

REPORT OF THE COMPTROLLER AND AUDITOR GENERAL OF INDIA

FOR THE YEAR 1975-76

(COMMERCIAL)

GOVERNMENT OF WEST BENGAL

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PREFATORY REMARKS

Government commercial concerns, the accounts of which are subject to audit by the Comptroller and Auditor General of India, fall under the following categories:—

- (i) Government Companies;
- (ii) Statutory Corporations; and
- (iii) Departmentally managed commercial undertakings.

This Report deals with the results of audit of the accounts of Government Companies and Statutory Corporations, including West Bengal State Electricity Board. The Report of the Comptroller and Auditor General of India (Civil) contains the results of audit relating to departmentally managed commercial undertakings.

- 2. In the case of Government Companies, audit is conducted by professional auditors appointed on the advice of the Comptroller and Auditor General, but the latter is authorised under, Section 619(3) of the Companies Act, 1956, to conduct a supplementary or test audit. He is also empowered to comment upon or supplement the report submitted by the professional auditors. The Companies Act further empowers the Comptroller and Auditor General to issue directives to the auditors in regard to the performance of their functions. In November 1962, such directives were issued to the auditors of Government Companies having paid-up capital of Rupees one crore or above for looking into certain specific aspects of the working of the Companies. These were revised in December 1965 and February 1969.
- 3. Government have invested funds by way of loans and advances amounting to Rs.1,612.09 lakhs up to 31st March 1976 in one company, viz., the Calcutta Tramways Company Limited, whose accounts were not subject to audit by the Comptroller and Auditor General. The Company has been under the management of the Government of West Bengal since 19th July 1967.
- 4. In respect of Calcutta State Transport Corporation, North Bengal State Transport Corporation, Durgapur State Transport Corporation and West Bengal State Electricity Board, the Comptroller and Auditor General is the sole auditor, while in respect of the West Bengal State Warehousing Corporation and West Bengal Financial Corporation, he has the right to conduct the audit of the concerns independently of the audit done by the professional auditors appointed under the respective Acts.
- 5. The points brought out in the Report are those which have come to notice during the course of test audit of the accounts of the above undertakings. They are not intended to convey or to be understood as conveying any general reflection on the financial administration of the undertakings concerned.

CHAPTER I

SECTION 1

GOVERNMENT COMPANIES

Introduction

There were 22 Companies of the State Government as on 31st March 1976. Of these, 13 submitted their accounts for 1975-76. Seven other Companies, viz., West Bengal State Textile Corporation Limited, West Bengal Tourism Development Corporation Limited, West Bengal Agro-Industries Corporation Limited, West Bengal Handloom and Powerloom Development Corporation Limited, West Bengal Pharmaceutical and Phytochemical Development Corporation Limited, Electro Medical and Allied Industries Limited and West Bengal Livestock Processing Development Corporation Limited, did not submit their accounts for 1975-76 up to December 1976. Of the remaining two Companies, West Bengal Dairy and Poultry Development Corporation Limited has not submitted its accounts even for the year ending 30th June 1975 and Basumati Corporation Limited has not submitted its accounts since inception (February 1975).

A synoptic statement showing the summarised financial results of the working of 19 Companies on the basis of the latest available accounts is given in Annexure 'A'.

2. Investment and guarantees

The total investment by Government by way of share capital in 13 Companies at the end of March 1976 was Rs.3,632.58 lakhs*.

Government have also given guarantees for repayment of loans overdrafts and amount raised by issue of bonds debentures in respect of eight Companies as detailed below:—

(In lakhs of Rupees)

Maximum amount guaranteed 3,008·85*

Amount guaranteed outstanding on 31st March 1976:—

Principal and interest 1,321·03*

3. Profits and losses

According to the annual accounts for 1975-76 submitted by 13 Companies, there was a total net loss of Rs.493.19 lakhs during 1975-76 as against a total net loss of Rs.481.51 lakhs during 1974-75 in respect of 12 Companies. Eight Companies, viz., West Bengal Industrial Development Corporation Limited, West Bengal Essential Commodities Supply Corporation Limited, West Bengal

^{*}Figures as per the records of the Companies,

Electronics Industry Development Corporation Limited, West Bengal Mineral Development and Trading Corporation Limited, West Bengal State Minor Irrigation Corporation Limited, West Bengal Small Industries Corporation Limited, West Bengal Forest Development Corporation Limited and Westinghouse Saxby Farmer Limited, earned profits aggregating Rs.54.58 lakhs against their total paid-up capital of Rs.864.39 lakhs. Only one Company, viz., West Bengal Small Industries Corporation Limited, declared dividend of Rs.5.21 lakhs in 1975-76. Five other Companies with aggregate paid-up capital of Rs.2,768.19 lakhs sustained losses totalling Rs.547.77 lakhs.

In each of the following Companies, the cumulative loss up to 1975-76 was more than the paid-up capital:

				Paid-up capital	Cumula- tive loss
				(In lakhs	of Rupees)
The Kalyani Spinning Mills Limited	• •	••	• •	158-21	816.07
The Durgapur Projects Limited	••	• •		2,056.58	2,345 · 81
Durgapur Chemicals Limited	••	••	• •	441 · 40	1,103.85
West Bengal Sugar Industries Develo	45.00	77.86			

4. Borrowings

The borrowings (loans, deferred payments and cash credits) of 13 Companies stood at Rs.8,184.37 lakhs at the end of 1975-76, representing an increase of Rs.527.65 lakhs over the borrowings (Rs.7,656.72 lakhs) at the end of the previous year.

5. Further, there were three Companies in the State coming under Section 619B of the Companies Act, viz., Indian Mechanisation and Allied Products Limited, Shaktigarh Textile and Industries Limited and Aluminium Manufacturing Company Limited with an aggregate paid-up capital of Rs.95.96 lakhs as on 31st March 1976. Of this, Rs.61.53 lakhs were held by the State and Companies and Corporations owned or controlled by Two Companies, viz., Shaktigarh Textile and Industries Limited, and Aluminium manufacturing Company Limited, finalised their accounts Indian Mechanisation the accounts of and Allied for 1975-76; Limited for the years ending 31st October 1975 and 1976 have Products not been submitted (January 1977).

SECTION II

THE DURGAPUR PROJECTS LIMITED

1. Introduction

1.01. The Durgapur Projects Limited was incorporated as a private limited company on 6th September 1961 to acquire and take over the State-sponsored Durgapur Industries Board which had a coke oven (with two batteries), a by-product plant and a thermal power plant (with two generating sets of 30 M.W. each). The Company took over the assets and liabilities of the project managed by the Durgapur Industries Board on 15th September 1961 at a provisional purchase price of Rs.2,116.74 lakhs. The purchase consideration was finalised by Government in 1974-75 at a sum of Rs.2,169.97 lakhs. A transfer deed has not been executed (January 1977).

By virtue of Section 43A(IA) of the Companies Act, 1956 (Amendment Act, 1974), the Company became a public limited company in February 1975.

- 1.02. The working of the Company was last reviewed in paragraph 57 of the Report of the Comptroller and Auditor General of India for the year 1970-71. The Report was considered by the Committee on Public Undertakings (1975-76) in their Second Report (April 1976). Action on the recommendations of the Committee is yet to be taken by Government Company (January 1977).
- 1.03. Earlier, the working of the Company was examined by a Committee appointed by Government in May 1967 under the chairmanship of Shri Suku Sen with the main object of ensuring operation of its units for deriving reasonable profits on the investments. The Committee submitted its report to Government in August 1967. The report has not been considered by Government (January 1977).

2. Objects

The main objects of the Company are:

- (a) to deal in coal, coke, coke oven gas and all by-products of coal, chemicals, artificial fertilisers, cement and refractories, and transmission of coke oven gas by pipe line for distribution and sale for industrial and domestic purposes;
- (b) generation, transmission and distribution of electricity in the licensed area; and
- (c) acquiring and providing dams, tubewells, reservoirs, irrigation and other works for securing adequate supplies of water required in connection with the business of the Company or for supplies to other industries.

3 Capital structure

3.01. The authorised capital of the Company is Rs.25 crores divided into 2,50,000 equity shares of Rs.1,000 each against which the paid-up capital on 31st March 1976 was Rs.1,500 lakhs, wholly subscribed by Government. In addition, the Company transferred from time to time a portion of the long-term loans received from Government to share deposit account without prior approval of Government. The balance in the share deposit account as on 31st March 1976 was Rs.556.58 lakhs. Approval of Government in regard to transfer of this amount is awaited (January 1977).

The balance of unsecured loans from Government as on 31st March 1976 was Rs.4,115.39 lakhs. Interest accrued and due on the loans up to 31st March 1976, but not paid, amounted to Rs.2,110.02 lakhs. The interest had been reckoned at the rate of 6 per cent for 1967-68 to 1975-76 as against 8 per cent as per the terms of loans pending sanction of Government with regard to a rebate of 2 per cent. Sanction of Government in this regard is awaited (January 1977).

3.02. At the instance of Government, the Company obtained from its bankers, on 14th December 1973, a loan of Rs.100 lakhs bearing interest at 13 per cent per annum and utilised it to repay on 15th December 1973 a part of the outstanding long-term loans received from Government from time to time. On 31st January 1974, the Company took a loan of Rs.100 lakhs from Government (rate of interest or terms not specified) and repaid the loan earlier obtained from the bankers, together with interest of Rs. 1.79 lakhs accrued thereon.

The Company had, however, held during this period Rs. 250 lakhs as short-term deposits in nationalised banks at interest of 5½ and 6 per cent per annum. Had some of these short-term deposits been withdrawn instead of taking a loan from the bankers, interest charges of Rs. 1 lakh could have been avoided. The Company requested (August 1974) Government for reimbursement of the interest paid to the bankers. Government's decision is awaited (January 1977).

4. Organisational set-up

- 4.01. The Management of the Company is vested in a Board of Directors headed by a Chairman. All the directors, including the Chairman and the Managing Director, are nominated by Government. The Board, as constituted in September 1976, consisted of seven directors, two of whom, viz., the Managing Director and the Deputy Managing Director, were whole-time directors.
- .4.02. The day-to-day business of the Company is conducted by the Managing Director, who is assisted by functional groups, like Finance, Technical and Personnel Departments. Both administrative and financial powers have been delegated by the Board of Directors to the Managing Director who has redelegated some of the powers to various officers.

4.03. Since 1st June 1966, there is no Financial Adviser to advise the Board of Directors. A post of Controller of Finance and Accounts was created in January 1972 after abolishing the post of Financial Adviser, but it was not filled up reportedly because no suitable candidate was available in the pay scale approved for the post. The Accounts Officer (Finance) functions under the Controller of Finance and Accounts but does not examine all proposals having financial implications.

5. Financial position and working results

5.01. The table below summarises the financial position of the Company under broad headings for the five years up to 1975-76:

			1971-72	1972-73	1973-74	1974-75	1975-76
				(In la	khs of Rup	ees)	
Liabilit	108						
(a) Paid-up capit	al (includ	ling share	1,988-83	1,988 · 83	2,022.17	2,056 · 58	2,056 · 58
(b) Reserves and s	urplus	• •	5 · 15	5 · 15	5 · 15	5.15	5.15
(c) Borrowings	• •	• •	4,007.25	4,007.00	4,073 · 41	4,141 · 94	4,115.39
(d) Trade dues a	nd other	liabilitics	1,922.06	2,211.22	2,732 · 15	3,425.07	4,264 · 28
	Total	••	7,923 · 29	8,212 • 20	8,832 · 88	9,628 · 74	10,441 - 40
Ass	rts						
(e) Gross block (i	including	goodwill)	5,548.37	5,995.08	6,056 • 52	6,153 · 50	6,236 · 49
(f) Less: Deprecia	tion	• •	1,582 · 87	1,844 • 92	2,090 · 44	2,322 · 45	2,550 · 67
(g) Net fixed assets	·	• •	3,96 5 · 50	4,150 · 16	3,966.08	3,831 · 05	3,685 · 82
(h) Capital work-in	-progress	• •	490 • 21	70.01	83.60	76 · 15	33.50
(i) Current assets,	loans and	advances	1,747 · 10	2,131.61	2,553.55	3,296 · 68	4,275 · 66
(j) Investments	• •	• •	100 · 61	100 • 61	100 · 61	100 - 61	100 · 61
(k) Cumulative loss	·	••	1,619.87	1,759-81	2,129.04	2,324 · 25	2,345 · 81
	Total	••	7,923 · 29	8,212.20	8,832 · 88	9,628.74	10,441 • 40
Capital employed	••	• •	3,834 · 75	4,123.84	3,851 · 17	3,694 · 61	3,699 • 50
Net worth	• •	• •	374 · 11	234.17 (-	-)101·72 ()345·12 (-)366-68

Note: (1) Capital employed represents net fixed assets plus working capital.

⁽²⁾ Net worth represents paid-up capital plus reserves and surplus less intangible assets.

5.02. Working results: The working results of the Company for the five years up to 1975-76 are tabulated below:

1971-72 1972-73 1973-74 1974-75 1975 (In lakhs of Rupees) (i) Sales (excluding sales tax) 1,735 · 30 1,824.60 1,282 · 14 2,366.76 2,980.35 (ii) Cost of sales 1,669 - 88 1,900 · 46 2,199.49 2,517.03 3,004.28 (iii) Loss 387.74 165 - 16 374.89 150.27 23.93 (iv) Percentage of cost of sales to sales 130.2 109.5 120 · 6 106.4 100.8

Up to 31st March 1976, the Company had incurred a cumulative loss of Rs.2,345.81 lakhs, representing 114.1 per cent of the paid-up capital (including share deposits).

5.03. The following table indicates the operational results of the Company for the five years up to 1975-76:

	1971-72	1972-73	1973-74	1974-75	1975-76
		(In la	akhs of Rup	oees)	
1. Value of production—					
(a) Sales	1,282 · 14	1,735 · 30	1,824 · 60	2,366.76	2,980 · 35
(b) Clesing stock of finished goods	$72\cdot 24$	139 · 13	234.07	318-42	385 · 44
(c) Opening stock of finished goods	54 · 13	72.24	139 · 13	234.07	318.42
Value of production $(a+b-c)$	1,300 · 25	1,802 · 19	1,919.54	2,451 · 11	3,047 · 37
Less—value of raw materials, stores and spares consumed and power and fuel purchased	704 • 12	911-23	1,145.41	1,429 · 27	1,919 · 38
2. Contributed value (i.e., sale value of production minus variable expenses)	596 · 13	890 • 96	774 · 13	1,021 · 84	1,127.99
3. Expenses (other than value of raw materials, stores and spares consumed and power and fuel purchased) less miscellaneous income.	983 · 87	1,058 · 12	1,149.02	1,172·11	1,151 • 92
4. Loss	387 • 74	165 · 16	374.89	150 • 27	23.93
5. Percentage of-					
(a) Contributed value to value of production	45.8	49•4	40 · 3	41.7	37· 0
(b) Conversion expenditure to contributed value	165.0	118.5	148•4	114.7	102 · 1
(c) Consumption of raw materials, stores and spares and pur- chase of power and fuel to value of production	54.2	50.6	59·7	58.3	63 • 0

- 5.04. The reasons for the unfavourable working results, as could be seen from the records, are as follows:
 - (i) Poor performance of the producing units, particularly the coke oven plants;
 - (ii) sale of energy and gas, mostly to Government departments undertakings, at unremunerative rates;
 - (iii) steep rise in the prices of raw material and increase in establishment expenditure due to revision of pay scales and higher dearness and overtime allowances; and
 - (iv) low off-take of coke.

The reduction in loss during 1975-76 is attributable mainly to increase in prices of products.

The performance of the various units of the Company has been analysed in the succeeding paragraphs.

6. Production performance

6.01. **Product range:** The product range of the Company falls under the following:

Name of the plant

Products.

Coke oven plant ... Hard coke, nut coke, pearl coke, breeze coke, crude tar, crude benzol and coke oven gas.

Tar distillation plant ... Light oil, carbolic oil, wash oil, naphthalene oil, anthracene oil and pitch.

Benzol plant ... Motor benzol, industrial toluol, light solvent naphtha, pure benzene and still-bottom oil.

Coal washery ... Washed coal and sink.

Thermal power station ... Power.

Water treatment plant ... Process and drinking water.

Spun pipe factory ... Spun pipe.

A. Coke oven group of plants

6.02. The plants consist of four batteries, each of 29 ovens, with ancillary by-product plants, coal handling and preparation plant, coke handling plant, benzol plant, tar distillation plant and gas compression plant with purification units. The four batteries of the coke oven plant were put into commission in February 1959, May 1960, April 1967 and April 1972 respectively, with a total input capacity of 2,600 tonnes of raw coal per day (on dry basis).

(a) Coke oven batteries

6.03. The following table indicates the input capacity of the coke oven batteries, the actual input of raw coal and the output of coke during the five years up to 1975-76:

	1971-72	1972-73	1973-74	1974-75	1975-76
(i) Raw coal input capacity (converted to wet basis) (in lakh tonnes).	6.57	8.76	8.76	8.76	8.76
(ii) Raw coal input (in lakh tonnes)	$5\cdot 22$	6.38	5 · 57	5 · 12	5 · 27
(iii) Percentage of raw coal input to input capacity.	79.5	72.8	63.6	58•5	60 • 2
(iv) Coke output capacity (on wet basis and on the basis of average volatile content) (in lakh tonnes).	5.04	6.72	6 · 72	6.63	6.72
(v) Coke output (in lakh tonnes)	4.02	4.93	4.31	3.96	4.08
(vi) Percentage of coke output to output capacity.	79.8	73 • 4	64 · 1	59 • 7	60 • 7

In addition to coke, the following by-products were obtained during 1971-72 to 1975-76 as compared to the rated capacity:

By-product		Year	Rated capacity	Actual production	Percentage of actual production to rated capacity
(i) Crude gas (in million eft)		1971-72	7,920	5,228	66.0
·		1972-73	10,560	6,033	57.1
		1973-74	10,560	5,026	47.6
		1974-75	10,560	4,960	47.0
		1975-76	10,560	5,193	49.2
(ii) Crude tar (in tonnes)	• •	1971-72	22,275	12,858	57.7
		1972-73	29,700	17,618	59· 3
		1973-74	29,700	14,014	47.2
		1974-75	29,700	12,698	42.8
		1975-76	29,700	13,526	45.5
(iii) Crude benzel (in Kılolitres)	••	1971-72	6,435	1,872	29 · 1
		1972-73	8,580	2,880	33 • 6
		1973-74	8,580	2,524	29.4
		1974-75	8,580	1,472	17.2
		1975-76	8,580	1,619	18.9

- 6.04. One of the by-products of the coke oven batteries is ammonia which is drained out in the form of ammoniacal liquor. The Board of Directors was informed (September 1975) that there was no arrangement to recover ammonia in the form of ammonium sulphate or ammonium chloride or in any other form since the commissioning of the batteries. It was further stated that importance was not being given to recovery of ammonia owing to the difficulties in competing with synthetic ammonium sulphate or similar fertilisers. It was also observed that draining of ammonia was a recurring loss to the Company, and also caused pollution of river water.
- 6.05. The following table indicates the output of coke in different grades during the five years up to 1975-76:

Grade	•			1971-72	1972-73	1973-74	1974-75	1975-76		
				(In lakh tonnes)						
Hard coke	••	• •	••	3.42	4.19	3 · 67	3.37	3.47		
Nut coke	• •	••	••	0.28	0.34	0.30	0.27	0.28		
Pearl coke	• •	• •	••	0.09	0.11	0.09	0.09	0.09		
Breeze coke	••	• •	• •	0.23	0.29	0.25	0.23	0.24		
		Total	••	4.02	4.93	4.31	3.96	4.08		

The output of coke in different grades was not measured in the absence of proper measuring device. The output was derived on the basis of the capacity of ovens used. There was no arrangement for weighing of coal at the time of charging the coke ovens and the ground stock of coke did not tally with the stock arrived at on the basis of estimates. The Management observed in April 1975 that production of coke varied in sizes, in as much as larger quantities of undersized coke were produced while the production of hard coke was less.

