adjustment of interest due to the Company and the Company was still pursuing with the APGENCO to realise the interest amount as per the Umpire award.

2A.15 Cash Management

2A.15.1 Avoidable payment of interest and processing charges

In order to repay GOI loans carrying higher rates of interest in advance of repayment schedule to pay National Coal Wage Agreement (NCWA) VI arrears and to meet working capital requirements, the Company borrowed Rs.600 crore from four banks after issuing limited tenders as indicated in the following table:

Name of Bank and dates of drawal of loan	Loan amount (Rs. in crore)	Rate of Interest	*Percent*age of processing fee	Period of repayment of loan
ICICI Bank Rs.100 crore on 10/08/2001 Rs.250 crore on 10/09/2001 Rs.50 crore on 3/10/2001	400	11.60	0.50	60 months
State Bank of Hyderabad (on 10/08/2001)	100	12.50	1.05	8 quarters
Indian Bank (10/09/2001)	50	11.75	1.00	60 months
Standard Chartered Bank (13/08/2001)	50	11.625	1.00	60 months

In this connection Audit observed that:

i) though the rates of interest and processing charges quoted by the three banks were higher than that of ICICI Bank, negotiations were not held with the three banks to match the rate of interest and processing charges to bring on par with quotation of ICICI. As a result, the Company had to pay additional processing charges of Rs.1.05 crore. Up to 31 March 2002, the Company had paid Rs.0.62 crore towards differential interest, due to non-matching interest rates.

Not negotiating terms of loan and non-drawing of loan with due care resulted in avoidable expenditure of Rs.2.36 crore

ii) in respect of loan drawn from State Bank of Hyderabad, the Company accepted the repayment in 8 quarterly instalments instead of monthly instalments. Had the repayment been accepted on monthly instalment basis the Company could have saved Rs.0.69 crore towards interest up to 31 March 2002 on reducing balance method. The Company decided (March 2002) to get the repayment of loan amount under monthly instalments instead of quarterly instalments. However, the same could not be got done in its favour so far (August 2002).

Thus, due to not negotiating the terms of loan and not drawing the loan with due care, the Company incurred an avoidable expenditure of Rs.2.36 crore.

2A.15.2 Disposal of Vidyut Bonds

In order to meet its cash flow requirements, the Company had contemplated (June 1999) disposal of Vidyut Bonds held by it through consultants. One M/s Karvy Consultants had offered disposal at 1.25 *per cent* premium with a commission of 0.35 *per cent*. M/s Anandam Consultancy (P) Ltd., who agreed for disposal at 1.25 *per cent* premium with a commission of 0.20 *per cent* was selected. It was, however, observed in audit that on the bonds valued Rs.10 crore (sold on 5 July 1999), the Company received premium at 0.25 *per cent* only as against the agreed premium of 1.25 *per cent* resulting in loss of Rs.10 lakh to the Company.

The Company had not preferred any claim for the differential amount of premium from them and thus, foregone an income of Rs.10 lakh on disposal of Vidyut Bonds.

2A.15.3 Delay in obtaining Non-deduction Certificate

During the years 1998-1999 and 1999-2000 the Company received interest on Vidyut bonds after deduction of Rs.1.63 crore and Rs.2.31 crore respectively towards tax deducted at source (TDS). As the Company was filing IT returns showing cumulative losses every year during the above period, it could have obtained exemption certificate from deduction of tax at source on the above interest income and avoided locking up of Rs.3.94 crore with APGENCO/APTRANSCO. Company could have consequently reduced the Cash Credit facility by Rs.3.94 crore and avoided payment of interest of Rs.32.67 lakh on the CC facility availed. Specific reasons for not obtaining exemption from TDS were not available on record.

It was replied (June 2002) that the non-deduction of TDS certificate was under process at Income Tax (IT) Department and by the time the Company received the tax exemption certificate, the interest income was received from APSEB after recovering the TDS.

The reply is factually incorrect as the Company received interest in December 1998 and June 1999 after deduction of income tax at source, from APGENCO whereas the Company submitted application for non-deduction certificate to IT Department only after receipt of the same (July 1999).