- 6.06. The main reasons for the operation of batteries below the rated capacity and the shortfall in production of coke and crude gas, as could be seen from the records, were as follows:
 - (i) Poor quality of coal blend, particularly with low volatile matter and high ash content;
 - (ii) green pushing (i.e., pushing of coke from the ovens before the full coking time);
 - (iii) inadequate maintenance;
 - (iv) frequent break-downs of machinery;
 - (v) non-availability of oven doors for replacement;
 - (vi) failure of guide cars, ram cars and quenching cars; and
 - (vii) repeated blanking of ovens (all the 29 ovens of the first battery and 15 ovens of the second battery remained blank since December 1973).

- 6.07. The lower yield of crude tar and benzol was attributed by the Management (October 1976) to:
 - (i) non-availability of process steam from the power station having requisite pressure; and
 - (ii) low generation of gas.
- 6.08. The coke oven batteries were originally designed for carbonising coal to be obtained from Ranigunge fields (only from Laikdih, Chance, Begunia, Ramnagar, Dishergarh and Sanctoria seams) with provision for using Giridih coal, with approximately 25 to 27 per cent volatile matter, in the blend. It was also envisaged that coal of different characteristics, viz., high volatile, medium volatile and low volatile, would be used in proportions of 20 to 25, 50 to 60 and 20 to 25 respectively in the blend. The plant was not able to get its requirements of coal from the Ranigunge and Giridih fields and had to purchase coal from other collieries. A consultant engaged by the Company in January 1972 to study the working of the coke oven group of plants observed (March 1972) that due to irregular supply of all the three types of coal, viz., high volatile, medium volatile and low volatile, the plant operators often charged whichever coal was available in hand irrespective of the required ratio in order to keep up production. The results of the analysis of coal charged into the ovens showed wide divergence, which was detrimental to the operation and, in the long run, to the life of the coke oven batteries. The consultant had suggested use of coal from Shampur seams in the blendings but this coal was not available to the extent required. In March 1976, the Coal Controller agreed to supply more direct feed coal including Dishergarh coal for improving the quality of coke; no tangible progress has been made in this direction (January 1977).

As per the figures supplied by the Company, the variations in volatile matter in the coal blend during the years 1971-72 to 1975-76 were found to be ranging between 25.6 and 26.6 per cent as against the specified percentage range of 28 to 30.

The ash content in the coal blend varied between 19.5 and 20.6 per cent during the years 1971-72 to 1975-76 as against the range of 15.6 to 17.9 per cent used during the trial run of the third battery in July-August 1967.

In view of non-availability of different categories of coal, viz., high volatile, medium volatile and low volatile, in the required proportions and charging of coal of high ash content in the batteries, the Central Fuel Research Institute, engaged by the Company in November 1971, recommended (February 1974) working of the coal washery at 85 per cent at least of its rated capacity. But the washery ran at 6.5 to 17.5 per cent of its rated capacity during the five years up to 1975-76 (see paragraph 6.33). According to the Management, the plant could not use larger proportions of washed coal from the coal washery due to its higher cost of production.

6.09. As per the specifications laid down in the guarantee schedules of the agreement for the coke ovens, the Company was required to blend coke breeze with coal to the extent of 3 to 5 per cent of the total input in the coke ovens. Mention was made in paragraph 87(b) of the Audit Report, 1965, about loss of Rs.2.81 lakhs sustained by the Company for non-utilisation of breeze coke to the minimum permissible limit during 1963-64. The Public Accounts Committee in their report of May 1969 noted with apprehension the accumulation of breeze coke and suggested its quick but economic disposal.

Similar loss was sustained by the Company to the extent of Rs.45.48 lakhs owing to non-utilisation of breeze coke up to 3 per cent during 1971-72 to 1975-76. Non-utilisation of breeze coke in the blend resulted in the accumulation of stock from 1.52 lakh tonnes as on 31st March 1974 to 1.76 lakh tonnes as on 31st March 1975 and 1.57 lakh tonnes as on 31st March 1976.

The Management stated (May 1976) that attempts were made in the earlier years to use breeze coke but these were not successful due to repeated break-down of the crusher.

6.10. Proper schedules of maintenance and lubrication of the plant have not been drawn up (January 1977). The Management observed (May 1975) that there was hardly any forward planning for procurement of spares and the available spares were not sufficient to chalk out a planned programme for preventive maintenance. The Management further observed (December 1975) that preventive maintenance in the coke ovens had not been started. Even inspection was not being carried out according to the prescribed schedule and as a result there were frequent preventible break-downs which affected gas supply to Calcutta and resulted in shortfall in the production of coke and by-products.

The Management stated in September 1976 that running maintenance of the first and second batteries had been taken up departmentally and that of the third and fourth batteries had been entrusted to a firm in June 1976.

6.11. One of the main factors for reduced oven availability was non-replacement of oven doors in time. According to the Management, blazing of oven doors was not very uncommon and due to it oven doors gave way, the buckstays got bent and the packings of ovens were burnt. Absence of regular cleaning of oven doors, door frames, oven top, etc. was stated by the Management in June 1975 to be the main reason for premature failure of oven doors. Although instructions were issued to all concerned from time to time that cleaning of doors, door frames, front goosenecks, back goosenecks, oven top, etc. was essential for maintaining the battery in proper condition, no tangible progress has been made in this direction (January 1977).

In September 1975, the Management stated that prompt replacement of oven doors was not possible as indigenous manufacturers of oven doors were limited.

6.12. One of the main reasons for the under-utilisation of capacity was stated by the Management in May 1975 to be the failure of guide cars, ram cars and quenching cars. The consultant engaged by the Company in January 1972 observed (March 1972) that the quenching tower was not functioning efficiently and that roughly 20 to 25 per cent of hot coke in the quenching car remained unquenched. It was further observed that gates of all the three quenching cars were full of holes, as a result of which hot coke tended to fall through the openings partly on the car track and partly on the wharves prior to quenching. The Management had reported (May 1975) to Government that attempts had been made to procure spares but that these could not be obtained. The defects have not been rectified (January 1977).

The Management had observed (May 1975) that out of three ram cars, one could not be operated for a long time as its long travelling wheels were badly worn out and no spares were available in the stores. Similarly, out of three guide cars, two were in operation. The idle ram car and the guide car are lying out of order (January 1977).

6.13. As regards repeated blanking of ovens, it may be stated that 29 ovens of the first battery and 15 ovens of the second battery remained blank since December 1973 for heavy repair and complete renovation. Heavy repairs and renovation of the first battery became necessary reportedly because the ovens had not been operated for about a year either due to recession in the market or due to shortage of coal. In April 1975, the company enquired whether the original suppliers and erectors of the plant were agreeable to renovate the blanked ovens from early 1977. While indicating their interest in renovating the blanked ovens, the erectors and the suppliers could not outline the terms and conditions two years ahead of starting the job.

Government observed (March 1976) that while one and a half batteries remained blank and unproductive, these were consuming a large quantity of gas (about 19.73 lakh cft per day) produced by the remaining two and a half batteries for keeping them at a temperature of about 900°C. According to Government, this 'colossal' wastage would continue till the idle ovens were renovated. From April 1976, 32 ovens were put into operation after minor repairs and the remaining 12 ovens were cooled down. Further developments in this regard are awaited (February 1977).

6.14 Quality control: Complaints were being received regularly from the consumers of hard coke, particularly the steel plants, with regard to its high ash content and poor physical properties. A test check of records revealed that two major consumers, who had agreed to draw coke at the rate of 7,000 tonnes and 10,000 tonnes per month respectively, requested the Company in October 1975 not to effect any further supply of coke due to its high ash content (more than 25 per cent), despatch of undersized coke and poor physical properties. The records further showed that a sum of Rs.4.61 lakhs was withheld by one of these consumers for supply of coke of high ash content during April 1969 to

August 1972. The Management considered (October 1975) that since about 50 to 60 per cent of the coke produced was being sold to different steel plants, unless the quality of coke was improved, prospects of supply to steel plants would be very bleak.

The Management attributed (February 1976) the sub-standard quality of the coke to the following:

- (i) poor quality of blended coal used in the coke ovens;
- (ii) inconsistent blending;
- (iii) indifferent grinding; and
- (iy) absence of selective crushing.
- 6.15. An important pre-requisite for making quality coke and for safe and efficient operation of the plant was selective crushing, which was, however, not given due importance. The consultant engaged by the Company in January 1972 had observed (March 1972) that the selective crushing unit of the coal crushing plant fitted with "Umbra" screens had not been functioning for several years. The Management stated (February 1976) that the selective crusher never functioned properly and that efforts would be made to commission it as early as possible. The selective crusher has not been commissioned (January 1977).
- 6.16. The quality of the coke produced in the plant has always been below standard. The Management found (October 1974) that all the bulk consumers of coke expressed their unwillingness to draw coke owing to its poor physical properties.

According to the Management, this was primarily due to poor crushing of coal and unsatisfactory operation of hammer mill. The operation of the hammer mill has not improved (January 1977).

- (b) Gas compression and purification plants (including gas grid)
- 6.17. The crude gas produced in the coke oven batteries passes through an exhauster to a scrubber. There is a gas flow meter in between the exhauster and the scrubber. Ammonia and benzol are separated in the scrubber. From the scrubber the gas is passed on to a gas holder and from the gas holder to the plant for underfiring the batteries and heating the furnaces of the process plant. The gas is also supplied to the local industries through a booster. The balance of the gas is passed on to a gas grid connected with Bally through the gas compression and purification plant for transmission to Calcutta. Gas is also sent to the power station and vented in the air in case the volume of gas in the gas holder exceeds a certain safe limit owing to reduced gas demand.

6.18. As against the prescribed recovery of 10,794 cft of crude gas per tonne of coal (on dry basis) fed into the batteries, the actual recovery during 1971-72 to 1975-76 was 10,216, 9,646, 9,207, 9,880 and 10,048 cft respectively. The lower yield per tonne of coal fed resulted in loss of production of Rs.83.60 lakhs (approximately) during the five years up to 1975-76:

	1971-72	1972-73	1973-74	1974-75	1975-76
(i) Raw coal input (on dry basis) (in lakh tonnes)	5 · 12	6.25	· 5·46	$5 \cdot 02$	5.17
(ii) Estimated yield of crude gas (in million cft)	5,517	6,746	5,894	5,419	5,580
(iii) Crude gas output (in million cft)	5,228	6,033	5,026	4,960	5,193
(iv) Shortfall in production (in million oft)	299	713	868	459	387
(v) Actual cost of production of crude gas (Rupees per thousand cft)	2.05	2 • 44	3 · 33	3.51	3.89
(vi) Loss of production (in lakhs of Rupeos)	6.13	17.40	28.90	16.12	15.05

The Management stated (May 1975) that the lower yield was attributable to change in the percentage of volatile matter of the coal blend charged, green pushing and leakage through oven doors.

6.19. Coke oven gas is used for undersiring of batteries. As against the consumption of 523 k cal of heat per kg of coal sed (on wet basis) as specified in the guarantee test certificate, the actual consumption of heat during 1971-72 to 1975-76 was 616, 648, 650, 767 and 752 k cal respectively. The excess consumption of heat in the form of gas, over and above the specified figure of consumption, was valued at Rs.109.29 lakhs (approximately) during the five years up to 1975-76:

•	1971-72	1972-73	1973-74	1974-75	1975-76
(i) Raw coal imput (on wet basis) (in lakh tonnes)	$5 \cdot 22$	6.38	5 · 57	5.12	5 • 27
(ii) Gas consumed in underfiring (in million cft)	2,447	3,097	2,779	2,975	3,022
(iii) Heat value per cft of gas as per analysis report (in k cal)	131.52	133.53	130.31	132.05	131 · 25
(iv) Total heat value of gas consumed (in million k cal)	3,21,829	4,13,542	3,62,131	3,92,849	3,96,637
(v) Estimated heat value of gas (in million k cal)	2,73,095	3,33,773	2,91,332	2,67,915	2,75,808
(vi) Estimated consumption of gas (in million cft)	2,076	2,500	2,236	2,029	2,101
(vii) Excess consumption (in million cft)	371	597	543	946	921
(viii) Actual cost of production of crude gas (Rupces per thousand cft)	2.05	2.44	3 · 33	3.51	3.89
(ix) Value of excess consumption (in lakhs of Rupees)	7-61	14.57	18.08	33.20	35 · 83

One of the reasons for the excess consumption of gas in underfiring was stated by the Management in December 1975 to be the presence of oxygen in waste gas in excess of the prescribed limit. As against the prescribed limit of 3 to 4 per cent of oxygen in the waste gas, the percentage of oxygen content varied between 5 and 8.9 during the five years up to 1975-76.

In December 1975, the Management found that the consumption of gas for underfiring in the battery was as high as 60 per cent and directed the Superintendent, Coke Ovens to reduce the gas consumption for underfiring. Consumption of gas in underfiring the ovens continued to be heavy and in September 1976 it was as high as 60.79 per cent.

6.20. The Board of Directors directed (July 1971) the Secretary of the Company to examine the possibility of underfiring the batteries with lean gas for which the existing batteries were designed and to work out the financial implications thereof. No progress has been noticed in this direction although saving of 10,000 to 12,000 nm³ of gas per hoùr was envisaged (January 1977).

In the initial commissioning of coke oven, batteries, a producer gas plant having a capacity of 7,500 nm³ per hour had been provided for initial heating up of the batteries. This gas, either by itself or in admixture with the coke oven gas, was not used at all for underfiring of ovens. According to the Management, the use of producer gas in heating up of ovens would release about 1,500 nm³ of coke oven gas per hour which would be available for distribution amongst the consumers. The raw material required for generation of producer gas was nut coke which was available in abundance from the Company's coke ovens. In February 1976, the Board of Directors proposed to consult the suppliers and erectors of the plant if it would be feasible to use producer gas for underfiring the ovens in order that the surplus coke oven gas could be sold to consumers. Further developments are awaited (January 1977).

In November 1976, the Management had enquired from four parties whether producer gas could be used for underfiring of ovens. One of the four parties had confirmed (November 1976) that it was possible to use producer gas for underfiring of ovens and showed keen interest in undertaking the job on turnkey basis. The party had quoted (November 1976) for preparation of a feasibility report at a total fee of Rs.25,000. In December 1976, the Board of Directors agreed to the proposal of the party. The Management is awaiting the feasibility report (January 1977).

6.21. Idle capacity of gas grid: The gas grid system comprises the gas compression and purification plants, pressure pipe line from Durgapur to Bally with necessary fittings and auxiliaries, and a pressure reducing station at Bally.

The grid, which was constructed in July 1963 at a total cost of Rs.479.14 lakhs, had capacity to transmit gas to Calcutta up to 35 million cft per day. Against this, the purification and compression system had a capacity of 15 million cft per day. Calcutta's demand was about 4 million cft per day at the beginning, which was expected to increase gradually up to 10 million cft per day.

The table below indicates the average transmission of gas per day to Calcutta through the gas grid system during the five years up to 1975-76:

Year			t	Total ransmission of gas to Calcutta	Transmission per day
				(In mil	lion cft)
1971-72	• •	••	••	1,549	4 • 2
1972-73	• •	••	••	1,915	5 • 2
1973-74	••	• •	••	1,423	3.9
1974-75	••	••	• •	1,393	3.8
1975-76	• •	• •	••	1,406	3.0

6.22. During the years 1971-72 to 1975-76, the coke oven gas produced in the plant remained unaccounted for to the extent of 1,367 million cft valued at Rs.35.19 lakhs as would be seen from the following table:

		1971-72	1972-73	1973-74	1974-75	1975-76
(i) Gas produced	••	5,228	6,033	5,026	4,960	5,193
(ii) Inter-plant consumption	••	2,475	3,166	2,810	3,004	3,052
(iii) Normal losses (i.e., 5 per cent gas produced).	of	261	302	251	248	260
(iv) Gas available for sale	••	2,492	2,565	1,965	1,708	1,881
(v) Gas sold	••	1,869	2,195	1,757	1,768	1,715
(vi) Gas, unaccounted for	••	623	37 0	208	Nil	166
(vii) Loss (in lakhs of Rupees)	••	12.77	9.03	6.93	Nil	6.46

Government stated (January 1976) that supply of gas to Calcutta through faulty meters was responsible for this loss and for measuring correct flow of gas, meters were installed and commissioned on 9th December 1975.

(c) Tar distillation plant

6.23. The plant was commissioned in May 1962 at a cost of Rs.118.23 lakes to treat the crude tar to be obtained from the coke oven plant for manufacture of various tar products such as light oil, carbolic oil, wash oil, naphthalene oil, anthracene wil, pitch, etc. The proportions of various tar products obtainable from distillation of crude tar are indicated below:

Products					Percentage of various tar products obtainable
Light oil	• •	••	• •	••	1
Carbolic oil		• •	• •	• •	2
Wash oil	••	• •	••	• •	7
Naphthalene oil	• •	••	••	• •	10.5
Anthracene oil I	and II	••	••	• •	12.5
Pitch	••	••	• •		65
Distillation loss	••	••	••	••	2
			Total	••	100

These proportions are, however, variable according to the quality of the crude tar. The types and quantity of final production are made according to the market demand.

6.24. The main distillation unit is a continuous plant with a capacity of distilling 100 tonnes of crude tar per day on three shifts basis. The annual rated capacity of 33,000 tonnes of crude tar was based on a daily throughput of 100 tonnes for 330 days in a year. The actual quantity of crude tar processed and the various tar products obtained, as compared to the rated capacity (33,000 tonnes of crude tar per annum), during the five years up to 1975-76, are indicated below:

Year			Actual Percentage quantity of of crude tar crude tar processed processed to rated capacity		Actual quantity of tar products obtained	Loss in process	Percentage of loss in process	
			(In tonnes)		(In tonnes)			
1971-72	• •	• •	9,307	28.2	8,675	632	6.8	
1972-73	••	• •	15,117	45 • 8	14,275	842	5.6	
1973-74	••	• •	11,592	35 · 1	11,027	565	4.9	
1974-75	••	••	8,001	24.2	7,518	483	6.0	
1975-76	••	••	10,788	32.7	10,460	328	3.0	

The lower throughput of crude tar is attributable to lower yield of crude tar from the coke ovens as indicated in paragraph 6.03.

6.25. In the annual reports of the Company for 1971-72 and 1974-75, it was stated that the plant remained idle for about four months during 1971-72 owing to development of a crack in the main distillation column and 4,264 tonnes of crude tar were disposed of without processing and whatever tar was recovered from the coke oven plant could not always be processed because of inadequate supply of process steam at requisite pressure.

The inadequate supply of process steam at requisite pressure from the power plant was attributed (November 1976) by the Management to:

- (i) non-working of converter for a long time; and
- (ii) non-availability of sufficient quantity of softened water due to complete break-down of three water softeners.

Restoration of the softeners and repair of the steam converter have not been taken up (January 1977).

- 6.26. As against the prescribed distillation loss of 2 per cent, the average loss during the five years up to 1975-76 varied between 3.0 and 6.8 per cent, the short recovery being 1,754 tonnes of tar products valued at Rs.7.12 lakhs based on the average cost of production during these years. The higher percentage of process loss was attributed (November 1976) by the Management to handling loss over and above the prescribed distillation loss of 2 per cent.
- 6.27. In March 1972, the consultant engaged by the Company in January 1972 recommended certain modifications to the plant with a view to producing purer products like hot-pressed naphthalene, in place of centrifuged naphthalene then being produced, and electrode grade pitch. The Durgapur Chemicals Limited, another Government Company, which was intended mainly to use the hot-pressed naphthalene of the Company in its phthalic anhydride plant, had found the product unusable owing to the presence of ingredients which caused frequent explosions during processing. The recommended modifications to the plant have not been carried out (January 1977). The Durgapur Chemicals Limited is obtaining hot-pressed naphthalene from the Hindustan Steel Limited.

In its annual report for 1973-74, the Company observed that marketing of the crude naphthalene produced by the plant was found difficult as the quality was not as good as that of hot-pressed naphthalene. Accordingly, the Company planned either to instal a hot-press or to produce a new product using the crude naphthalene as basic raw material. The Company continues to produce crude naphthalene by centrifuging (January 1977).

(d) Benzol plant

- 6.28. The plant was commissioned to treat crude benzol produced from coke oven plant for manufacture of various benzol products, viz., motor benzol, industrial toluol, light solvent naphtha, pure benzene, still-bottom oil, etc.
- 6.29. The plant was designed to wash and distil 8,580 kl of crude benzol based on a daily input of 26 kl for 330 days in a year on three shifts basis. The actual quantity processed and benzol products obtained, as compared to the rated capacity, during the five years up to 1975-76, are indicated below:

Yoar			Actual quantity of crude benzol processed	Percentage of quantity processed to rated capacity	Actual quantity of benzol products obtained	Loss in process	Percentage of Icas in process
			(In kilolitre	8)	(In kilolit	res)	
1971-72	••	• •	1,917	22.3	1,578	339	17•7
1972-73	••		2,877	33.5	2,400	477	16.6
1973-74	••	••	2,516	29 · 3	2,264	252	10.0
1974-75	••	••	1,459	17.0	1,187	272	18.6
1975-76		• •	1,653	19.3	1,275	378	22.9

The main reasons for operation of the plant below the rated capacity were stated by the Management (October 1976) to be:

- (i) low yield of crude benzol from coke ovens;
- (ii) non-availability of adequate process steam from power plant having requisite pressure; and
- (iii) low off-take of finished benzol products from time to time owing to glut in the market.
- 6.30. During the five years up to March 1976, the distillation loss varied between 10.0 and 22.9 per cent, the short recovery being 1,718 kl of benzol products.

The Management has not fixed the normal percentage of distillation loss in the benzol plant (January 1977).

6.31. The table below indicates the value of production, the total expenditure (less miscellaneous income) and profit/loss of the coke oven group of plants during the five years up to 1975-76:

Year					Value of	Total	Profit (+)
					production	expenditure less miscella- neous income	Loss (-)
					(In lakhs of Rupees)	
1971-72	• •	• •	••	• •	617.46	738 · 13	(-)120-67
1972-73	• •	• •	• •	• •	1,003 · 43	928 • 78	$(+)74 \cdot 65$
1973-74	••	• •	• •		950.00	1,026:98	(-)76.98
1974-75	• •	• •	• •	• •	1,116.55	1,084.50	$(+)32 \cdot 05$
1975-76	• •	• •	• •	••	1,348.73	1,236 · 20	$(+)112 \cdot 53$

B. Coal washery

- 6.32. In order to meet the requirements of washed coal of the coke oven plant for manufacture of metallurgical coke and the requirement of sinks (middlings and rejects) for the power station, an all-cyclone washery was commissioned in March 1968 at a cost of Rs.429.62 lakhs with an input capacity of 1.62 million tonnes of raw coal per annum.
- 6.33. The following table indicates the rated capacity of the washery, the input of raw coal and the output of washed coal and sinks during the five years up to 1975-76, based on the annual reports of the Company:

	1971-72	1972-73	1973-74	1974-75	1975-76
(i) Rated input capacity (on dry basis) (in lakh tonnes)	16.20	16.20	16.20	16.20	16.20
(ii) Raw coal input (on dry basis) (in lakh tonnes)	1.06	1.60	2.68	2.14	2.82
(iii) Percentage of coal imput to rated capacity	6.5	9.9	16.5	13.2	17.5
(iv) Washed coal output (on dry basis) (in lakh tonnes)	0.57	0.81	1.69	1 · 27	1 · 62
(v) Percentage of washed coal to raw coal input	- 53.8	56.9	63 · 1	59.3	57.4
(vi) Estimated yield of washed coal (per cent)*	70	70	70	70	70
(vii) Sinks output (on dry basis) (in lakhs tonnes)	0.49	0.69	0.99	0.87	1 · 20
(viii) Percentage of sinks to raw coal input	46.2	43 · 1	36.9	40.7	42 · 6
(ix) Estimated yield of sinks (per cont)*	30	3 0	30	3 0	3 0
(x) Estimated c. st of production of 'washed coal (Rupees per tonre)†	. 39	39	39	39	39
(xi) Actual cost of production of washed coal (Rupees per tenne)	182	155	142	175	198

^{*}Based on the norms of yield fixed in July 1968,

[†]Based on the project estimates.

The consumption of coal in the washery is measured by weightmeter and the production of washed coal is derived by subtracting the weight of sinks produced (which are weighed) from the total input of coal.

The operation of the washery below the rated capacity was attributed (September 1976) by the Management mainly to:

- (a) shortage of essential and critical spares;
- (b) trouble in gear box, spiral gears and ball mills;
- (c) frequent breakage of screen arms;
- (d) unsatisfactory performance of centrifuges;
- (e) meagre use of washery sinks at the power station because of its abrassive effect on boilers;
- (f) accumulation of sinks by the side of the washery;
- (g) low off-take of washed coal by the Company's coke oven plant in view of its higher cost of production;
- (h) non-availability of the required quantity of raw coal; and
- (i) want of magnetite ore.
- 6.34. In view of shortage of superior grade coking coal in the country and increased requirements of washed coal in various steel plants, the Coal Controller advised (December 1972) the Company that its washery should work to optimum capacity as early as possible.

The Central Fuel and Research Institute (CFRI), which was engaged by the Company in November 1971 to carry out detailed investigations covering both the power plant and the coal washery and to recommend some economic method of their working, in its report (February 1974), observed that in view of the shortage of superior grade coking coal there was hardly any scope for the Company to obtain adequate quantity of direct feeding raw coal for its coke oven batteries. The Institute recommended (February 1974) that the washery should utilise at least 85 per cent of its rated capacity to meet the requirements of the Company's coke ovens.

The yield of washed coal during the period from 1971-72 to 1975-76 varied between 53.8 and 63.1 per cent, as against the expected yield of 70 per cent. The low yield of washed coal resulted in corresponding increase in the yield of sinks. The lower yield was stated (September 1976) by the Management to be due to poor washability of raw coal input. For the same reason, the ash content in the washed coal ranged between 16.7 and 22.6 per cent as against the estimated ash content of 15 to 17 per cent as per the guarantee test report by the Central Fuel and Research Institute.

6.35. The Board of Directors was informed (December 1974) that one of the main constraints for operating the washery at full rated capacity was unsatisfactory performance of gear box, spiral gears and ball mills. There were 66 gear boxes in the washery which were required to be replaced

gradually. The ball mills frequently went out of order and ball mill bars were worn out as proper materials for their manufacture could not be procured. Since the performance of the ball mill was not satisfactory, quotations for purchase of ball mill were invited in September 1974. Order was placed in February 1975. Supply has not been received (January 1977).

The Management stated (March 1976) that gear boxes had not previously been ordered and that a list of spares for import was to be prepared for further processing. The gear boxes have not been replaced (January 1977).

6.36. It was planned in 1962-63 that sinks obtained from the washery would be used in the Company's power station for generation of thermal power. It was found (November 1971) difficult to consume the entire quantity of sinks in the power plant because of inconsistent ash and high moisture contents therein. The sinks with fluctuating ash content (ranging between 30.4 and 39.7 per cent) posed problems of erosion to the boilers and damage to mill rings and other equipment as it contained substantial portion of high ash mineral constituents. The high moisture in the sinks often resulted in irrigular flow from the bunkers and chutes. sinks continued to be dumped since inception. As on 31st March 1976, sinks so dumped near the washery and power plant sites accumulated to 1,83,516 tonnes valued at Rs.78.82 lakhs and the expenditure incurred on dumping during the years 1971-72 to 1975-76 was Rs.7.90 lakhs. the period from 1971-72 to 1975-76, about 70.468 tonnes of sinks were disposed of to outside parties for Rs.40.49 lakhs. The Company was also advised by the Central Electricity Authority (October 1975) not to use coal washery sinks in the power station. The Management informed Central Electricity Authority (March 1975) that some minor modifications in the washery section to rewash the sinks in coal washery would be made The washery has not been modified (January 1977).

In its annual report for 1974-75, the Company stated that a major bottleneck in running the washery was accumulation of sinks by the side of the washery. The sinks could not be used in the power station since various experts, viz., the Central Fuel Research Institute, study group of the Planning Commission, Central Electricity Authority, etc., had recommended against its use in the power station on technical considerations.

- 6.37. A committee was set up in July 1973 to examine the possibility of utilisation of washery sinks by installation of a beehive coke plant and country type domestic hard coke plant. Findings of the committee are awaited (January 1977). Setting up of a briquette plant for utilising washery sinks did not also materialise.
- 6.38. The CFRI, in its report of February 1974, recommended, as a short-term measure, three-cut products (viz., washed coal, middlings and rejects) instead of the existing two-cut system of washing (washed coal

and sinks). For this purpose, some modifications were suggested by addition of conveyor belts, etc. As a long-term measure, CFRI suggested some major modifications at an estimated cost of Rs.2 crores.

The Board of Directors agreed (July 1974) in principle to accept the scheme and decided to invite public tenders from reputed firms.

In February 1975, the Fuel Policy Committee had also recommended that a time schedule should be drawn up and adhered to for conversion to three-product washery. While accepting the recommendation of the Committee, the Government of India had desired that a time schedule should be drawn up and adhered to for conversion to three-product washeries.

As the Company was not in a position to arrange finance from its own resources for implementation of such a scheme, the same was kept in abeyance (September 1975).

In the meantime, the Company handed over a copy of the report oť of CFRI to the erectors and suppliers the washery plant offer their thereon. requested them to comments submitted their comments in June 1975 along with their advice in the matter. In April 1976, a committee was constituted to examine the report of the erectors and suppliers of the plant and to submit its recommendations to the Managing Director, Recommendations of the committee (January 1977).

- 6.39. Out of three independent streams of the washery, only two are being operated; the third stream is kept engaged for receiving and crushing of direct feeding raw coal for the coke ovens. CFRI in its report (February 1974) had recommended that the third stream could be set to operate at higher bath density and sinks obtained from the other two streams could be retreated in it to separate the middlings. The Management reported (September 1976) that the third stream was kept engaged for receiving and crushing of raw coal for the coke ovens.
- 6.40. Loss of coal fines (slurry): Coal fines forming slurry (below 0.5 mm) are meant to be recovered as filter cake for being mixed with washed coal or sinks as the case may be. The washery has been provided with filters to arrest loss of slurry. The coal fines (which were worked out in August 1976 by the Management to be 3 per cent of input of raw coal), which are as good as washed coal, however, flow out of the washery during periods off break-down, emergency draining of filters, discharge of washery effluent at the start and stoppage of operation of the plant. The coal fines in the Flurry, which thus flow out, have not been recovered since commissioning of the plant. The slurry accumulated periodically outside the washery is being disposed of by inviting tenders on "as is where is" basis.

During the period from September 1971 to August 1976, the Company realised a sum of Rs.5.38 lakhs from various parties on account of sale of slurry by inviting tenders.

The Management stated (August 1976) that very fine coal particles could not be recovered by the existing filters; there was always some effluent from the washery and in the absence of slurry ponds, as in the case of other washeries, the coal fines could not be recovered. Proposals for construction of two brick-paved tanks for recovery of washed coal from washery slurry going to the drain, at an estimated cost of Rs.0.65 lakh, was approved in November 1976.

6.41. Consumption of magnetite: Against consumption of 1 kg of magnetite per tonne of raw coal fed (on dry basis) into the washery specified in the schedule of guarantees supplied by the suppliers and erectors of the plant, the actual consumption during the five years up to 1975-76 was 2.52 kg, 5.99 kg, 6.30 kg, 2.50 kg and 2.55 kg per tonne respectively.

The excess consumption of magnetite was attributed (September 1976) by the Management to:

- (a) inferior quality of magnetite ore;
- (b) frequent stoppages of the plant;
- (c) leakages from chutes and pipes;
- (d) handling loss; and
- (e) bad condition of magnetite preparation plant.

The variation in the consumption from year to year was not, however, explained.

6.42. Consumption of electricity: Against consumption of 6.5 kwh of power per tonne of raw coal (on dry basis) fed into the washery specified in the schedule of guarantees supplied by the suppliers and erectors of the plant, the actual consumption of power ranged from 27.76 kwh in 1971-72 to 8.86 kwh in 1975-76 per tonne of raw coal.

The excess consumption of power was attributed by the Management (September 1976) to the following:

- (a) The raw coal section of the washery was being operated in three shifts for unloading coal to save demurrage, while the production section was being operated in two shifts. The electricity consumed in the third shift in raw coal section was charged to the operation of coal washery but the third shift was not used for production of washed coal;
- (b) operation of the washery below the rated capacity; and
- (c) unloading of coal in the coal washery for coke ovens and crushing of the same for despatch to coke ovens.

6.43. The table below indicates the value of production, the total expenditure (less miscellaneous income) and profit/loss of the coal washery during the five years up to 1975-76:

Year	Year			Value of production	Total expenditure less miscella- neous income	Profit (+) Loss (-)	
					(Iı	n lakhs of Rupe	es)
1971-72	• •	••	••	••	94 • 4()	144.88	(—)50·48
1972-73	• •	••	••	• •	154-51	190 · 77	$(-)36 \cdot 26$
1973-74	• •	• •	• •	• •	255.77	297.83	(-)42·06
1974-75	• •	••	• •	• •	199-64	254 · 99	$(-)55 \cdot 35$
1975-76		• •	• •	• •	318.06	393 · 31	$(-)75 \cdot 25$

C. Power station

- 6.44. As on 31st March 1976, there were five units—two of 30 MW each and three of 75 MW each. The power station consists of five turbogenerator units with five pulverised coal fired boilers associated with necessary auxiliaries including demineralising, cooling tower and ash plants.
- 6.45. **Ceneration:** The table below indicates the particulars of installed capacity, power generated and purchased, power available for sale, power sold and unaccounted and distribution loss for the five years up to 1975-76:

	1971-72	1972-73	1973-74	1974-75	1975-76
	1001		(In Mkwh)	10.12.10	2010-10
(i) Installed capacity	2,496 · 600	2,496 · 600	2,496.600	2,496 · 600	2,496 · 600
(ii) Power generated	738 - 851	747 • 904	829 • 279	884.001	972 · 637
(iii) Power used for generating station auxiliaries.	98 · 522	98.680	99-695	114.376	110 · 456
(iv) Power purchased	48.408	47.223	34 · 889	99 • 164	84 · 726
(v) Power available for sale $(ii+iv-iii)$.	688.737	696 • 447	764 • 473	868 • 789	946-907
(vi) Power sold	667 • 678	686 · 923	757 • 226	855-716	932 • 995
(vii) Unaccounted and distribution losses.	21.059	9.524	7 • 247	13.073	13.912
(viii) Percentage of power generated to installed capacity.	29.6	30.0	33•2	35 • 4	39.0
(ix) Percentage of unac- counted and distribu- tion losses to power available for sale.	3.1	1.4	1•0	1.5	1.5

The reasons for the shortfall in generation, as could be seen from the records, were as follows:

- (i) Inadequate system demand and low load during night hours;
- (ii) non-availability of adequate spares, store materials and equipment in time;
- (iii) poor quality of coal used;
- (iv) premature failure of mill rings;
- (v) frequent mechanical troubles in generating units owing to inadequate maintenance;
- (vi) failure of two rows of low pressure rotor of turbine III in January 1973;
- (vii) complete damage of cable system of the first and second units and partial damage of cables of the third and fourth units on account of a fire in January 1974;
- (viii) non-operation of boiler feed pumps and motors;
 - (ix) repeated failures of blades of all the turbo-generators; and
 - (x) non-availability of light diesel oil and furnace oil of required quantity and quality.

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6.46. Unit-wise utilisation of capacity:

The table below indicates the generation of power in each of the five units for the five years up to 1975-76:

		T	4 - 11 - 3	V	1971	-72	1975	2-73	197	3-74	197	4-75	197	5-76
Unit			talled acity	Year of commi- ssioning	Units generated	Percentage of generation to capacity	Units generated	Percentage of generation to capacity	Units generated	Percentage of generation to capacity	Units generated	Percentage of generation to capacity	Units generated	Percentage of generation to capacity
		(MW)	(Mkwh)		(Mkwh)		(Mkwh)		(Mkwh)		(Mkwh)		(Mkwh)	
1	••	3 0	262 · 800	1960-61	••	••	45 · 148	17.2	55.795	21.2	28.023	10.7	113.726	43.3
n	••	3 0	262 · 800	1960-61	48.147	18.3	74 · 50 3	28.3	81 · 279	30.9	64 · 482	24.5	5.765	2.2
ш	••	75	657.000	1964-65	181 • 742	27.7	122 · 183	18-6	39.312	6.0	70 • 967	10.6	244.025	37-1
IV	••	75	657.000	1964-65	104 • 525	15.9	209 · 199	31.8	283 · 401	43 · 1	314 • 692	47.9	155-529	23.7
· V	••	75	657-000	1966-67	404-437	61.5	296 · 871	45.2	369-492	56.2	405 • 837	61.8	453 · 5 82	69 • 1

There was no generation in Unit I during 1971-72 due to overhauling of boiler.

The Company has not prescribed the firm capacity of each unit taking into account the various factors affecting generation (January 1977).