2A.16 Unfruitful investment in sick Company

At the instance of Government of Andhra Pradesh (October 1994) the Board of Directors of the Company agreed (November 1995) to take over Andhra Pradesh Heavy Machinery and Engineering Limited (APHMEL), a sick Company (already referred to BIFR in 1992) as its subsidiary and inducted Rs.9.18 crore towards equity as per BIFR package (February 1996) on APHMEL. APHMEL became subsidiary of the Company in June 1998 and the Company extended a total financial support of Rs.22.29 crore to APHMEL {Rs.9.18 crore towards equity, Rs.6.82 crore towards mobilisation of advances on order support, Rs.2.98 crore towards VRS loan (this loan was in addition to the VRS loan of Rs.1 crore granted by Government of Andhra Pradesh as Unsecured Interest-free loan) and Rs.3.31 crore towards interest on Advances}. On the mobilisation advances, interest of Rs.3.31 crore was accrued up to 31 March 2002. APHMEL incurred losses aggregating Rs.32.42 crore as on 31 March 2002 and its networth became negative. Considering the equity in APHMEL as not realisable, the Company made a provision for the entire equity of Rs.9.18 crore in its accounts for the years 1999-2000 and 2000-2001. The Company also failed to recover interest of Rs.3.31 crore. Besides, the Company did not even account for interest of Rs.0.74 crore that had fallen due during the years 2000-01 and 2001-02 on mobilisation advances. The Company was thus put to a loss of Rs.12.49 crore while the remaining amount of loan/advance of Rs.9.80 crore remained locked up (Rs.6.82 crore plus Rs.2.98 crore).

2A.17 Materials Management and Inventory Control

2A.17.1 Stores and Spares for HEMM

Details of consumption, closing stock and closing stock represented in number of months consumption of inventories in respect of HEMM, Longwall/Machine Mining and others for the 5 years ended March 2002 were as shown in the following table:

(Rupees in crore)

Particulars	1997-98	1998-99	1999-2K	2000-01	2001-02
Closing Stock					
HEMM	147.87	133.58	126.86	128.09	117.39
LW/MM	61.41	52.88	47.61	46.90	51.06
Others	24.96	23.81	23.58	23.16	22.72
Total	**234.24**	**210.27**	**198.05**	**198.15**	**191.17**
Consumption					
HEMM	95.25	100.70	96.32	102.78	120.19
LW/MM	39.13	31.18	22.73	26.88	28.47
Others	20.93	18.66	18.84	21.19	22.81
Total	**155.31**	**150.54**	**137.89**	**150.85**	**171.47**
Closing Stock in number of months consumption					
HEMM	18.63	15.92	15.80	14.96	11.72
LW/MM	18.83	20.35	25.14	20.94	21.52
Others	14.31	15.31	15.02	15.11	11.95
Total	**18.10**	**16.76**	**17.24**	**15.76**	**13.38**

It was observed that the value of stock of spares (HEMM, LW/MM and others) in terms of months' consumption was on high side when compared with six to eight months' consumption recommended (November 1971) by High Power Committee appointed (March 1970) by the Government of Andhra Pradesh.

Norms for holding stock of stores and spares have not been fixed

Though a period of 30 years had elapsed, the Company had not so far revised the norms keeping in view the developments/improvements by introduction of new technologies like Longwall, Blasting Gallery, Opencast mining etc., during the last 5 to 20 years.

2A.17.2 ABC Analysis

The Company had not made ABC analysis of stores based on its value and utility besides failing to fix the minimum, maximum and re-ordering levels to maintain stock at main stores and area stores.

2A.17.3 Consumption of HSD Oil in excess of Norm

Consumption of HSD oil beyond norm resulted in additional expenditure of Rs.10.93 crore

The Company had fixed norms for consumption of HSD oil in respect of various Heavy Earth Moving Machinery in OC mines viz., Diesel Shovels, Dumpers, Dozers, Drills, Graders etc.

Audit observed that there was overall excess consumption of HSD oil in all the years up to 2001-02 and the percentage of excess consumption ranged between 1.14 and 7.47. The total value of such excess consumption calculated at the relevant average purchase prices, during the above period worked out to Rs.10.93 crore.

An analysis of project-wise excess consumption revealed that the consumption was abnormal (more than 10 *per cent*) in respect of (i) RG-OC-I during the years 1997-98 (15.25 *per cent*), 1998-99 (21.58 *per cent*) and 2000-01 (11.04 *per cent*) (ii) PK OC-I during the years 1999-2000 (11.26 *per cent*) and 2000-01 (16.09 *per cent*) (iii) Yellandu OC-Block D during the years 2000-01 (37.03 *per cent*) and 2001-02 (14.96 *per cent*) and GK OC-I in the year 2001-02 (19.70 *per cent*).

Though the consumption of HSD oil in many OC mines was erratic and abnormal compared to the norm, the Company had not analysed the equipment-wise specific causes for excess consumption of HSD oil.

2A.18 Risk Management

The Company, in order to provide safety to the workers, laid down (1983) a safety policy based on the recommendations of Fifth Safety Conference on safety in coal mines.

The Company implemented these safety measures and incurred Rs.1050.02 crore towards safety of workmen during the 5 years' period from 1997-98 to 2001-02. In spite of spending huge amount on safety measures, there was no significant decrease in accident rate. The details of the accidents occurred during the last 5 years up to 2001-02 were as follows:

Year	Fatal accidents	No. of fatalities	Serious accidents	No. of persons seriously injured.
1997-98	34	35	113	**117**
1998-99	26	30	93	**99**
1999-2k	24	27	91	**101**
2000-01	24	30	96	**101**
2001-02	27	31	96	**104**

Though the Company had been incurring more than 8 *per cent* of its Revenue Budget every year towards safety, the accidents could not be reduced substantially. The Company also paid accident compensation of Rs.2.79 crore during the period 1997-2001. On the other hand, on account of accidents, the Company had lost 6.80 lakh mandays during the years 1997-2001 affecting the output to the value of Rs.52.86 crore. It was observed that accidents (fatality) were more in UG mines than the OC mines and more particularly under Hand section mining.

2A.18.1 Loss of equipment due to fire

One Drill, procured and commissioned in April 1994 at opencast mine II at Ramagundam region, was damaged in fire accident during April 1999. The Drill was procured at a cost of Rs.1.25 crore. On the date of accident, the drill had worked for 7891 hours (43.84 *per cent)* of the total estimated life of 18000 hours. Till November 1998, the drill was insured under consolidated fire

policy. However, on the grounds that the premium paid was not commensurate with claims preferred/settled, the Company decided (September 1998) not to continue fire insurance cover for the equipment. Hence, the policy was not renewed and no claim could be preferred.

During repairs, it was found that due to fire the equipment had suffered fatigue/structural strength failure and would not serve useful purpose even after repairs and hence, was recommended (December 2000) to be surveyed off. Accordingly, the drill was surveyed off and the written down value of Rs.0.58 crore was written off the books of account for the year 2000-01.

Audit observed that the Company, while proposing discontinuance of fire insurance cover for equipment, decided (January 1999) to set aside Rs.3.00 crore under "Current Assets" with the nomenclature "Deposit for replacement of assets damaged due to fire". This fund was proposed to be used for replacement of equipment so damaged. It was however, observed that the funds under the head "Deposits" stood between Rs.25 lakh and Rs.1.01 lakh during the period 1999-2000 and 2001-02 and Deposits with the nomenclature as proposed was not operated. Thus, though the insurance cover was discontinued, adequate arrangements were not made for meeting the cost of replacement of assets damaged due to fire.

2A.18.2 Non-commissioning of Nitrogen Flushing Plant

The Company placed an order for supply, erection and commissioning of Nitrogen Flushing Plant with 500 NM 3 /Ltr. capacity (along with spares for 2 years) at Gouthamkhani open cast mine of Kothagudem area for a value of Rs.0.52 crore. The delivery was to be completed by November 1995, which was extended up to 20 March 1996.

Since the Company felt (July 1996) that Nitrogen Flushing Plant was not at all required for opencast mines but was necessary (July 1996) for introduction of BG method in VK 7 Incline against spontaneous heating, the supplier was directed to supply the equipment to that mine. However, the equipment was supplied in March 1997 without HT Panel and was erected by December 1998. An amount of Rs.23 lakh was paid to the supplier (February 1999) as *adhoc* payment. The balance price of Rs.30.80 lakh was not released as the H.T. Panel was not supplied and the plant not commissioned.