6.47. One of the reasons for low generation was extensive shut-down of the generating units caused by scheduled and forced outages. The particulars of shut-down of the power station during the years 1971-72 to 1975-76 are indicated below:

Brief reasons for shut-downs	1971-72	1072-73	1973-74	1974-75	1975-76
(a) Boiler overhauling and maintenance.	13,782	7,469	3,119	5,877	2,748
(b) Turbo-generator overhauling and maintenance.	874	1,486	6,654	3,424	12,201
(c) Induced draught fan and forced draught fan trouble.	1,702	4,877	4,041	1,070	1,450
(d) Fire hazard	60	33	3,965	5,730	22
(e) Absence of load	4,199	47	• •	1,026	40
(f) Non-availability of spares	214	42	6	1,105	33
(g) Maintenance of auxiliaries	• •	2,848	• •	• •	51
(h) Others	2,502	1,651	1,097	1,155	1,060
Total shut-down hours	23,333	18,453	18,882	19,387	18,605
Total plant hours	43,800	43,800	43,800	43,800	43,800
Percentage of shut-down hours to total plant hours.	53·3	42.1	43 · 1	44.3	42.5

6.48. Load factor: The annual load factor (percentage of power actually generated to generation necessary to meet the peak demand) of the power station for the five years up to 1975-76 was as under:

	1971-72	1972-73	1973-74	1974-75	1975-76
Power generated (in Mkwh)	73 8 · 851	747-904	829 • 279	884 • 001	972 · 637
Peak demand (in MW)	175	158	179	170	172
Generation nocessary to meet the peak demand (in Mkwh).	1,583.000	1,384 · 080	1,568.040	1,489 · 200	1,508 · 720
Load factor	48.2	54 ·0	52·9	59.4	64.6

The Management stated (May 1976) that the low load factor in the power station was due to creatic drawal of power by the West Bengal State Electricity Board, particularly during night hours.

The Central Electricity Authority had fixed (February 1976) the target of utilisation factor of the power station at about 70 per cent. The Management stated (March 1976) that in a system where the night load was low and the generating units had idle capacity for 8 to 10 hours a day, it was impossible to achieve the utilisation factor fixed.

6.49. The entire coal requirement of the power station was expected to be met from Jamadoba and Lodna coal mines. The boilers were designed to burn coal up to 28 per cent ash content for Units I and II and up to 40 per cent ash content for Units III, IV and V. Although the boilers of Units III, IV and V were designed to burn coal of high ash content, the accessories of the boilers were reportedly not capable of tolerating such high ash content, resulting in rapid wear and tear of some parts of the boiler accessories.

The power station was not able to get its entire coal requirements from the Jamadoba and Lodna collieries and had, therefore, to procure coal from other collieries, particularly from Ranigunge area. The supplies received from collieries other than Jamadoba and Lodna exceeded the prescribed limit (24 per cent) of ash and moisture content.

Since June 1973, the Company has purchased coal from the then Coal Mines Authority Limited (CMA) which supplied coal of different grades from different collieries. According to CMA, a specific grade of coal was supposed to contain a specific heat value. The Company, however, had to pay for the supply not according to the heat content but at the rate specified for the grade of the colliery from which the supply was made.

Laboratory tests made by the Company revealed that the heat value of the coal received was much less than what it should have been but the Company had to pay for it at the rate for coal of higher heat value.

The table below indicates the average permissible heat value per kg of coal, average heat value obtained per kg of coal, quantity of coal receivable in terms of permissible heat value and actual coal received during the three years up to 1975-76:

	1973-74	1974-75	1975-76
Permissible-heat value per kg of coal received (k cal per kg)	5,551	5,466	5,437
Actual heat value per kg of coal received (k cal per kg)	4,792	4,955	5,061
Actual quantity of coal received (in tonnes)	4,29,164	3,73,654	6,24,502
Quantity of coal received in terms of permissible heat value (in tennes)	3,70,483	3,38,722	5,81,314
Coal short received in terms of heat value (in tennes)	58,681	34,932	43,188
Average value per tonne of coal received (in Rupees)	48.54	63 · 73	$82 \cdot 34$
Amount of excess expenditure (in lakhs of Rupees)	28.48	$22 \cdot 26$	35 · 56

The Management stated (March 1976) that the quality of coal had deteriorated in the last few years and the Company had been receiving coal with ash content of more than 40 per cent and sometimes even up to 52 per cent, with foreign materials like shale and stones in abundance. The Management further observed that the Company had been getting high ash and moisture

content coal of less thermal value, low ash fusion temperature and lower grindibility index. According to the Management, the use of low grade coal in the power station had resulted in formation of clinkers, quick erosion of I. D. Fans, overloading of ash plant, damage to mill rings and balls, coal carrier pipes, etc.

In June 1974, the Management requested the CMA to supply coal according to the required specification, which was agreed to by the latter, but the records showed that the request had been of little avail. The Company had also sent its Vigilance Officer for surprise visits to the collieries. According to the report (May 1974) of the Vigilance Officer, trucks meant for carrying coal were being loaded with mud, shales and stones in the presence of the officers of the Authority. In June 1976, the Management found that stones and other abrasive materials were still being received with coal.

Coal washery sinks were earmarked for consumption in the power station. As the washery sinks contained high percentage of ash (ranging between 30.4 and 39.7) and highly abrasive materials namely shale, stone particles, etc., these could not be used in the power station as mentioned earlier. According to the Management, these abrasive elements caused too much erosion of pressure parts of boilers, grinding rings and balls, etc.

Amounts aggregating Rs.19.03 lakhs were deducted by the Company from the bills submitted by CMA for supply of coal below specifications during 1973-74, 1974-75 and 1975-76 on the basis of the analysis reports of the Company's own laboratory. CMA had not agreed to the deduction in the absence of formal agreement regarding the basis for bonus-penalty and in the absence of joint sampling and analysis. In August 1975, the Company agreed to refund the amount deducted for the period 24th December 1973 to 31st March 1976 when transportation of coal was done by the Company and a sum of Rs.12.87 lakhs was provided in the accounts for 1975-76 for the purpose. CMA agreed to deduction of remaining Rs.6.16 lakhs from its bills.

6.50. Coal fed into the five boilers of the power station is required to be pulverised. This is done in three coal mills attached to each boiler of units I and II and in four coal mills attached to each boiler of Units III, IV and V. One coal mill in each boiler is kept as stand-by.

The manufacturers had not prescribed any norms for the life of the top and bottom rings and balls, which depended on the quality of coal and content of foreign matter in it like steel, rock particles, etc. According to the Management (December 1971), mill ring set of U.S. origin and that of indigenous origin were expected to last for 8,000 and 4,000 hours of operation respectively, but the average life of the indigenous sets in actual operation ranged between 90 and 2,000 hours during October 1975 to August 1976.

The premature failure of the mill rings was attributed (February 1976) by the Management to the persence of excessive silica in the coal obtained and substandard quality of rings produced indigenously. In August 1976, the Management found that the performance of the mill rings procured (July 1973 to March 1976) from an indigenous source was not satisfactory and that the rings were breaking into pieces very frequently resulting in heavy outages of coal mills and losses in generation. Trial orders for two sets of mill rings, each on a Durgapur and Orissa firm at a total cost of Rs.5.13 lakhs and Rs.2.37 lakhs respectively, have been placed (January 1977).

Between June 1972 and August 1976, 30 sets of mill rings (imported: 17 and indigenous: 13) valued at Rs.29.03 lakes were consumed in the coal mills attached to the boilers of Units II, III and IV.

- 6.51. The rotor of Unit III (75 MW capacity) got badly damaged in January 1973. The unit was under repair up to December 1973. It could regain a maximum capacity of 30 MW after removal of the affected blades under supervision of an engineer brought from West Germany. In December 1973, the Company placed an order on a West German firm (quotation was invited in May 1973) for supply of new blades (cost: Rs.11.25 lakhs) to be installed in the unit. The new blades were received in October 1974 and full capacity of the unit was commissioned in March 1975 by the supplier firm after further expenditure of Rs.7.20 lakhs. The unit remained out of operation for over eleven months and worked with de-rated capacity of 30 MW for over 14 months thereafter. In the annual reports of the Company, the Management stated that re-blading took long time owing to (i) delay in procurement of blades, (ii) delay in getting release of foreign exchange and import licence, and (iii) delay in obtaining services of experts from West Germany.
- (a) A fire broke out on 12th January 1974 at the power station. A large number of imported power and control cables of copper make of Units I and II was completely gutted and some cables of Units III and IV were partially affected. Preliminary inspection was carried out by the surveyor of insurance company on 14th January 1974. On 12th February 1974, the surveyor, after inspection for the second time, authorised the Company to proceed with the repair and replacement of the damaged property. Repair work for the cable system was entrusted to a contractor in February 1974 at a total cost of Units I and II were put on stream in November 1974 and Rs.19.95 lakhs. September 1974 respectively. In the Company's annual report for 1973-74, the Management stated that as Units I and II were completely incapacitated and could not be operated for over six months, there was considerable loss of revenue The Company had lodged (June 1974) a claim of Rs.26 to the Company. lakhs on the insurance company. It also invited open tenders (May 1974) for the disposal of the salvaged burnt cable, the ownership of which vested in the insurance company, on the ground that disposal of the salvaged material would be more remunerative to the Company than the replacement cost to be realised from the insurance company on the basis of insurance cover. The highest bid as evaluated by a committee worked out to Rs.8.66 lakhs. The committee recommended not to dispose of the material but to take up the matter with the insurance company for its final assessment. In June 1974, the insurance company challenged the Company's right to invite offers for the disposal of the

burnt cables through open tenders and advised it not to dispose of the same without its concurrence. As the Company had already lodged (June 1974) a claim of Rs.26 lakhs on the insurance company, it refrained from disposing of the salvaged material. The insurance company in its turn invited offers for the damaged cables lying at the Company's power station. The highest offer it received for the entire salvage from a single party was Rs.10.50 lakhs. Meanwhile, 998.25 metres of the good portion of the salvaged cables were drawn from the stores to meet the Company's requirements. The surveyor of the insurance company called for a revised list (April 1976) of the salvaged materials on account of use of a portion of cables by the Company, which was furnished in April 1976. According to the revised list the salvage dealer offered Rs.3.51 lakhs, against the original offer of Rs.10.50 lakhs. The matter was taken up with the insurance company which stated (June 1976) that actual payment against the company's claim would not be made until disposal of salvage had ben finalised. As the sum assured was Rs.899.24 lakhs against the total value of plant and machinery of Rs.3,030.00 lakhs, the insurance company offered Rs.3.34 lakhs for the salvage. The insurance company had objection if the Company invited fresh tenders for getting higher price. In pursuance of the Board of Directors' decision of 18th June 1976, fresh tenders were invited through press advertisement (August 1976) for disposal of the salvaged materials in order to attract better prices. The Board of Directors decided (November 1976) to dispose of the materials to the highest bidder who offered The materials were disposed of in November 1976. Rs.5,00,557. Management requested the insurance company (December 1976) for adjustment of the amount realised by the disposal of the salvaged materials (Rs.5,00,557) against the Company's claim of Rs.26 lakhs. Final adjustment of the claim has not been effected (January 1977).

The Management informed the Government of India in August 1974 that negligence in maintenance, non-availability of foreign spares in time, use of sub-standard quality of indigenous spares and use of coal not up to specification were the reasons for the fire.

(b) Another fire broke out on 19th February 1975 and damaged the auxiliary transformer of Unit V, which resulted in dropping of the average generation in the power station. A claim for Rs.12.86 lakhs was preferred with the insurance company on 17th February 1976.

The surveyor of the insurance company assessed in December 1976 the value of the assets at Rs.292.10 lakhs, against which the sum assured was Rs.84.51 lakhs. The amount payable by the insurer to the Company was assessed by the surveyor at Rs.2.14 lakhs. The Company is yet to accept the offer of Rs.2.14 lakhs after surrendering the salvaged materials (January 1977).

6.53. There are three feed pumps in each generating unit, two of which should always remain in operation for generation at rated capacity. The Management found (August 1974) that one of the reasons for low generation

was non-operation of the boiler feed pumps and motors. The reasons for non-working of feed pumps and motors, as could be seen from the records, were as follows:

- (a) Overhauling work of boiler feed pumps were in arrears; out of 9 feed pumps of Units III, IV and V, 8 pumps were not overhauled for more than 5 years.
- (b) Repeated vibration in the coupling and bearing of the pumps and high endseal temperature in these motors.
- (c) Non-availability of spares.
- 6.54. One of the major constraints responsible for low generation was stated by the Management in May 1974 to be non-disposal of fly ash. About 250 to 300 tonnes of ash accumulated per day. Ash is being dumped regularly into the dumping yard, from where it is removed through a contractor. For dumping of ash in the dumping yard, the Company maintains a fleet of 42 wagons along with the requisite personnel. During the three years up to 1975-76, 49,960 tonnes of ash were removed from the dumping yard through contractors at an expenditure of Rs.2.91 lakhs.

The Power Economy Committee appointed by the Government of India, in its report (August 1974), recommended all possible action for utilising the fly ash produced by the power station. In Tamil Nadu, fly ash is being used in pole factories for over a decade.

In reply to the recommendations made by the Power Economy Committee, the Management stated (May 1975) that the West Bengal State Housing Board had shown some interest in the use of fly ash with a view to making bricks on the basis of a patent obtained by the Central Fuel Research Institute. But no tangible progress has been made in this direction (January 1977).

6.55. Boilers of Units I and II were designed to burn light diesel oil while the boilers of Units III, IV and V were designed to burn furance oil of 600 seconds viscosity as secondary oil support. Though the principal fuel of the power station was coal, considerable amount of fuel oil was used as secondary fuel for starting up the boilers and for flame stabilisation in the furnace during the low load periods. Non-availability of light disel oil of the required quality and furnace oil of lower viscosity posed a serious problem in running the power station.

In view of the worldwide crisis in petroleum products, the Government of India had directed (January 1974) the Company to convert the existing boilers and other equipment to use furnace oil of 1,500 seconds viscosity and to speed up its implementation as a time bound programme. In the absence of any

concrete evidence of speeding up of the implementation of the programme of conversion, a committee set up by the Government of India in June 1974 visited the power station (August 1974) and observed as under:

"The committee was very much disappointed to see the progress made so far. The power station authority did not even finalise the scheme for conversion. The job is being handled in a slipshod manner which will only prolong the execution of this job."

In pursuance of a decision of the Board of Directors (February 1975), the work was allotted to a firm on 5th April 1975 on turnkey basis at a negotiated price of Rs.12.88 lakhs on the ground of urgency. The firm was required to complete the work in all respects within 6 months from allotment of the work, failing which the firm was liable to pay a penalty at ½ per cent of the contract value for every week of delay subject to a maximum of 5 per cent of the total contract value. On 25th March 1975, the firm requested an upward revision of price as certain items were reportedly not considered in its previous offer. The Board of Directors approved (July 1975) the revised price of Rs.14.08 lakhs.

As the work was behind schedule, the target date was extended from 5th October 1975 to the end of November 1975. The firm failed to complete the work even by that date. In a joint meeting held on 13th and 14th February 1976, the firm assured the Company that it would complete the modification job of the boilers of Units III, IV and V by the end of May 1976 and those of Units I and II by the end of June 1976. The work is still incomplete (January 1977). The firm was exempted from paying security deposit but the entire amount excluding the erection cost of Rs.1.30 lakhs has been paid to the firm. For the delay, no fine has been imposed on the firm. Owing to use of furnace oil of 600 seconds viscosity in the boilers during the period from April 1974 to September 1976 the Company had to incur extra expenditure of Rs.13.23 lakhs, being the difference in value of low and high viscosity oil.

The Management stated (November 1976) that the work was allotted to the firm as the Company could not locate any other firm which could take up the job on a turnkey basis. It was also stated that the reasons for the work falling behind schedule would be ascertained and penal measures as enforceable would be taken if the firm was found to be at fault.

6.56. Overhauling of turbo-generator: Phased programmes were not drawn up by the Company for undertaking overhauling of the turbo-generator of different units; such works were undertaken only when these became unavoidable, leading to forced outages for prolonged periods and risk of damage to the equipment. Due dates of overhaul as per the manufacturers' recommendations were not available. The actual dates of taking up overhauling of the

turbo-generator and the actual time taken for the same for the various units of the power station, since installation, against the norm of 3 to 4 months fixed by the Management in December 1964, are indicated below:

Unit	Date of commission- ing	Period of actual overhauling	Actual time taken (in number of days)	
I	10th June 1960	28th December 1964 to 28th February 1965. 27th April 1974 to 10th August 1974	63 106	
II	13th April 1960	29th December 1965 to 15th April 1966 30th December 1975 to 15th April 1976	108 108	
111	23rd April 1964	7th September 1966 to 10th December 1966. 1st June 1973 to 9th December 1973	95 192	
IV	19th June 1964	21st October 1967 to 31st January 1968 24th March 1975 to 26th July 1975	103 125	
\mathbf{v}	4th May 1966	17th February 1969 to 28th May 1969	101	

6.57. Overhaul of boilers: Boilers are required to be overhauled once a year according to the provisions of the Indian Boilers Act, 1923. Phased programmes were not drawn up for undertaking overhauling of boilers of the various units; such works were undertaken only when these became unavoidable, leading to forced outages for prolonged periods and risk of damage to the boiler equipment. The standard time required for the overhaul of a boiler has not been fixed by the Company (January 1977). The actual time taken for the overhaul of boilers in the various units since inception varied from 13 days to 260 days each time.

It will also be seen that the boilers were not overhauled according to the provisions made in the Indian Boilers Act. Most of the boilers were run beyond the period of steaming certificate.

A committee on modernisation of maintenance procedures, set up by the Central Electricity Authority, had prescribed (June 1975) that overhauling of turbo-generators and boilers in the power station should be completed within 45 days and 30 days at the maximum, respectively, so that the down time of the generating unit was brought to a minimum. To achieve this, the following recommendations were made:

- (a) Setting up of a fully equipped planning and programming unit headed by an Executive Engineer;
- (b) shift working to reduce overhauling time;
- (c) separation of overhauling organisation from the organisation for preventive maintenance and break-downs:
- (d) optimum application of personnel to minimise overhauling period;
- (e) setting up of a sub-unit to procure critical spares; and
- (f) continuous monitoring of the behaviour of machines during operation so that overhauling is planned when the behaviour shows drift from normal.

The cost of implementation of the recommendations was estimated by the Management in November 1975 to be Rs.2 crores.

While making the recommendation, the Committee identified the following major bottlenecks which caused delay in completion of overhauling:

- (i) Inadequate lead time for proper planning of maintenance;
- (ii) lack of documentation for procedure and methodology of maintenance;
- (iii) inadequate man-power both at supervisory and working level;
- (iv) single shift work;
- (v) shortage of tools and tackles, electric welding and gas cutting sets;
- (vi) delay in procurement of essential spares;
- (vii) shortage of vital consumable materials like oxygen; and
- (viii) delay in obtaining materials from stores.

The consultant engaged by the Company in January 1972 had also observed (March 1972) that no power station maintenance organisation had been developed in spite of heavy overhauling work. The consultant had recommended that at least two engineers should be associated fully with overhauling work done by outside contractors so that overhauling work could be taken up in future by the Company's own men. A sum of Rs.3.49 lakhs (DM 1,02,360) was paid to a West German firm in April 1976 for overhauling of turbines of Units III and IV.