The equipment was kept idle for last three years at VK 7 BG mine without any progress in commissioning, resulting in idle investment to the extent of Rs.23 lakh besides loss of interest of Rs.8.51 lakh (at 12 *per cent* per annum up to March 2002).

2A.19 Welfare Expenditure

A review of welfare measures provided by the Company revealed the following:

2A.19.1 Unlimited free supply of power

As per the provisions of NCWA II concluded with effect from 01 January 1979, the Company was to recover charges from its employees for electricity consumption in excess of 30 KWH per quarter per month at the same rates at which the electricity supply undertakings charge coal companies. Despite the above provision and its carry forward in subsequent NCWA III to VI also, the Company had not implemented the same and extended the facility of unlimited free supply of power to employees on the plea that electricity consumption, if charged, would create workmen unrest and opposition by the unions. It was, however, noticed that in the case of Executives, though there was no specific provision for free supply of power, the Company was recovering only one *per cent* of basic pay per month towards electricity charges irrespective of actual consumption.

Supply of Power free of cost/concessional rate resulted in additional financial burden of Rs.228.37 crore

A review of monthly consumption of power in Company's quarters located in different areas revealed that the total cost of unlimited supply of power free of cost/at concessional rate resulted in an additional/extra expenditure of Rs.228.37 crore in three regions of the Company (Rs.51.11 crore in Kothagudem region, including Corporate Office Rs.12.31 crore, Rs.74.94 crore in Ramagundem region and Rs.102.32 crore in Bellampally region) during the years 1996-97 to 2000-2001.

The Company stated (March 2002) that it was not able to implement the provisions of NCWA but had taken measures to reduce consumption of power by installing pole-mounted transformers and fixing transformer protection devices which is not in the spirit of the requirement.

2A.19.2 Free Issue of higher grade coal to employees

The Company is producing B to G grades of coal from its mines. Low grades of coal like E and F were being supplied to employees free of cost for their domestic use and cooking gas was being supplied wherever facilities are available for the supply of LPG.

Free supply of high grade coal to employees resulted in additional financial burden of Rs.1.28 crore

During the test-check conducted by Audit in Manuguru area, it was noticed that, in spite of availability of ‘E’ grade coal at CSP, the Company issued 'C' Steam, 'C' Slack and 'C' Crushed grades during the last five years ended 31 March 2001. Similarly, in Bhoopalapalli area also the Company, despite having ‘E’ grade of coal, had issued ‘B’ ROM grade directly from its pitheads during the years 1999-2000 and 2000-2001. Thus, supply of B and C grades of coal to the employees free of cost instead of ‘E’ grade deprived the Company potential revenue of Rs.1.28 crore (Manuguru area - Rs.0.94 crore and Bhoopalapalli area - Rs.0.34 crore).

It was observed that in the case of Eastern Coalfields Company Ltd., a subsidiary of Coal India Ltd., a decision was taken by its management to issue only D grade or lower grades of coal to employees as free supply. However, the Company did not take any decision regarding the grade of coal to be issued to its employees. Thus, non-fixation of the grade of coal for issue to employees resulted in avoidable extra expenditure.

2A.20 Internal Control and Management Information System

2A.20.1 Internal Control

2A.20.1.1 Unauthorised absence of workmen from duty

A review of surprise checks conducted by Internal Audit of attendance/presence of workmen at the work spots at mines and service departments during the last three years ended 31 March 2002 revealed that there had been large scale absence of workmen. An analysis of results of surprise checks conducted between June 1999 and March 2002 revealed the following:

Year	**In muster Total**	**Out musters**			**Defaulters**	
		Yes	**No**	**Early**	**Number**	*Percentage*
1999-00 (from 6/99)	23332	16082	3354	3896	7250	**31**
2000-01	33984	23318	4895	5771	10666	**31**
2001-02	43948	30433	4755	8760	13515	**31**

It may be seen from the above details that, in spite of conducting surprise checks every month during the last 3 years, there was no improvement in the attendance of workmen and the *percent*age of defaulters remained at 31 throughout the 3 years' period. Further, the *percent*age of "No out musters" to total "in muster " workers ranged between 10.82 and 14.40. There was no improvement in 'no out muster' even after conducting surprise checks. There is need for increasing internal control measures to eliminate 'no' and 'early' out musters.