The State Government informed (August 1975) the Government of India that in order to implement the recommendations of the committee on modernisation of maintenance procedures, the Company would need 500 to 600 more persons over the existing strength entailing an additional expenditure of about Rs.4 lakhs every month. The recommendations of the committee have not been implemented (January 1977).

6.58. Water of river Damodar, which is being used by the Company, posed a serious problem to the boilers of the power station. The processed water, which is being supplied to the power station from the Company's water treatment plant, showed unusual hardness as well as considerable quantities of organic matter. As these could not be removed by the water treatment plant, a demineralisation plant with two chains, having capacity to produce make-up water of 480 cu.m per chain per hour, was installed in 1964.

In June 1971, the Management observed that thc output make-up water per chain had come down to 250 cu.m per hour against the rated capacity of 480 cu.m. per hour. As the derated capacity of the make-up boiler feed demineralisation plant had upset the provision, the Management proposed (June 1971) the installation of a third

chain of the same capacity. Accordingly, a single quotation was obtained in June 1971 from a firm of Bombay which agreed to instal the third chain at a total cost of Rs.3.50 lakhs. Since the price of the equipment, cost of erection, commissioning, etc. was considered high it was decided by the Management (July 1971) to call open tenders.

In August 1972, sealed tenders were invited for installation of the additional chain (estimated cost: Rs.4.50 lakhs) at the power station deminerlisation plant. Eight tenders were received. None of the offers was accepted on the ground that the tender specification of the Company had been defective, in as much as it did not categorically specify the availability of make-up water within the two re-generation (480 cu.m) and space limitation. In order to give all tenderers a fair chance, the revised specifications were also sent to the earlier tenderers requesting them to submit their revised offers, which were opened on 15th January 1973. This time six parties submitted their revised offers.

As approved by the Board of Directors (January 1974), the work was allotted to a firm of Calcutta on 13th July 1974, at a negotiated rate of Rs.5.43 lakhs, on condition that the firm would complete the work within 10 months from allotment of the work, failing which the firm was liable to pay a penalty of ½ per cent of the contract value for every week of delay, subject to the maximum of 5 per cent. As the validity of the offer expired on 31st Octber 1973, the firm came forward (August 1974) with a price escalation bill for Rs.1.77 lakhs on the ground that there had been unprecedented price increase during the period January 1974 to April 1974. Claim of Rs.1.67 lakhs was accepted by the Board of Directors in June 1975. The work was completed in March 1976. For the delay in completion by about 10 months, a penalty of Rs.35,000 was imposed on the firm but it was waived by the Board of Directors on 24th July 1976.

Consultant: Having regard to the recommendations of the Action Group of the Planning Commission for bringing the power station back to normal working in the quickest possible time, the Company requisitioned the services of a consulting engineer of New Delhi, at a monthly fee of Rs.6,900 for the first term and of Rs.8,400 for each of the second and subsequent terms, with effect from February 1973, to continuously guide and advise the local staff with station particular reference rehabilitating the power accessories. Despite continuous service of the consulting engineer since February 1973, there have been occasional failures of boiler feed pumps and motors, coal mills, I.D. fans, boilers, etc. The period of the consultancy service was extended for a third term with effect from 1st February 1974 at a monthly fee of Rs.8,400 for overhauling of boiler of Units II and III, overhauling of all the turbines excluding turbine III, ash handling system, etc. The turbogenerator of unit V along with its auxiliaries has not been overhauled since May 1969.

6.60. Thermal efficiency: The thermal efficiency of generation (percentage of total heat energy equivalent of the electricity sent out to the heat energy in the fuel consumed) of the power station during the five years up to 1975-76 is indicated below:

		1971-72	1972-73	1973-74	1974-75	1975-76
1.	Units generated (Mkwh)	738 · 851	747.904	829 · 279	884.001	972 · 637
2.	(a) Coal consumed (tonnes)	4,17,784	3,92,184	4,93,575	5,08,768	5,78,553
	(b) Oil consumed (tonnes)	18,314	31,142	28,911	39,015	19,819
3.	(a) Ccal consumed per kwh generated (in kg)	0.5665	0.5244	0.5952	0.5755	0.5766
	(b) Oill consumed por kwh generated (in kg)	0.0248	0.0416	0.0349	0.0441	0.0198
4.	(a) Average calorific value of coal (k cal/kg)	5,001	5,082	4,792	4,955	5,061
	(b) Average calorific value of oil (k cal/kg)	10,016	9,872	9,719	9,641	9,606
5.	Overall thormal efficiency of generation (percentage)	28.0	28.0	27.0	26.3	27.7

According to the efficiency guaranteed by the manufacturers, the power station should require 2,360 k cal of fuel per unit of electricity generated and hence the thermal efficiency expected was 36.4 per cent. The efficiency actually attained by the power station was less than the efficiency guaranteed by the manufacturers.

The Company has not fixed any norms of efficiency taking into account the operating conditions and other relevant factors. During the five years up to 1975-76, the value of the consumption of coal and oil in excess of the requirement based on the thermal efficiency guaranteed by the manufacturers was of the order of Rs.505.45 lakhs. No limits have also been fixed by the Company for loss of fuel in handling and storage.

One of the reasons for higher fuel consumption in the boilers and decrease in the thermal efficiency was heavy deficiency in feed water temperature. During 1975-76, the feed water temperature was as follows:

Unit				Maximum	Minimum	Avorago	Designed tomperature as por project report
				(In	degrees centig	grade)	
I	• •	••	••	130	113	118]	00.1 10g
11	• •	• •	••	130	118	123	204 · 4°C
111		••	••	150	· 135	144	
IV	••	• •	••	154	129	136	215·5°C
v	• •	••	••	165	133	148	

Due attention was not given to the maintenance of heaters in order to improve the feed water temperature. The Management stated (October 1976) that an indent had been placed for procurement of heater tubes for replacement of worn out tubes and these would be fitted as soon as the materials were received.

6.61. Auxiliary consumption: The consumption of energy in auxiliaries was in excess of the prescribed limit (viz., 10 per cent of the power generated) during the five years up to 1975-76 as shown in the table given below:

	1971-72	1972-73	1973-74	1974-75	1975-76
Units generated (Mkwh)	738 · 851	747 • 904	829 · 279	884 • 001	972 • 637
Actual auxiliary consumption (Mkwh)	98.522	98 • 680	99-695	114.376	110.456
Norm as per the prescribed limit of 10 per cent of the units generated (Mkwh)	73 · 885	74 • 790	82 • 928	88 • 400	97 • 264
Excess consumption (Mkwh)	24 · 637	23.890	16.767	25.976	13.192
Cost of energy consumed in excess (In lakhs of Rupees)	25.92	26.16	18.58	35.02	17.55

Reasons for the excess auxiliary consumption of power have not been analysed by the Company (January 1977).

6.62. Cost of generation: The table below indicates the actual cost, of generation under broad headings during the five years up to 31st March 1976, against the anticipated cost of generation of 3.26 paise per kwh in Unit V:

Year				Units	Cost of generation			Details of op	Porcento de			
1 car				generated (Mkwh)	Total cest	Fixed cost	Operation and main- tenance ccst	Salaries and wages, etc.	Stores and spares, repairs and maintenace	Cost of fuel	Percentage of cost of fuel to operation and main- tenance cost	
						(paise per k	wh)					
1971-72	••	• •	••	738 · 851	10.52	4.70	5 · 82	0.84	1.38	3 · 60	61.9	
1972-73	••	• •	••	747 • 904	10.95	4.56	6.39	0.93	1.29	4.17	65 · 3	
1973-74	••	• •	••	829 · 279	11.08	4.15	6.93	1.00	1.29	4.64	67.0	4
1974-75	••	• •	• •	884.001	13.48	4.09	9.39	1.03	1.35	7.01	74.7	8
1975-76	••	••		972 • 637	13.30	4.05	9.25	0.87	0.82	7.56	80 • 2	

The reasons for the high cost of generation, as could be seen from the records, were as follows:

- (i) Non-utilisation of generation capacity to the optimum extent.
- (ii) Increase in the cost of operation and maintenance.
- (iii) Higher cost and consumption of fuel. Fuel cost alone ranged between 3.60 to 7.56 paise per kwh during the last five years.
- (iv) High consumption of power in the auxiliaries.

The sharp increase in the fuel cost was attributed by the Management (March 1975) to:

- (a) increase in price of light diesel and furnace oil:
- (b) increase in consumption of fuel oil due to running of units at de-rated capacity and frequent fluctuation of drawal by Bandel thermal power station;
- (c) unsatisfactory condition of coal mills; and
- (d) non-functioning of instruments for measuring oil consumption for a long time.

The cost of coal per unit generated at the Company's power station was worked out by the Eastern Regional Electricity Board (February 1976) to be 5.9 paise. The Board observed (February 1976) that the cost of coal per unit generated could be reduced to 3.7 paise provided the plant was run at higher load factor and the maximum demand limit increased.

- 6.63. Coal mill rejects: Coal has to be pulverised in the coal mills before it is fed to the boilers and unground coal is rejected by the mills. No account was kept of the coal mill rejects. CFRI in its report (February 1974) observed that although the figures of yield of mill rejects were not readily available from the plant records, these were expected to be sizable quantity, viz., at least 3 to 5 per cent of the total coal fed into bowl mills. It was further observed that usable coal (ash content: 31.5 per cent) formed about 50 per cent of the mill rejects from the bowl mill of boiler III and was lost as discard. In case of mill rejects from the bowl mill of boiler V, the corresponding loss of good coal (ash content: 30 per cent) was found to be 27 per cent of the total mill rejects. CFRI recommended that for economisation of operation of the power plant, setting of the bowl mills delivering the mill rejects should be regularly checked and put in order to keep the coal loss to a minimum, but that at the same time some positive measures might also have to taken to recover and or use the coal lost with the mill rejects. No action has been taken in this direction (January 1977).
- 6.64. Tariff and commercial matters: The Company's standard industrial tariff had always been kept at par with that of the Damodar Valley Corporation (DVC) excepting for fuel surcharge and was revised only when the standard tariff of the DVC was revised. Although as per the terms of the agreement with the consumers, the Company could revise the tariff independently, this tariff

had all along been linked up with the standard tariff of DVC. The Management felt (February 1972) that there should not be any difference in the tariff of the two agencies operating in the same area. The tariffs were first revised in October 1965. In June 1971, a surcharge of 15 per cent on the total energy and demand charges was levied in order to improve the finances of the Company. The tariffs were further revised in August 1974 and December 1974. The Company did not compile any detailed cost of supply of energy to each category of consumer to serve as a reliable guide to its tariff policies. The Company sells about 75 per cent of its saleable power to the West Bengal State Electricity Board and about 20 per cent to the local industries.

6.65. Proposals for revision of tariffs in each case were formulated, keeping in view mostly the amount of additional revenue to be raised to cover the increased revenue expenditure. The following table indicates that despite the periodical increase in tariff rates, the increase in revenue was largely offset by increase in expenses:

Year		Sale (In Mkwh)	Revenue from sale of energy (In lakhs of Rupees)	Revenue per unit sold (In paise)	Total revonue expenditure (In lakhs of Rupees)	Overall cost per unit sold (In paise)	Loss per unit sold (In paiso)
1971-72		667 • 678	454.93	6.81	673 · 97	10.09	3.28
1972-73	• •	686 · 923	514.52	7 • 49	711.22	10.35	2.86
1973-74		757 · 226	571.97	7.55	808 • 42	10.68	3 · 13
1974-75		855.716	984 · 76	11.51	1,118.27	13.07	1.56
1975-76		932 • 995	1,211.62	12.99	1,306.53	14.00	1.01

6.66. Special tariff: The Company has been supplying power to large bulk consumers like the West Bengal State Electricity Board, The Fertilizer Corporation of India Limited and Graphite (India) Limited. The special tariffs for bulk supply were kept unaltered at the time of general revisions of tariff in October 1965, August 1974 and December 1974. The particulars of special tariffs in respect of the three bulk consumers are given below:

(A) West Bengal State Electricity Board

The Board was availing of power at 33 KV and 132 KV, with effect from 14th September 1961 and 14th April 1964 respectively, at the following rates:

- (a) For 132 KV supply:
 - (i) Demand charge ... Rs.11.50 per KVA per month
 - (ii) Energy charge ... 2.08 paise per kwh plus fuel surcharge
- (b) For 33 KV supply:
 - (i) Demand charge ... Rs.6.41 per KVA per month up to 5,000 KVA, Rs.5.70 per KVA per month over 5,000 KVA
 - (ii) Energy charge ... 2.57 paise per kwh plus fuel surcharge

The Company proposed (January 1969) to the Government that the special tariff be enhanced from the dates DVC decided to revise its tariff for supply of power to the Electricity Board; this was not considered up to 8th August 1973 when Government decided to appoint a committee for making recommendations regarding revision of the tariff.

On the basis of the recommendations of the committee (November 1973), the Company was permitted, for the first time, by Government to enhance its special tariff rates from 1st April 1974 as under:

(a) For 132 KV supply:

- (i) Demand charge ... Rs.7.70 per KVA per month
- (ii) Energy charge ... 2.14 paise per kwh plus fuel surcharge plus two and a half per cent surcharge on total billed amount

(b) For 33 KV supply:

- (i) Demand charge ... Rs.6.75 per KVA per month up to 5,000 KVA, Rs.600 per KVA per month over 5,000 KVA
- (ii) Energy charge ... 2.70 paise per kwh plus fuel surcharge plus two and a half per cent surcharge on total billed amount

In accordance with the principle accepted by the committee, the Board of Directors, with the approval of Government, revised the special power tariff applicable to the Electricity Board with effect from 12th May 1975, the date from which DVC's revised tariff for the Electricity Board was scheduled to be effective. As the West Bengal State Electricity Board did not agree to pay the enhanced tariff to DVC from 12th May 1975, the Company could not also adopt the revised tariff. Government directed (December 1975) the Company to form a committee to decide whether its revised tariff could be made effective from 12th May 1975, or 1st September 1975 or 1st January 1976. The committee has not been formed (January 1977).

Bills are being preferred by the Company on the basis of the revised rate with effect from 1st January 1976. Meanwhile, DVC's tariff to the Electricity Board has been given effect to from 1st September 1975. The revised rates were as under:

(a) For 132 KV supply:

- (i) Demand charge ... Rs.22.23 per KVA per month
- (ii) Energy charge ... 5.472 paise per kwh less 1 paisa per kwh for wheeling charge and line loss plus fuel surcharge

- (b) For 33 KV supply:
 - (i) Demand charge ... Rs.18.00 per KVA per month
 - (ii) Energy charge ... 7.83 paise per kwh for first 2 million units less 1 paisa per kwh for transmission cost and line loss
 - 7.56 paise per kwh for next 3 million units less 1 paisa per kwh for transmission cost and line loss
 - 7.29 paise per kwh for next 5 million units less 1 paisa per kwh for transmission cost and line loss, plus fuel surcharge

Deferment of revision of tariff by the Board from 1st September 1975 to 1st January 1976 has resulted in loss of revenut of Rs.45 lakhs, as worked out by the Company.

(B) Long-term agreements for supply of power

In January 1967 and October 1971, the Company sanctioned supply of power to Graphite (India) Limited and The Fertiliser Corporation of India Limited respectively with commitment to keep the rates firm for a period of ten Jears. As the tariff rates in the above cases had been kept firm, the Company could not get the benefit of tariff revisions in respect of these supplies.

The losses sustained by the Company on account of supply of energy at low rates to three consumers for the years 1973-74 to 1975-76 are given in the table below:

	Total supply (in Mkwh)			Revenue realised per kwh (paise)			Cost of production per kwh (paise)		Loss per kwh (paise)			Total loss (In lakhs of Rupees)			
Name of consumer	1973-74	1974-75	1975-76	1973-74 1	974-75 1	975-76	1973-74 1	974-75 19	75-76	973-74 1	974-75	1975-76	1973-74	1974-75	1975-76
West Bengal State Electri- city Board-															
132 KV	421 · 725	5 550.053	534.034	6.80	10.75	11.30	11.09	13.48	13.30	4 · 29	2.73	2.00	180-92	150 · 16	106.81
33 KV	75 • 395	5 86·771	78 · 772	7.68	12.12	13.11	11.09	13.48	13.30	3.41	1.36	0.19	25.71	11.80	1.50
The Fertilizer Corporation of India Limited.		2 57·19]	76·213	8.77	9.54	9.71	11.09	13.48	13.30	2 · 32	3.94	3.59	9.70	22.53	27 · 36
Graphite (India) Limited.	33.92	9 34.70	1 36 ·607	8 · 17	11.77	12.11	11.09	13•48	13.30	2.92	1.71	1.19	9.91	5.93	4•36
										ๆ	'otal		226.24	190 · 42	140.03

6.67. Pattern of sale and revenue: The pattern of sale and revenue in respect of various categories of consumers having different rates of tariff for the three years up to 1975-76 is shown below:

	1973-74				1974-75			1975-76			
Category	Sale (In Mkwh)	Total revenue earned (In lakhs of Rupees)	Revenue earned per kwh sold (In paise)	Sale (In Mkwh)	Total revenue earned (In lakhs of Rupees)	Revenue earned per kwh sold (In paise)	Sale (In Mkwh)	Total revenue earned (In lakhs of Rupees)	Revenue earned per kwh sold (In paise)		
Domestic			-				••				
(a) Light and fans	. 2.417	6.81	28.17	2 · 412	7 · 40	30.70	3.071	7.38	24.03		
(b) Heat and power	. 0.210	0.34	16.43	0.690	1.26	18-29	0.629	1.16	18-47		
Commercial											
(a) Light and fans	. 0.459	1.65	36.00	0 • 520	1.92	37.00	0.770	3.08	30.00		
(b) Heat and power	0.204	0.38	18.55	0.317	0.55	17.32	0 · 420	0.77	18.29		
Industrial											
(a) Low and medium voltage	1.201	2.17	18.10	1 · 409	3.35	23.75	1.661	4.01	24 · 12		
(b) High voltage	. 179.074	174.41	9.74	190 · 466	260-28	13.67	230 · 706	3 65·93	15.86		
Street lighting	0.136	0.49	36.00	0.569	2.11	37.00	0.569	2 · 27	40.00		
Traction (Railway non-traction)	0.149	0.28	18.66	: 0.150	0.34	23 · 11	0.163	0.44	26.86		
Public water works ar Sewerage pumping	ad 8.654	6.06	7-00	9-288	6.50	7.00	8.048	11.07	13.74		
Supply to distributing license	es 564·722	378.00	6.69	649 · 895	690 · 14	10 · 62	686 • 958	782 · 38	11.38		
Total	. 757 · 226	570 · 59*		855 • 716	973 · 85*		932 • 995	1,178 • 49 *			

^{*}Does not include the revenue realised on account of meter rent and other receipts.