2A.20.2 Management Information System

The Industrial Engineering Department (IED) prepares various Management Information Reports mostly in the areas of productivity and performance and monitors the productivity of each unit daily/weekly/ monthly/yearly. It also prepares various performance reports at the Area and corporate level to enable the line managers for monitoring performance of controlling areas of wastage and for taking corrective measures. The Cost and Budget Department prepares mine-wise/technology-wise cost sheets in order to exercise control over the cost of production and wasteful expenditure, if any.

Audit, however, observed that remedial measures to control costs and wastages were not initiated on the basis of analysis of these reports. The object of controlling costs does not appear to have been achieved and the Company has not prescribed any periodical returns as part of management information system to watch the theft of energy, land encroachments etc.

2A.21 Estate Management and Township

2A.21.1 Encroachments on Company's Land

As on 31 March 2002, the Company was in possession of land admeasuring 47623 acres obtained from Forest department (14468 Acres), purchased from private parties (22019 Acres) and assigned by Government of Andhra Pradesh (11136 Acres).

280.16 acres of Company's land was under un-authorised encroachments

Audit observed that 61894 unauthorised encroachments in the form of construction of commercial complexes, big shops, restaurants etc., had come up on a total area of about 280.16 acres of Company's land over a period of time. The Company conducted (July 2001) a survey to identify the incidence of encroachments and noted that the encroachments were multipurpose i.e. residential, commercial, schools etc., which were both by the employees as well as by outsiders as mentioned below:

Particulars	Employees	Non-employees	Total
1. **Extensions to quarters**	(No of encroachments)		
i. for residential	19158	--	19158
ii. for commercial	412	--	412
2. **Independent constructions in colonies**			
i. for residential	5771	20115	25886
ii. for commercial	587	4153	4740
3. Constructions in and out side colony area			
i. for residential	6800	3256	10056
ii. for commercial	250	1256	1506
4. Others	-	136	136
Total	**32978**	**28916**	**61894**

These encroachers were not only enjoying the Company's land illegally but also tapping Company's electricity and water estimated to cost Rs.5 crore per month.

The Company neither ascertained the extent of encroachments nor taken any action for eviction/demolition

Audit observed that though these encroachments had taken place for the period up to 50 years, the Company neither ascertained the extent of encroachments nor taken any action for eviction/demolition of the encroachments till June 2001.

The Company initiated action only in November 2001, to levy licence fee on annual basis on these non-employees to gain control on the lands under encroachment. The Company had so far collected Rs.4.03 lakh towards licence fee (March 2002). The Company had not fixed any responsibility on the persons in the concerned departments due to whose inaction these encroachments had taken place.

2A.21.2 Township

2A.21.2.1 Construction of Quarters at Rudrampur

During the year 1995, the Company proposed to construct 611 Quarters of all types at Rudrampur. After calling for open tenders (August 1995), the Company awarded (January 1996) the contract for construction of 366 quarters (miners, C2 and C type) to M/s. Nagarjuna Construction Company Ltd., (NCCL) at a total cost of Rs.5.78 crore on lowest tender basis. These quarters were to be completed by February 1997. As per the policy followed by the Company, repeat orders at the same or reduced rates can be placed against previous order within two years and two times in each case, without calling for fresh tenders, but the repeat order quantity should not exceed the original order quantity.

In January 1996 the Company proposed to construct the balance 234 quarters. In spite of availability of provision in the policy for repeat order and NCCL having come forward to construct additional quarters with three *per cent* reduction in existing rates, Company invited fresh tenders (October 1996) for the additional quarters, as B.G. Shirke Construction Technology Private Ltd., (BGSCT), who was the second lowest against August 1995 tender represented (March 1996) to give them the opportunity to quote for additional work. Offers were received from NCCL and BGSCT and after negotiations the Company awarded (August 1997) the work to NCCL for Rs.3.69 crore which was higher by Rs.19.42 lakh than the rates offered in June 1996. The Company further awarded (March 1998) construction of another 88 miner houses by increasing the number of houses, under the contract awarded in August 1997. The construction of 234 and 88 quarters were completed in June 1999 and May 1999 respectively. Audit observed that had the additional quarters (322 quarters) been awarded to NCCL as per the policy of the Company without inviting fresh tenders, the Company would have saved Rs.25.49 lakh.

It was stated (February 2002) that the volume of additional work was high enough to justify calling of tenders afresh. The reply is not tenable since, as per the policy followed by the Company repeat orders at the same rates could have been placed against the previous order of NCCL and avoided an extra expenditure of Rs.25.49 lakh.

2A.21.2.2 Electricity Duty on Captive Power Generated

For 22 years, the Company failed to show consumption of power by private parties separately

The Company owns three Captive Power Plants situated at Kothagudem, Ramagundam and Bellampalli. About 97 *per cent* of the power generated, along with power purchased is supplied to both mines, utilities and colonies, while the remaining 3 *per cent* is used by traders residing in colonies. There was no segregation of power supply for Captive consumption and for private traders. Under the Electricity Duty Act 1939, Electricity Duty (ED) is payable on power generated and sold. Such duty is not payable on Captive consumption. As the details of power sold to private traders were not furnished separately, the Chief Electrical Inspector (CEI), Government of Andhra Pradesh demanded (January 1981) Rs.0.23 crore towards ED on total energy generated and consumed from 1970-71 and 1972-73. The Company protested the levy of ED and requested (March 1981) Government for granting exemption from payment. The Government, however, decided (February 1986) to recover ED from 1968-69 to March 1985 and adjusted Rs.6.87 crore against equity investment in the Company. Though Government promised to consider exemption of ED from April 1985 onwards, the Company failed to obtain exemption orders (March 2002). In the meanwhile, CEI had raised demands aggregating Rs.25.42 crore for the period from April 1985 to December 2000. Audit observed that, during the period of 22 years from January 1981 to March 2002, the Company failed to show consumption by private parties separately, in order to avail exemption. The Company did not evaluate the cost of segregating the power supply equipment/meters etc., vis-a-vis the electricity duty (ED) demanded by the Government with a view to facilitate financially prudent decision-making.

2A.21.2.3 Avoidable expenditure due to non-segregation of township consumption

The Company had been availing power for mines, workshops, water works, offices and townships in Kothagudem, Ramagundam and Bellampally areas from Andhra Pradesh Northern Power Distribution Company Limited (APNPDCL) (erstwhile APSEB) with a contracted maximum demand of 125.50 MVA under HT category I service. According to the tariff effective from January 1992, no demand charges would be payable for the power supplied to townships under HT category VI provided separate service connections were taken for consumption by townships. However, without segregating their service connections for townships, the Company continued to draw power for townships also under HT category I. Under HT category I, demand charges varying from Rs.65 to Rs.170 per KVA were payable. Accordingly, the Company paid Rs.51.98 crore towards demand charges during the period from February 1992 to March 2002.

Non-segregation of colony consumption resulted in huge extra expenditure

Thus, due to non-segregation of colony consumption under HT Category-VI, the Company incurred an avoidable extra expenditure of Rs.51.98 crore. The Company, however, belatedly applied (January 1999, August 2001 and November 2001) for new service connections, which were yet (August 2002) to be sanctioned by APNPDCL

2A.21.2.4 Uneconomic utilisation of purchased power

A review of utilisation of power generated from own power plants and power purchased from APNPDCL during the years 1996-97 to 2000-01 revealed that the Company consumed 4317.44 lakh units (KWH) of power for colonies out of which 410.48 lakh units were consumed from its own generation.

There was loss due to uneconomic use of purchased power by colonies due to improper planning

Under HT category I, power consumed by residential colonies was billed at lowest rates ranging from 0.75 paise to Rs.1.15 per unit compared to power consumed by mines and other utilities. If the entire colony consumption was planned for utilisation out of purchased power, which was cheaper for colony and costly for industrial consumption, the Company could have avoided an additional expenditure of Rs.3.84 crore on 410.48 lakh units consumed during the above period. Absence of planning to economise on power, resulted in extra expenditure of Rs.3.84 crore.

2A.22 Other topics of interest

2A.22.1 Rejection of Insurance Claim

A Hitachi Dozer imported (September 1995) at a cost of Rs.0.98 crore, was commissioned in October 1996 at Opencast-III mine of Ramagundam area. The dozer met with fire accident in September 1997 while welding the operator's cabin door.