6.68. Fuel surcharge: One of the reasons for the losses in the power station was stated by the Management in March 1975 to be incorrect valuation of coal consumed in the power station for calculation of the fuel surcharge. During 1973-74, out of 5,09,761* tonnes of coal consumed in the plant, 88,940 tonnes of coal (Rs.52.70 per tonnes) were taken into consideration as sinks (Rs.22.50 per tonne) in calculating fuel surcharge, which resulted in underrecovery of fuel surcharge to the extent of Rs.26.86 lakhs. The Board of Directors observed (January 1975) that the consumers should be requested to make payments of the amount under-charged. The amount has not been realised (January 1977).

Non-realisation of fuel surcharge of Rs.16.96 lakhs pertaining to the period from 1967-68 to 1970-71 (up to June 1970) from the Aluminium Corporation of India Limited was commented upon in paragraph 55 of the Report of the Comptroller and Auditor General of India for the year 1971-72. Against the outstanding claims, only Rs.6.75 lakhs were realised up to March 1977.

In February 1976, notification was made in the Calcutta Gazette declaring the Aluminium Corporation of India Limited as a relief industry under 'Sick Industries, West Bengal' and all dues from it had to be suspended up to 16th August 1976.

- 6.69. Levy of surcharge for delay in payment: All bulk consumers, including the West Bengal State Electricity Board, are allowed one month from the date of presentation of bills for making payment. On delayed payments, a surcharge of one per cent per month or part thereof on the amount billed was formerly levied for the period from the date of presentation of the bill to the date of payment. The rate was revised to 2 per cent with effect from August 1975 in order to discourage consumers from delaying payments. In the case of the West Bengal State Electricity Board there has been no revision of surcharge from the old rate of one per cent. The Company preferred a number of delayed payment surcharge bills amounting to Rs.36.15 lakhs up to 31st March 1976 to the West Bengal State Electricity Board and the Durgapur Chemicals Limited on account of payment made after the due dates. Payment of these bills has not been made by the parties (March 1977).
- 6.70. Losses in bulk supply of energy: The power station is connected with the Bandel Thermal Power Station of the Electricity Board on the one hand and the DVC system on the other. The Company has to supply power to Bandel according to a pre-determined monthly schedule.

Sudden decrease in drawal from the scheduled off-take often caused excess supply to the DVC system. There were, however, occasions when the Company had to supply excess energy to the DVC in order to provide a minimum load for its running units, particularly during night hours.

^{*}Includes 16,186 tonnes consumed for process steam.

Mention was made in paragraph 1 of Section III of the Report of the Comptroller and Auditor General of India for 1973-74 (Commercial), of the loss of Rs.4.07 lakhs suffered by the Company in pumping excess energy of 72.81 Mkwh to the DVC system during the period from 1968-69 to 1971-72. Similar loss of revenue of Rs.15.12 lakhs was suffered by the Company during the period 1972-73 to 1975-76 on account of pumping excess power of 77.67 Mkwh to the DVC system.

The Management stated (March 1976) that a large portion of the energy pumped into the DVC system was due to non-drawal of schedule off-take by the Bandel Station and that the West Bengal State Electricity Board could not be pursuaded to share the loss suffered by the Company in proportion to its responsibility for causing excess pumping into the DVC system.

The Electricity Board, however, considered (March 1975) that the schedule given was only an operational guideline and that it could vary its drawal from the Company according to the needs of its own system.

There is no agreement with the Electricity Board for supply of power. The terms and conditions of supply are determined by exchange of letters.

6.71. Losses in import of energy: In order to meet sudden extra drawal over the schedule by the Bandal Power Station, power is imported from DVC under "emergency assistance". In importing power from DVC and diverting the same to Bandel, the Company gets only energy charge and fuel surcharge from the Electricity Board. DVC charges at a rate fixed by the Eastern Regional Electricity Board from time to time, which is higher than the rate recoverable from the Electricity Board.

During the period from 1971-72 to 1975-76, the Company had to suffer a loss of Rs.13.41 lakhs due to import of energy (84.240 Mkwh) from DVC for sale to the Electricity Board.

To avert the loss for both overdrawal and underdrawal by the Bandel Station, a meeting was held in January 1975 amongst the officials of the Company, the Electricity Board, DVC and the Department of Public Undertakings. It was recomended that:

- (i) the Electricity Board should be made to agree to pay to the Company the amount which the Company pays to the DVC, and
- (ii) the Company's tariff for the Electricity Board should be fixed reasonably so that the energy charge and the fuel surcharge together cover the emergency power purchase rate fixed by the Eastern Regional Electricity Board from time to time.

The recommendations have not been implemented (January 1977).

6.72. Expansion programme: As mentioned in paragraph 57(5) of Section III of the Report of the Comptroller and Auditor General of India for the year 1970-71, the Company decided in 1962-63 to install one 150 MW unit

at an estimated cost of Rs.12.50 crores to be financed from U.S., A.I.D. loans. The project was abandoned (September 1972) after incurring an expenditure of Rs.9.37 lakhs as both the Central and the State Governments expressed (March 1969) their inability to provide requisite funds.

In order to meet the shortfall in the availability of power in the State, the Company again decided in 1971-72 on an expansion of the power station by installing one 200 MW unit at an estimated cost of Rs.43 crores. In view of the likely delay in the installation and commissioning of the 200 MW unit, the Company decided in 1972-73 to instal one 110 MW unit. In November 1973, a project report was sumbitted to Government for approval and its inclusion in the Fifth Plan.

The estimated cost of the expansion unit was revised from Rs.2,674.80 lakhs to Rs.2,958.80 lakhs (November 1973) due to price escalation and to Rs.3,791.91 lakhs (August 1976) to accommodate fresh provisions for additional items of work. While the unit was originally scheduled to be commissioned by the end of 1978, the target date of commissioning had been revised (August 1976) to the end of February 1980.

Pending receipt of clearance from the Planning Commission and finalisation of details of the sources of financing, the Board of Direcors decided (January 1974) to place orders on the suppliers of plant and equipment. Accordingly, a letter of intent was placed in February 1974 on the Hyderabad unit of Bharat Heavy Electricals Limited for supply of a turbo-generator set along with auxiliary and ancillary equipment. Rupees 81.00 lakhs were advanced up to November 1976. Another letter of intent was placed on a private firm in Durgapur in February 1974 for supply of indigenous materials and components of the boiler. Rupees 70.55 lakhs were advanced to the Durgapur firm up to November 1976. Rupees 31.83 lakhs were advanced to a foreign firm for supply of imported materials and components of the boiler. Foreign exchange to the extent of £13,35,099 was released by the Government of India in August 1975.

The Company appointed a firm of consulting engineers for the expansion work. The total amount of fees payable to the consulting engineer was estimated to be Rs 73.10 lakhs. Rupees 3.10 lakhs were advanced to the firm up to November 1976.

The Management observed (February 1975) that the sixth unit had not been formally sanctioned and included in the Fifth Plan due to uncertainty regarding availability of finance. The scheme was stated to have been accepted in principle by both the Planning Commission and the State Government, and Government on its own initiative allocated Rs.150.00 lakhs during 1973-74 and 1974-75 for the purpose of taking advance action in regard to placement of orders for equipment and other preliminary expenses. The scheme has since been approved by the Planning Commission.

In June 1975, the board of Directors noted that no funds from the Government of India would be available and the Chairman wondered if the Company should implement the sixth unit if such implementation was to be carried out from the Company's own resources.

As the Government of India and the State Government had expressed (August 1975) their inability to provide the requisite funds, the Company approached (November 1975) the nationalised banks and the financial institutions to secure the entire finance necessary for the project but the negotiations failed.

The total expenditure incurred up to November 1976 (including advances) on erection of the sixth unit was Rs.200.48 lakhs.

The Management stated (August 1976) that desired progress could not be achieved due to stringency of funds and although the generator, turbine and some accessories had already been manufactured in the works of the firm at Hyderabad and many components of the boiler had been fabricated both at Durgapur and in the U.K., the same had not reached the project site due to non-payment of outstanding dues to the suppliers of plant and equipment. Besides, the Company was liable to pay 18 per cent interest on all outstanding dues to the suppliers of turbo-generator, which stood at about Rs.40.00 lakhs up to March 1976.

6.73. The table below indicates the value of production, the total expenditure (less miscellaneous income) and the profit loss of the power station during the five years up to 1975-76:

Year			Value of production	Total expenditure	Profit (+)
			-	less miscella- neous income	Loss ()
			(In	lakhs of Rupees)
1971-72	••	• •	460 · 66	671 · 84	(-)211·18
1972-73	• •	••	522 · 24	723 · 91	$(-)201 \cdot 67$
1973-74	• •	• •	577.94	836 · 66	$(-)258 \cdot 72$
1974-75		• •	979 · 66	1,117 · 76	(-)138-10
1975-76		• •	1,202 · 92	1,297 · 13	$(-)94 \cdot 21$

D. Water treatment plant

6.74. In order to meet its own process and drinking water requirements as also of various industries located in the Durgapur industrial belt, the Company expanded the capacity of its existing water works from 6 million gallons per day to 35 million gallons (process water 21 million gallons and drinking water 14 million gallons) per day in January 1965 at a total cost of Rs.190.32 lakhs.

Further expansion of capacity of the water works to 55 million gallons per day by the end of the Fourth Five-Year Plan was contemplated (March 1963) and an additional expenditure of Rs.12.01 lakhs was incurred during 1963-64 to 1969-70 towards civil and mechanical works. The expansion to 55 million gallons per day has, however, not been completed (January 1977).

6.75. The following table indicates the rated capacity, the input of raw water in the treatment plant and the output of process and drinking water during the five years up to 1975-76, based on the annual reports prepared by the Company:

	1971-72	1972-73	1978-74	1974-75	1975-78
(i) Rated capacity (Million gallons) :.	12,775	12,775	12,775	12,775	12,775
(ii) Raw water input (Million gallens)	8,203	8,758	9,444	10,190	10,123
(iii) Percentage of raw water input to rated capacity	64.2	68.5	73.9	79.8	79 · 2
(iv) Process and drinking water output (Million gallongs)	8,080	8,319	8,628	9,534	9,207
(v) Loss in process (Million gallons)	123	439	816	656	916
(vi) Percentage of loss in process to raw water input	1.5	5.0	8.6	6.4	9.0
(vii) Cost of production (Rupees per thousand gallons)—					
(a) Process water	0.70	0.70	0.72	0.79	0.80
(b) Drinking water	0 · 85	0.81	0.88	0.80	$0 \cdot 92$
(viii) Selling price (Rupees per thousand gallons)—					
(a) Process water	1.25	1.25	1 · 25	1 · 25	1.75
(b) Drinking water	1.25	1.25	1.25	1 · 25	1 · 75

The reasons for the restricted production of process and drinking water, as seen from the Company's records, were as follows:

- (i) Non-drawal of water of any kind by the Fertilizer Corporation of India Limited;
- (ii) low off-take of process water for units IV and V of the power plant;
- (iii) low demand from bulk consumers;
- (iv) non-utlisation of process water in the coke oven group of plants to its full requirements due to blanking of 44 ovens since December 1973; and
- (v) delay in development of other ancillary industries at Durgapur.

The percentage of loss in process has been gradually increasing. The Management has not fixed the normal percentage of process loss in the treatment plant (January 1977).

6.76. There is no direct metering arrangement for the intake of raw water from river Damodar to determine the quantity of raw water purchased from DVC. There is also no arrangement to measure the outgoing process drinking water from the water works. The quantity of raw intake water is determined on the basis of electrical energy consumed by the pumps assuming the pumped water to be directly proportional to the energy consumed in a given time.

In November 1974, the Board of Directors felt that in the absence of metering arrangement it was not possible to account for the incoming and outgoing water. The Board of Directors, therefore, approved purchase of nine water meters for installation in each individual feeder pipe line of the intake and the outgoing water at a cost of Rs.4.70 lakhs. No steps have, however, been taken for procurement of meters (January 1977).

Although the various units of the Company consume process and drinking water worth about Rs.38 to Rs.69 lakhs annually, the metering arrangements for the measurement of water received at the individual units were not functioning. In the absence of metering arrangements, there was no effective control over the consumption of water. Allocation apportionment of the cost of water to the different consuming plants was stated by the Management in February 1976 to have been made on the basis of technical estimates. In March 1976, the Managing Director of the Company observed that for a correct basis of interplant transfer, the meters should be set right and properly maintained. The meters have not been set right (January 1977).

Process and drinking water is being supplied by the Company to different Government departments undertakings (31 in number) and private consumers (90 in number) in Durgapur industrial belt for industrial as well as domestic use through 150 meters. Out of these 150 meters, 86 meters at the consumers' end were lying out of order and bills are reportedly being preferred on the basis of the average consumption in the year preceding the dates when the meters went out of order. In September 1975, it was decided that notices should be issued for the replacement of damaged meters by the consumers. A test check, however, showed that out of 86 damaged meters, only 36 were replaced by the consumers between 1st October 1976 and 6th November 1976. Fifty damaged meters remained to be replaced (January 1977).

6.77. The table below indicates the value of production, the total expenditure (less miscellaneous income) and the profit loss of the water treatment plant during the five years up to 1975-76:

Year			Value of	Total	Profit(+)
			production	exponditure less miscella- neous income	Loss(-)
				(In lakhs of	Rupecs)
1971-72	• •	• •	83 · 33	75.01	$(+)8 \cdot 32$
1972-73	• •		68 · 19	66.04	$(+)2 \cdot 15$
1973-74	•		73 · 44	67.57	(+)5.87
1974-75	•		$84 \cdot 32$	$71 \cdot 28$	(+)13.04
1975-76	• •	• •	111.26	78.79	$(+)32 \cdot 47$

E. Spun pipe factory

- 6.78. In May 1963, the Company took over the factory at Durgapur from DVC at a total cost of Rs.2.34 lakhs with a view to producing RCC spun pipes (commonly known as hume pipes) and jointing collars to meet its own requirements.
- 6.79. The factory's annual rated capacity of 6,270 runs was based on a daily output of 19 runs of mixed production (pipes and collars) for 330 days in a year on single shift basis. The actual production during 1971-72 to 1975-76, as compared with the rated capacity, is indicated below:

Year				Rated capacity	Actual production	Percentage of production to rated capacity
				(Runs of m	ixed production)	
1971-72	••	• •		6,270	2,860	45.6
1972-73	• •	•	• •	6,270	2,764	44.1
1973-74	• •	• •	• •	6,270	3, 130	50.0
1974-75	• •	• •	• •	6,270	2,686	42.8
1975-76	• •	••		6,270	2,503	40.0

The factory has been operating below its rated capacity since its take-over. The operation of the factory below the rated capacity was attributed (February 1976) by the Management mainly to want of adequate demand from outside parties, particularly Government departments.

To maintain a satisfactory level of production, the Company requested Government (February 1976) to ensure steady flow of substantial orders from Government departments.

6.80. The table below indicates the value of production, the total expenditure (less miscellaneous income) and the profit loss of the spun pipe factory during the five years up to 1975-76:

Year			Value of production	Total expenditure <i>leas</i>	Profit (+)	
				production	Loss(-)	
					(In lakhs of Ru	pees)
1971-72		• •	• •	4.03	6.31	(-)2·28
1972-73		• •	• •	4.46	8 • 49	(-)4.03
1973-74	• •	••	••	5.17	8.17	(-)3.00
1974-75	• •	••		6.59	8 • 50	(-)1.91
1975-76	• •	• •	••	8.71	6.18	(+)0.53

F. Central workshop

- 6.81. In November 1961, the Board of Directors of the Company decided to establish a central workshop with the following objects in view:
 - (i) repairs and maintenance of its plants and machinery;
 - (ii) manufacture of spare parts; and
 - (iii) execution of orders from outside parties on competitive basis.

As per a decision of the Board of Directors, the workshop stopped (August 1966) undertaking any outside job due to administrative difficulties.

The workshop, established at a cost of Rs.19.50 lakhs, started functioning from January 1964. It has four main shops, viz., (i) Machine shop, (ii) Structural shop, (iii) Foundry shop, and (iv) Electrical repairing and armature winding shop.

- 6.82. The Company has not assessed the capacity of the different shops in the workshop. Annual targets of work to be performed by different shops have also not been laid down. The extent of utilisation of machines and labour could not, therefore, be determined. No estimates are prepared indicating the time and the materials required either for repair jobs or for manufacturing jobs. As a result, there is no mechanism available either to compare the efficiency of the workshop or to control the cost of manufacture repairs. Separate job cost sheets are not being maintained.
- 6.83. The following essential records have not been maintained in the central workshop:—
 - (i) Register of fixed assets.
 - (ii) Log sheets of machines showing utilisation of each machine.
 - (iii) Register of work orders showing the estimated and the actual labour, material and overheads.
 - (iv) Job cards.
 - (v) Registers showing the volume of work actually done in individual shops either in monetary terms or in terms of physical quantities.
- 6.84. For re-organisation of the workshop, a committee was appointed by the Company on 4th November 1975, which submitted its report on 24th December 1975. The main recommendations of the committee were:
 - (i) amendment of the existing defective manning patterns;
 - (ii) modification of the electrical repairing and armature winding shop;
 - (iii) disposal of idle machine;
 - (iv) inculcating cost consciousness;
 - (v) installation of two overhead cranes or hoists each of 5 tonne capacity; and
 - (vi) re-conditioning of lathes.

The Company has not taken any decision on these recommendations (January 1977).

- 6.85. Idle machines: (i) Nine machines valued at Rs.2.04 lakhs, purchased and installed between December 1963 and April 1965, have not been commissioned. The Committee for re-organisation of the central workshop recommended (December 1975) disposal of the machines as none of them could be profitably used in the workshop. The Company has not taken any decision in the matter (January 1977).
- (ii) Sixteen other machines valued at Rs.2.07 lakhs, though commissioned in January 1964, have remained idle since their commissioning. The Committee for re-organisation of the central workshop recommended (December 1975) utilisation of the machines to meet urgent break-down jobs of the plant.
- 6.86. The table below indicates the value of production, income the total expenditure (less miscellaneous income) and excess of expenditure over income of the central workshop during the five years up to 1975-76:

Year				Value of production	Total expenditure less miscollaneous income	Excess of expenditure over income	
					(In lakhs of Rup	ees)	
1971-72	• •	• •	• •	40.37	$51 \cdot 82$	11.45	
1972-73	• •	• •	• •	49.36	77-80	28.44	
1973-74	• •	• •	• •	$57 \cdot 22$	90 • 60	33.38	
1974-75	• •	••	••	64 · 35	100 • 64	36 · 29	
1975-76	• •	• •	• •	57 · 69	90.40	$32 \cdot 71$	

7. Idle plant and machinery

- 7.01. Mention was made in paragraph 57(9) of the Report of the Comptroller and Auditor General of India for the year 1970-71 about non-commissioning of plant and machinery worth Rs.115.80 lakhs. The Committee on Public Undertakings in their second report recommended (April 1976) that immediate steps should be taken to commission the idle plants.
- 7.02. The table below indicates the major items of plant and machinery which are mostly lying idle (January 1977):

Name of the plant	Date from which lying idle	Value (In lakhs of Rupees)	Remarks
(i) De-carbonation plant	November 1958	8•00	The plant was installed to recover hydrogen sulphide gas for production of sulphuric acid from the weak ammoniacal liquor obtained from coke oven gas. The Management had stated (December 1975) that the plant could not be run owing to low sulphur content in the coal used in coke ovens and that weak ammoniacal liquor was being drained out since the commissioning of the coke oven batteries.