The fire accident was reported (September 1997) to the Insurance Company stating that the Dozer was covered under Insurance Policy taken for the period from 18 November 1996 to 17 November 1997. However, when the surveyor requested the Company to furnish the details of the Insurance coverage of equipment under the said policy, the Company failed to produce the details, but requested the Insurance Company to accept the claim against the value for which details of the equipment were not given in the policy. The Company's request (April 1999) for extension of time by six months to submit the claim was also not accepted by the Insurance Company. After re-conditioning and re-commissioning of the equipment at a cost of Rs.42.91 lakh, the Company submitted the detailed claim (July 2000). However, the Insurance Company finally turned down (November 2001) the claim on the ground that the dozer was not covered by the said policy.

The Company stated (February 2002) that only the description of the dozer was mentioned in the insurance policy and project serial number was not allotted by the time insurance policy was taken as the dozer was under commissioning stage. Thus, non-disclosure of details of dozer in the insurance policy had resulted in loss of Rs.42.91 lakh.

2A.22.2 Rejection of Insurance Claims on theft of Cables at OC-II mine, Ramagundam

The Company had been insuring HEMM cables at opencast mines against burglery, housebreaking and theft up to 19 January 2000. With effect from 20 January 2000, the Company discontinued the general insurance due to non-cooperation from the Police department and delay in settlement of claims by insurance companies.

During the period when the insurance policy was live, there was theft of cables valued at Rs.27.50 lakh at OC.II mine, Ramagundam against which claims were preferred for Rs.27.18 lakh (short claim Rs.0.32 lakh). Out of above, the Company could receive claims amounting to Rs.3.32 lakh only and failed to submit required documents like investigation reports and details of the coverage of insurance in respect of remaining amount. As chances of recovery of Rs.24.18 lakh were found to be remote, the Company wrote off the entire amount (March 2001). The Company, thus, suffered a loss of Rs.24.18 lakh.

The Company stated (April 2002) that the cables stolen were not covered under insurance policy, by oversight and hence the required details could not be submitted to insurance Company for settlement of claims. However, the Company had not fixed any responsibility for non-inclusion of the above cables in the said insurance policy.

2A.22.3 Consumption of higher grade coal

The Company owns and operates a powerhouse in Bellampalli area with an installed capacity of 7 MW for meeting uninterrupted power supply to the mines of the area. The Power House was designed for consumption of lower grade of coal and was in operation for the past sixty years.

There was loss due to issue of higher grade coal than required

Audit observed that though the power house was designed for consuming E grade coal, due to improper planning of coal linkage to the power house, the grade of coal consumed during the four years ended March 2002 was frequently changed to superior grade viz., D and C. Thus, use of higher grades of coal in power plant despite availability of lower grade coal resulted in avoidable expenditure of Rs.2.70 crore.

The Company's reply (March 2002) did not contain any remarks on the specific observation regarding usage of higher grades of coal.

Conclusion

Though the operations of the Company resulted in huge accumulated losses up to 1996-97, after measures of relief extended by Government of India and commitments made by the Company thereto under the Financial Restructuring Package, the operations of the Company resulted in profit up to 2001-02 with substantial reduction in accumulated losses.

Twelve ongoing underground mines were behind their schedule of completion. The delay in respect of seven projects ranged between five and nine years. Though production targets were substantially achieved, a large number of underground mines incurred losses. There was under-utilisation of Longwall equipment as well as plant and machinery under Blasting Gallery method of mining. Development of three mining projects was continued in deviation to guidelines given by Government of India. The Company had incurred huge expenditure on idle wages due to non-deployment of surplus labour. There was substantial loss due to periodical non-revision of sale price as per directives of Government of India. Company's huge land had been under unauthorised encroachments over a period up to fifty years and the Company did not take action to evict them. Failure to show electricity consumption by private parties separately, non-segregation of township consumption etc., had resulted in avoidable expenditure.

The Company was required to complete the projects on schedule, use its plant and equipment effectively, make the mines economically viable, deploy its surplus labour gainfully, evict unauthorised encroachments on its land and manage electricity consumption economically.