Remarks Value Date Name of the plant (In lakhs from w hich of Rupees) lving idle 7.13 The plant was installed in 1958 to recover Novem-(ii) Sulphuric acid plant sulphur from hydrogen sulphide to be ber 1958 obtained from the de-carbonation plant and to produce sulphuric acid therefrom at 10 tonnes per day. The plant was taken over from the supplier without carrying out any fullfledged trial run. Management had stated (June The 1973) that the plant could not be come missioned since inception awing to low concentration of hydrogen sulphice in the coke oven gas and lack of market for acid of 78 per cent strength which could be produced in the plant. 6.40 The plant was departmentally designed and 1971 (iii) Alum plant installed to produce ferric alum at 10 tonnes per day from sulphuric acid to be produced in sulphuric acid plant for treatment of raw water in the Company's water treatment plant. The alum plant could not be commissioned as the sulphuric acid plant did not run since installation. The plant is being operated in a limited way since February 1976. 12.96 The plant was installed for production of March (iv) Rosin plant soluble phenolic resin from sodium pheno-1964 late, a by-product of tar distillation plant with a view to making hard boards. The plant produced some quantity of resin during 1963-64, which was not easily marketable. The plant was closed down from March 1964. The Company had entered into an agreement in April 1963 with National Research Development Corporation of India for 14 years for utilising the latter's patent right for manufacture of resin. Accordingly, the Company has been paying royalty at Rs. 1,000 per annum although there has been no commercial production of resin. 73.99 The plant was installed to process and July (v) Hydrorefining plant ... distil 32 tonnes of cruc'e benzol per day 1961 for maximum recovery of finished products. The Management stated (October 1976) that the plant was taken over without ironing out all the shortcomings and defect and that the plant, excepting its distillation section, could not be operated owing to low yield of crude benzol from coke oven gas. On being approached, the designer of the plant had suggested in July 1968 certain medifica-

tion/rectification in the plant, but this has not been implemented (January 1977). The facilities already existing in the benzel plant was stated to be adequate to cope up with the yield of crude benzel

achieved.

Name of the plant

Value Date from (In lakhs of Rupees) which lying idle

Remarks

(vi) Wagon tippler plant

September 1969

- 13.72 Mention was made in paragraph 83 of the Audit Report, 1970 about purchase of a wagon tippler plant. The plant was installed in the power station for tippling ten box wagons per hour. The plant was provisionally taken over by the Company in January 1966 without conducting any trial run and guarantee test. As the guarantee period expired in November 1966, a token guarantee test was carried out at an extra cest of Rs. 9,000 in October 1968. The tippler plant did not work after the token guarantee test. No fellew up action was taken for rectifica-tion of the plant by importing sparts. In September 1976, the Management stated that since the entire ccal required for the power plant was being transported by trucks, there was no immediate need of the plant.

(vii) Coal sampling equip-April 1973 ment

0.70 The equipment was installed in the ccal sampling house in April 1973, but the same has not been commissioned (January 1977). The Management stated (October 1976) that the suppliers came on 12th July 1973, 31st October 1973, and 7th November 1975 to undertake trial runs, but on all these occasions the suppliers failed to commission the plant. manufacturer's representatives examined the plant and recommended (March 1976) removal of some parts and certain modification for trial run. The manufacturer firm also expressed a desire to take the

machine back to his workshop at his own cost; but the Company did not agree to the proposed modifications (June 1976).

For utilisation of ammonia and hydrogen sulphide of the coke ovens, which were being drained out in the form of ammoniacal liquor since inception, the Company consulted a consultancy firm of Delhi in December 1972 regarding the possibility of commissioning the idle plants. In September 1973, an order was placed with the consultancy firm for preparation of an economic viability report on three idle plants, viz., de-carbonation plant, sulphuric acid plant and alum plant at a cost of Rs.0.55 lakh plus out of pocket expenses. In its report submitted in December 1974, the consultancy firm estimated the total capital requirements for overhauling, modifications, etc. of the idle plants at Rs.6.77 lakhs and offered its consultancy service at Rs.1.35 lakhs. The consultancy firm also pointed out that after modifications, overhauling and repairing of the idle plants as suggested, the sulphuric acid plant would produce 2,850 tonnes of acid based on 300 working days in a year; of this, 2,832 tonnes could be utilised in the alum plant for production of 8,850 tonnes of liquid alum to meet the requirements of water treatment plant and other local water works and the remaining acid could be utilised in the benzol recovery section. The consultancy firm further pointed out that commissioning of the idle plants would be economically viable and the de-carbonation plant, sulphuric acid plant and alum

- plant would earn profit of Rs.9.97 lakhs, Rs.6.57 lakhs and Rs.4.37 lakhs per annum respectively. The Company accepted (March 1975) the recommendations and placed a formal order with the firm (September 1975) for preparation of a detailed engineering report at a cost of Rs.1.35 lakhs. In September 1975, the consultancy firm was also asked to prepare a techno-economic report based on an in-plant study, laboratory investigation and market study to re-start the idle resin plant at a total fee of Rs.0.75 lakh.
- 7.04. Engineering report in respect of the alum plant was submitted by the consultancy firm in June 1976. However, the alum plant had been started (February 1976) by the Company by making certain modifications even before receipt of the report. A test check of the records showed that 291 tonnes of liquid alum were produced in the plant during the period February 1976 to October 1976 by purchasing sulphuric acid, bauxite, etc., from the market. Detailed engineering report in respect of de-carbonation plant and sulphuric acid plant and the techno-economic report in respect of resin plant have not been received from the consultancy firm (January 1977).
- 7.05. The Board of Directors expressed (September 1976) serious concern at the slow progress on the assignments entrusted to the consultancy firm. During discussion (August 1976), the consultancy firm held that the delay was due to non-availability of drawings owing to which it had to examine the cquipment of each plant in site and find out what modifications were necessary. The Management stated (September 1976) that suitable steps were being taken to sort out the issue.
- 7.06. As on 31st March 1976, the Company was owning 42 wagons for removal of ash from the power station, 11 locomotives and 47 heavy earth-moving machines. A test check of records in October 1976, showed that 17 wagons were in running condition, 10 wagons were under repair and 15 wagons were beyond economic repair. Out of 11 locomotives, 6 had been in unserviceable state for a long time. Out of 47 heavy earthmoving machines, which were purchased between 1955-56 and 1959-60, 15 were in unserviceable condition and beyond economic repair. In its annual report for 1974-75, the Company stated that appropriate action on unserviceable equipment plants would be taken on receipt of recommendations of a survey committee formed in 1973-74 for the purpose. Recommendations of the survey committee are awaited (January 1977). The Board of Directors desired (November 1976) that a proposal for disposal of 15 wagons which were beyond economic repair should be put up to the Directors' Executive Committee for its consideration. Proposal for disposal of the wagons had not been put up to the Committee (January 1977).
- 7.07. The Company purchased two bulldozers for handling coal in the power station from Bharat Earth Movers Limited (BEML) between September 1971 and June 1972 at a total cost of Rs.9.88 lakhs. Performance of the bulldozers was reportedly unsatisfactory since their commissioning. After expiry of the warranty period, the bulldozers became inoperative needing thorough repair and renovation. In May 1974, an order for procurement of spares valued at Rs.1.16 lakhs was placed with a Calcutta firm on single tender basis. The spares have not been received and the bulldozers have not been put to use

(January 1977). Although the performance of the bulldozers was unsatisfactory, an order for procurement of another bulldozer was placed in April 1974 with the same firm (BEML) at Rs.7.52 lakhs. The bulldozer has not been supplied by the firm (January 1977).

8. Manpower analysis

- 8.01. No comprehensive work study had been conducted to assess the staff requirements or to lay down the standards of labour productivity in the Company's various units till August 1971, when it constituted a high power committee for scientific manning for all its sections. Pending finalisation of a scheme for scientific manning, the staff strength has been sanctioned by the Board of Directors from time to time on an *ad hoc* basis. The report of the committee has not been made available to Audit (January 1977).
- 8.02. The table below indicates the overall staff strength and its productivity during the five years up to 1975-76:

	1971-72	1972-73	1973-74	1974-75	1975-46
(a) Number of employees	5,746	6,134	6,239	6,232	6,155
(b) Value of production (In lakhs of Rupees)	1,300 · 25	1,802 · 19	1,919.54	2,451 · 11	3,047 · 37
(c) Value of production per employee (Rupees)	22,628	29,380	30,767	39,331	49,510
(d) Number of employees directly engaged in production	N. ▲.	1,843	1,794	1,800	1,786
(e) Value of production per employee directly engaged in production (Rupees)	N.A.	97,786	1,07,000	1,36,173	1,70,625
(f) Salaries and wages (In lakhs of Rupees)	340 · 46	381 · 78	447.89	496 • 26	445 · 23
(g) Average payments made per employee (Rupees)	5,925	6,224	7,179	7,963	7,234
(h) Sales (In lakhs of Rupees)	1,282 · 14	1,735 · 30	1,824 · 60	2,366 · 76	2,980 · 35
(i) Sales per employee (Rupees)	22,314	28,290	29,245	37,978	48,421

8.03. The Committee on Public Undertakings in their Second Report recommended (April 1976) that in the matter of recruitment the Company should determine the requirement of staff in each unit keeping in view the possibilities of utilising the additional staff available in other units.

A report submitted in August 1975 by the Industrial Engineering Cell of the Company to the Managing Director showed that there were 75 muster roll labour and 373 contractors' labour in the coke oven group of plants, coal washery and thermal power station. The Cell was directed to finalise the manning pattern of the Company. There has been no progress in the matter (January 1977).

9. Incentive bonus

9.01. Mention was made in paragraph 88(9) of the Audit Report, 1968 about introduction of a bonus scheme not based on productivity. In March 1976, the Board of Directors asked the Managing Director to prepare a scheme based on productivity for its consideration. No scheme on scientific basis has been

introduced (January 1977). Incentive payments are being made to groups of direct and indirect workers receiving pay up to Rs.1,350 per month at *ad hoc* rates.

9.02. The Management considered (May 1976) that if the quality of products, particularly of coke, was not maintained, incentive bonus allowed to the concerned departments, viz., sales department, chemical laboratory and coke oven operation department, might be stopped. The concerned departments are still getting incentive payments despite there being no improvement in the quality of coke as indicated earlier (January 1977).

10. Costing system

- 10.01. The existing system of costing suffered from various defects as mentioned in paragraph 57(7) of the Report of the Comptroller and Auditor General of India for the year 1970-71. These mainly related to absence of a standard costing system owing to want of actual figures for both input and output, classification of expenditure under fixed and variable costs and procedure for ascertaining the idle time of labour and machinery. The system did not provide the Management with a yardstick to measure the performance and take corrective action.
- 10.02. During test check of records it was noticed that the following basic deficiencies continued to exist:
 - (i) Norms had not been evolved by resorting to time and motion study for executing particular jobs.
 - (ii) Idle time of machinery had not been determined.
 - (iii) Idle time of labour had not been analysed.
 - (iv) Detailed costs of supply of energy to each category of consumer had not been compiled.
 - (v) No estimates were prepared for repair or manufacturing jobs at the workshop.
 - (vi) Daily time cards were not maintained in respect of each work order in the workshop.
 - (vii) There had been considerable timelag in compilation of monthly and annual cost sheets and consequently, variations in the estimates and the actuals could not be investigated in time. Annual cost sheets for 1975-76 were compiled and reconciled with financial accounts only in November 1976.
 - (viii) Consumption of raw materials (mainly coal) was not being measured as the measuring devices attached to the plants had gone out of order.
 - (ix) Chargeable expenditures, such as power, water, gas, steam, etc., were allocated to each product not on the basis of actual consumption shown by meters but on the basis of technical estimates.

10.03. The cost of production on the basis of the cost sheets maintained and the selling prices of some of the products for the four years up to 1975-76 were as follows:

Products		1972-73		1973-74		1974-75		1975-76		
		Cost of production	Selling price							
					(In R	supees)				
Motor benzol (per kilol:tre)	••	1,938	670	1,465	2,450	4,435	2,4 50	2,232	2,100	
Industrial toluol (per kilolitre)	••	2,893	1,000	1,653	2,526	4,572	2,526	2,334	2,200	
Light solvant naphtha (per kilclitre)	••	6,452	2,390	1,666	4,000	7,241	4,000	3,092	2,835	•
Pure benzene (per kilolitre)	••	1,938	690	1,925	2,512	4,547	2,512	2,281	2,150	
Crude naphthalene (per tonne)	••	1,588	1,500	2,454	3,000	11,133	3,000	2,604	2,505	

11. Sales performance

11.01. Sales organisation: The Company has a sales department at Calcutta headed by a Senior Sales Officer. The department deals with sale of coke and by-products. The Engineer-in-charge (Commercial) at Durgapur deals with sales of power and its revenue sections at Durgapur deal with sales of other products, viz., process and drinking water, spun pipes, etc.

The Company constituted a sales and purchase committee in 1962 for overall supervision and decision in all matters of sale and purchase. This committee was replaced by a purchase, sales and finance committee in June 1967 (subsequently named as the Directors' Executive Committee) headed by the Chairman.

11.02. Customer composition: The main customers of the Company are:

- (i) Railways, Defence Undertakings and Steel Plants (both in the public and private sector), for coke; about 75 per cent of the production is being sold to these customers.
- (ii) Chemical industries in the private sector for coke oven by-products.
- (iii) Oriental Gas Company's Undertaking (a departmental undertaking of the State Government) for distribution of coke oven gas in Calcutta.
- (iv) West Bengal State Electricity Board and the Damodar Valley Corporation for power; about 75 per cent of the saleable energy is drawn by the Electricity Board.
- (v) Local industrial consumers for process and drinking water.
- (vi) Public Works, Irrigation and Housing Departments of Government and local industrial consumers for spun pipes
- 11.03. Pricing policy: (a) Coke: Prices and distribution of different fractions of coke, viz., hard coke, nut coke, pearl coke and breeze coke, were controlled by the joint coke plant committee up to 1st May 1972, when the Company left the committee. Thereafter, it increased the price of hard coke and nut coke to Rs.180 per tonne from Rs.125 per tonne fixed on 1st April 1971. The Company was arranging distribution of coke to the consumers direct up to 5th July 1973, when control on distribution of hard coke was imposed by the joint coke allocation committee, under the Colliery Control Order, 1945. The price of hard coke was further raised to Rs.250 per tonne with effect from 1st March 1974. Consequent on revision in the prices of coal and coke by Bharat Coking Coal Limited, the price of hard coke was further revised to Rs.310 per tonne with effect from 1st July 1975. Similarly, the prices of other fractions of coke were revised. This last revision of prices of

coke was approved by the Board of Directors on 7th August 1975, which was retrospectively given effect to from 1st July 1975. As the customers were not informed of this change of price, the Company had to forgo additional revenue of Rs.19 lakhs for despatches of 28,885 tonnes of hard coke, 1,686 tonnes of nut coke and 324 tonnes of pearl coke during July 1975. Mention of a similar loss in the sale of coke between December 1973 and February 1974 was made in paragraph 2, Section III of Chapter 1 of the Report of the Comptroller and Auditor General of India for the year 1974-75 (Commercial).

In pursuance of an order (12th September 1975) issued by the Government of India, distribution of coke was decontrolled with effect from 15th September 1975. Thereafter, the Company was authorised to sell and distribute its coke products freely without any prohibition. The Company has been distributing coke to most of its consumers in West Bengal through West Bengal Small Industries Corporation Limited, since 15th September 1975.

- (b) By-products: For sale of by-products, open tenders are invited from time to time and price of each p.oduct is fixed by negotiation with the tenderers.
- (c) Gas: Selling price of gas to the Oriental Gas Company's Undertaking, which is the main customer for coke oven gas, is determined by Government. Since inception, gas was sold to the Undertaking at 60 paise per therm up to September 1969, when the price was revised to 65 paise per therm. As the price fixed by Government was considered uneconomic in view of rise in the price of coking coal, spares and stores, representations were made to Government for upward revision of price. In January 1975, Government set up a Committee to examine revision of price of gas supplied to the Undertaking. The Committee in its report (March 1976) recommended the price of gas for sale to the Undertaking to be Rs.1.80 per therm with effect from July 1976. The revised rate has been given effect to from July 1976.

The losses sustained by the Company on account of supply of coke oven gas at low rates to the Oriental Gas Company's Undertaking for the years 1971-72 to 1975-76 are given in the table below:

Year			Total	aupply	Total cost revenue Loss			
		(in million eft)		(in therms)	Total cost revenue realised		Loss	
					(In lakhs of Rupees)			
1971-72	• •	• •	1,549	75,97,275	117.30	49.38	67.92	
1972-73		• •	1,915	98,43,862	162 · 66	63.99	98 · 67	
1973-74	••	• •	1,423	72,26,424	154.95	46.97	107.98	
1974-75	• •	• •	1,393	71,47,149	157.95	46.46	111-49	
1975-76	• •	• •	1,406	71,28,125	166 · 14	46.33	119-81	

- (d) Power: The Company maintains its standard tariff for power at par with the Damodar Valley Corporation (DVC) and revises it whenever DVC revises its tariff. The Company is, however, selling energy at special rates to its bulk consumers.
- (e) Process and drinking water: Prices of process and drinking water are revised on the basis of negotiation with the local industrial consumers. The water rate fixed in January 1965 at Rs.1.25 per thousand gallons was raised to Rs.1.75 per thousand gallons in January 1975 and Rs.1.90 per thousand gallons from 1st April 1976.
- (f) Spun pipes: Selling prices of pipes are fixed without regard to the cost of production and prevailing market rate. Although the Company was selling the products at a rate below the cost of production, it could not sell the entire produce of the factory. Pipes continued to be accumulated in stock, viz., from 5,970 pieces as on 31st March 1974 to 9,756 pieces as on 31st March 1975 and to 14,233 pieces as on 31st March 1976. The accumulation in stock was stated by the Management to be due mainly to lack of adequate demand from outside parties, particularly Government departments.

11.04. The year-wise break-up of opening balance, quantities produced and purchased, quantities sold and processed and the closing balance of different finished products during the five years up to 1975-76 is given below:

Excess (+) Finished products Quantity? Quantity Quantity Opening Quantity Year Total Clesing balance sold processed produced purchased balance Loss (-) (In lakh tennes) 1971-72 Hard coke 3.47 3.46 0.05 $3 \cdot 42$. . 0.01. . 1972-73 4.18 4.19 4.20 0.01 0.02 1973-74 3.61 0.02 3.69 3.67 0.08 . . . (+)0:01 1974-75 3.16 0.08 3.37 3-45 0.30 3.39 1975-76 0.303.47 3.77 (-)0.04• • 0.34. . 1971-72 0.19 Nut coke 0.27 0.550.28• • 0.36• • 0.18 1972-73 0.70 0.360.34. . 0.521973-74 0.140.520.300.82 (-)0.02• • 0.660.22 1974-75 0.660.270.93 (+)0.040.75(+)0.031975-76 0.250.750.281.03 0.81 • • . 1971-72 0.05 Pearl coke 0.18 0.09 ٠. 0.09 • • 0.13 • • 1972-73 0.24 0.030.13 0.11 . . 0.21. . 0.05 1973-74 0.30 0.210.09(-)0.010.24. . 1974-75 0-33 0.04(+)0.010.240.09. . 0.30 0.021975-76 0.30 (-)0.040.39 0.09 •• 0.33. . 1971-72 0.12 1.20 1.43 Breeze coke 0.231.31 1972-73 1.60 0.17 0.291.31 1.43 . . 1.68 0.12 1973-74 (-)0.040.251.43 1.52 1974-75 1.75 0.07(+)0.080.23 1.52. . 1.76 0.332.00 1975-76 1.76 0.24(-)0.101.57 • •

8

Finished pro	oducts		Year	Opening balance	Quantity produced	Quantity purchased	Total	Quantity sold	Quantity processed	Excess (+)	Closing balance	
									prosoudu	Loss (~)		
						(In	tonnes)					
Crude tar	*:	••	1971-72	856	12,858	464	14,178	4,264	9,307	(+)19	626	
			1972-73	626	17,618	5	18,252	744	15,117	••	2,391	
			1973-74	2,391	14,014	•	16,405	2,651	11,592	(+)2	2,164	
			1974-75	2,164	12,698	• •	14,862	4,771	8,001	(-)1	2,089	
	••		1975-76	2,089	13,526	••	15,615	2,624	10,788	••	2,203	
Tar products	••	•	1971-72	772	8,675	••	9,447	1,730	6,778	••	939	
			1972-73	939	14,275	•	15,214	2,430	11,895	(-)4	885	
			1973-74	885	11,027	• •	11,912	1,503	- 9,863	(+)2	558	
	••		197 4± 75	558	7,518	•	8,076	1,747	6,035	(+)2	296	•
	••		1975-76	296	10,460	••	10,756	2,527	7,821	(-)19	389	33
							(In kilolit	res)				
Crude benzol	9-0	• •	1971-72	66	1,872	••	1,938	•:	1,917	•	21	
			1972-73	21	2,880	••	2,901	•	2,877	•	24	
	• ·		1973-74	24	2,524	••	2,548	• •	2,516		32	
			1974-75	3 2	1,472	••	1,504	• •	1,459	••	45	
			1975-76	45	1,619	••	1,664	••	1,653	••	11	
Benzol produc	ts 🕳	••	1971-72	127	1,578	••	1,705	1,351	267		87	
			1972-73	87	2,400	• •	2,487	2,081	314	•	92	
			1973-74	92	2,264	••	2,356	1,884	310	₩	162	
			1974-75	162	1,187	••	1,349	1,124	157	~	162 68	
			1975-76	68	1,275	••	1,343	1,053	205	••		
					-		-,0-0	x,000	200	•	85	

- 11.05. The Company faced difficulties in disposing of coke and by-products as indicated below:
- (a) Disposal of mixed coke: Since despatch of coke could not always be matched with production owing reportedly to glut in the coke market, a sizable portion (about 15 per cent) of the total production accumulated every year. As a result, hard coke, nut coke, pearl coke and breeze coke accumulated in mixed coke dumps. The Company entered into an agreement with the Hindustan Steel Limited (Durgapur Steel Plant) for sale of one lakh tonnes of mixed coke during 1972 at the rate of Rs.60 per tonne, but the proposition ultimately fell through. The price of mixed coke was refixed at Rs.136 per tonne in August 1974 and then at Rs.138.31 per tonne in November 1974, after considering a screen analysi report (July 1974) of the CFRI (for this a fee of Rs.7,000 was paid). The price did not attract buyers. Public tenders were invited in February 1975 and again in June 1975, for sale of the mixed coke on "as is where is" basis. In response, 231 offers were received, out of which 19 parties were selected and allotted mixed coke at the rate of Rs.145 per tonne. Limited quantities of mixed coke were lifted by these parties up to December Meanwhile the stock of mixed coke was piling up. In order to facilitate disposal and to prevent further accumulation, the Board of Directors reviewed the price again and fixed it at Rs.125 per tonne with effect from 16th December 1975 on "as is where is" basis.

A test check of the sales day book showed that 37,165 tonnes and 8,755 tonnes of mixed coke were sold respectively to outside parties and to the Durgapur Projects Employees Multipurpose Co-operative Society Limited at the rate of Rs.125 and Rs.26.50 per tonne during the period January 1976 to December 1976, without screening. During the period 25th May 1976 to 17th August 1976, 10,000 tonnes of mixed coke were departmentally screened and found to contain 6 per cent hard coke, 12 per cent nut coke, 12 per cent pearl coke and 70 per cent coke breeze. On the basis of the screening report, 45,920 tonnes of mixed coke, which were sold during 1976, contained 2,755 tonnes of hard coke, 5,510 tonnes of nut coke, 5,510 tonnes of pearl coke and 32,145 tonnes of breeze coke valued at Rs.53.12 lakhs without taking into account the cost of screening. The Company had to forgo revenue of Rs.4.34 lakhs on account of sale of 45,920 tonnes of mixed coke without screening during the period January 1976 to December 1976.

As the mixed coke dump contained bigger sized coke, the joint coke allocation committee and the Coal Controller did not allow (in December 1973) the Company to dispose of the dump on "as is where is" basis. Disposal of the dump remained a problem to the Company. Arrangement has since been made to salvage the different fractions of coke from the dump either departmentally or through contractors at an extra cost which varies between Rs.5 and Rs.15 per tonne.

A big mixed coke heap (about 50,000 tonnes) had been lying undisposed of since 1958-59. According to an analysis report (March 1976), the heap contained about 86.6 per cent of coke breeze and 13.4 per cent of pearl coke.

It was decided (May 1976) to dispose of the entire heap to the West Bengal Small Industries Corporation Limited at a concessional rate of Rs.45 per tonne as a special case, on the ground that screening of the heap to separate the pearl fraction would be a time consuming affair and would entail extra expenditure. Accordingly, during May 1976 to October 1976, 5,000 tonnes of mixed coke were sold to the West Bengal Small Industries Corporation Limited. The sale involved loss of Rs.1.56 lakhs to the Company calculated on the basis of the average sales prices of pearl coke and breeze coke without taking into account the cost of screening that would have been necessary. Despatches of mixed coke to the party at a concessional rate were suspended from November 1976 as increased percentage of higher fractions of coke was found in the dump.

In January 1976, the Company gave a few trial runs for briquetting coke breeze and coal washery sinks but the products were not found suitable for use.

- (b) As there was a boom in the market for crude coal tar, the Company on 5th July 1972 decided to dispose of 1,500 tonnes of crude coal tar on an ad hoc basis to the highest bidder instead of processing the same into different by-products for which no market was available. Accordingly, open tenders were invited in July 1972 and the highest rate received was Rs.701 per tonne. The Company could sell only 10 tonnes of crude tar to the highest bidder. As the party did not lift the balance quantity, open tenders were invited for the second time in April 1973 instead of negotiating with the second highest bidder, who had offered to take delivery of the entire quantity at Rs.700 per tonne. This time the Company accepted the offer of Rs.501 per tonne against the selling price of Rs.701 per tonne fixed by the Company. The highest bidder did not, however, lift the crude tar. Ultimately, the Company sold the balance quantity of 1,490 tonnes of crude coal tar to the Hindustan Steel Limited at Rs.350 per tonne, which resulted in a loss of revenue of Rs.5.23 lakhs.
- 11.06. Export promotion: In July 1975, the Board of Directors felt that there was scope for export of coke with 22 per cent ash content. Accordingly, it directed the Management to start producing coke with 22 per cent ash content and finalise a contract with the Mineral and Metal Trading Corporation Limited (MMTC) for export arrangements. In January 1976, the Managing Director of the Company had a discussion with the Chairman of MMTC and was assured of an export order in about six months.

In April 1976, however, it was considered very difficult to undertake manufacture of high grade coke having ash content of 20 to 22 per cent with other stipulations for export, as the quality of coal input was deteriorating. The Management further felt that in deciding on production of high grade coke, effect on other production, mainly of gas and by-products, and technological difficulties would have to be considered. Finally, it was considered not advisable to commit the Company to supply of high grade coke for export market.

12. Credit control

12.01. Mention was made in paragraph 57(8) of the Report of the Comptroller and Auditor General of India for the year 1970-71 regarding arrears in the collection (Rs.5.09 crores) of book debts up to 31st March 1971. The Committee on Public Undertakings, while reviewing the position of the outstanding debts in their Second Report, expressed (April 1976) serious concern at the mounting balance of sundry debtors.

The table below indicates the volume of book debts compared to the sales during the five years up to 1975-76:

Year			Book debt	ts at the end c	Sales during	Percentage	
		(Considered good	Considered doubtful	Total	the year	of debtors to sales
				(In lakh	ıs of Rupees)		
1971-72	• •	••	481 • 68	23.00	504 • 68	1,062 • 44	47.5
1972-73	••	••	491 · 79	23.00	514.79	1,460 · 99	35 • 2
1973-74	••	••	537 · 9 0	22.97	560 • 87	1,446.62	38.8
1974-75	• •	•	989 · 57	22.97	1,012.54	2,052 · 49	49.3
1975-76			1,256 · 79	69 · 22	1,326.01	2,468 · 27	53.7

12.02. The party-wise and period-wise break-up of the sundry debtors of Rs.1,317.64 lakhs as on 31st March 1976 is tabulated below. The break-up for the remaining Rs.8.37 lakhs was not available:

		Total	Due from Govern- ment departments	Due from Govern- ment under- takings	Due from private parties
	••	•	(In lakhs o	f Rupees)	
Debts outstanding for less than six months	•	909 • 90	98.87	752.75	58.28
	•	104 15	15 41	111.00	
Debts outstanding for six months and more but less than one year		134.15	17.61	111-83	4.71
Debts outstanding for one year and more but less than three years		100.97	17.42	78.10	5 · 45
Debts outstanding for three years and above		172 · 62	34.17	93 • 34	45-11
Total		1,317.64	168.07	1,036.02	113.55

There was no system of obtaining confirmation of debts from the debtors concerned. The debts outstanding as on 31st March 1976 included Rs.36.15 lakhs on account of surcharge on delayed payments which had been disowned by the parties viz., West Bengal State Electricity Board and Durgapur Chemicals Limited and considered doubtful by the Company.

The provision for bad and doubtful debts, which was raised from Rs.22.97 lakhs as on 31st March 1974 to Rs.69.22 lakhs as on 31st March 1976, was considered (August 1976) inadequate by the Company Auditors.

- 12.03. The increase in outstanding dues is mainly in respect of public undertakings, particularly West Bengal State Electricity Board, Durgapur Chemicals Limited and Hindustan Steel Limited and is partly due to disputes raised by industrial consumers.
- 12.04. While heavy amounts were outstanding from sundry debtors, the Company could not make timely payment to its creditors. The sundry creditors increased from Rs.776.65 lakhs at the end of 1973-74 to Rs.1,601.36 lakhs at the end of 1975-76.

13. Inventory control

- 13.01. Purchase: The Company re-organised its purchase organisation in January 1969 and entrusted the entire work relating to purchase, custody and distribution of stores to the Controller of Stores and Purchase. There is one central store and 11 other stores located at different centres.
- 13.02. The table below indicates the work handled by the purchase department and the staff engaged thereon during the three years up to 1975-76:

				1973-74	1974-75	1975-76
Indents received	••	••	••	1,263	1,269	1,603
Tenders floated	• •	••	••	15	14	8
Enquiries issued	• •	• •	••	1,157	1,756	1,537
Number of orders placed		• •	••	2,821	2,892	3,389
Value of orders placed (In	lakhs of R	upees)	• •	1,143 · 65	1,346 • 90	1,899-10
Number of staff employed	in the pure	chase depai	rtment	68	65	70
Number of staff employed	in the stor	es units	••	116	115	109

13.03. As per the decision of the Board of Directors in June 1974, all purchases, other than coal, petroleum products and those made against rate contracts of the Director General, Supplies and Disposals or of properietory items, are to be made by (i) inviting quotations from suppliers on approved lists in respect of purchase not exceeding Rs.1.50 lakhs in each case, and (ii) by inviting open tenders in respect of purchase exceeding Rs.1.50 lakhs in each case.

All petroleum products are purchased from Indian Oil Corporation Limited and coal is purchased from the nationalised collieries. Prior approval of the Board of Directors is to be obtained for purchase of stores costing more than Rs.1 lakh in each case. Approved lists of contractors suppliers are required to be maintained for inviting limited tenders quotations and the lists are required to be made up-to-date from time to time with the approval of the Board of Directors.

- 13.04. The following deficiencies were noticed in the purchase procedure:
 - (i) No time schedule had been prescribed for processing of indents at various stages up to their finalisation. There was also no specific procedure for classifying the indents according to the urgency of the requirement.
 - As per the report of a consultant appointed by the Company in December 1973, the time taken for placing a purchase order from the date of receipt of indent was about 5 months. The consultant had recommended (September 1974) various measures to reduce the time lag. A test check of purchase cases for 1975-76, however, showed that in many cases the time lag was more as would be seen from the following table:

	Time lag between receipt of indents and placing of purchase order	Number of purchase orders involved		
(a)	three years or more	10		
(b)	two years or more but less than three years	24		
(c)	one year or more but less than two years	219		

- (ii) Detailed procedure had not been laid down for invitation and acceptance of tenders.
- (iii) Conditions in which acceptance or otherwise of escalation clause for raw materials, wages, etc. would be considered, were not laid down.
- (iv) There was no procedure for watching the performance of different suppliers.
- (v) Guidelines about entering into post-tender negotiations relating to rates and other terms were not laid down.

- 13.05. In the following cases, deviations from the prescribed purchase procedure were noticed:
 - (i) Open tenders were not always invited for procurement of stores valuing over Rs.1.50 lakhs in each case. A test check showed that in 21 cases materials valued at Rs.113.94 lakhs (each valuing over Rs.1.50 lakhs) were purchased during the period from June 1974 to March 1976 without inviting open tenders.
 - (ii) In certain cases, decision about acceptance of tenders was not taken conveyed by the Company within the prescribed period of validity of tenders, resulting in delayed execution at higher cost or non-execution of orders by the tendering firms.
 - In December 1971, the Company invited limited quotations for urgent procurement of 'Ram Beam with Slide and Pusher Shoe' and received quotation from a party (A) in December 1971 offering the item for Rs.3.32 lakhs. By the time the case was processed, the validity period had expired. Fresh tenders were invited on 7th October 1972 and a purchase order for Rs.1.20 lakhs was placed on the lowest tenderer (B) on 27th April 1973. The validity period of the offer had expired on 31st January 1973 and the firm (B) did not accept the order. Fresh tenders were invited on 24th August 1973 and a purchase order for Rs.3.60 lakhs was placed on firm (A) which was the highest tenderer, on 17th August 1974. The party expressed its unwillingness to accept the order as the validity period of its offer had expired on 12th October 1973. The Company finally purchased the material (November 1974) at Rs.4.55 lakhs from firm (A).
 - (iii) In some cases, indents were not properly scrutinised to determine the actual quantity to be purchased with reference to the existing stock position and the quantity to be received against the purchase order placed earlier. As a result, there was heavy accumulation of slow-moving and non-moving stores and spares.
 - (iv) In certain cases no penalty was recovered for delay dafault in supply. The number and year of purchase orders against which supplies were outstanding (September 1976) are given below:

Year of deli specified in purchase o	the			Number of purchase orders outstanding	Value of supplies outstanding (In lakhs of Rupees)
1973-74	••	9-8	••	548	25 · 69
1974-75	• •	•••	• •	497	37.58
1975-76	••	• •	• •	518	36.08

The Company has not taken any action against the defaulting suppliers (January 1977),

- (v) In many cases "on account" payments varying from 90 to 100 per cent were made to suppliers against proof of despatch of materials. Considerable delay was, however, noticed in adjustment of such advances on account of delay in receipt of 'goods received notes' and other procedural formalities. As on 31st March 1976, Rs.696.82 lakhs were outstanding for adjustment on account of advances to contractors and suppliers.
- (vi) Approved lists of contractors suppliers were not up dated (January 1977).
- 13.06. Inventory holding: The inventories of the Company consist mainly of consumably stores, spares for plant and machinery and construction stores. There are about 38,000 items in the Company's stores. The table below indicates the comparative position of the inventory and its distribution at the close of each of the five years up to 1975-76:

	1971-72	1972-73	1973-74	1974-75	1975-76			
Stock at the close of the year-	(In lakhs of Rupees)							
(a) Raw materials (including materials in transit)	53 · 13	76 • 63	104.88	62 · 31	211-10			
(b) Stores and spares	192 • 19	189•14	186-18	280 · 82	378 · 23			
(c) Finished goods	72 · 24	139 • 14	234.07	318-42	385 • 44			
(d) Others (excluding materials in transit)	83 · 82	84 • 48	91 • 42	97 · 32	108.26			
Total	401 · 38	489 • 39	616-55	758 · 87	1,083.03			
Total consumption of raw materials, stores and spares during the year (in lakhs of Rupees)	768 • 30	988•68	1,254.53	1,457.86	1,976 · 30			
Closing stock of raw materials, stores and spares expressed in terms of of months' consumption	3.8	3.2	2.8	2.8	3.6			
Total sales during the year (in lakhs of Rupees)	821 • 48	1,213.06	1,246 · 67	1,387 · 10	1,777 • 43			
Closing stock of finished goods as number of days' sales	32	42	69	84	79			

Except in the power plant stores minimum, maximum, re-ordering and critical levels of individual items of stores were not fixed.

13.07. Slow-moving Non-moving items: There was not much forward planning for procurement of spares up to June 1972, when a department named as Planning, Co-ordination and Inspection was established to handle procurement of foreign and indigenous spares for the power station as well as for the coke oven group of plants. During the years 1972-73 to 1975-76, the department took procurement action in respect of foreign as well as indigenous spares for Rs.475.52 lakhs and Rs.291.88 lakhs respectively. The Management observed (May 1975) that since the original drawings, specifications composition of spare parts were not available, it was exceedingly difficult to provide the necessary particulars to suppliers of spares without which the Company could not expect to get the proper spares and the specifications quoted for indenting spares were only approximate based on visual inspection of worn out spares. Further, the suppliers and erectors of the coal washery had stated (February 1975) that at the time of erection they had handed over a complete set of drawings to the then Maintenance Engineer of the washery. also stated that there had been considerable improvement and change in the design of the washery equipment and they were finding it difficult to supply necessary spare parts which conformed to designs made over 12 years back. Owing to non-availability of spares in time, maintenance jobs could not be carried out for long periods, which resulted in backlog of maintenance work of most of the equipment and consequent break-downs of equipment. drawings and material specifications of spares were not available, the Company procured from time to time a large number of out-of-specification spares. Management further observed (December 1975) that the specifications sent by the indentors of different units to the Controller of Stores and Purchase for procurement of stores materials, spares, etc., were very often defective and at times incorrect, leading to procurement of wrong parts and materials which led to accumulation and inventory of uscless and non-moving items.

The closing stock of stores and spares (Rs.378.23 lakhs) as on 31st March 1976 included non-moving and slow-moving items valuing about Rs.211.17 lakhs as indicated below:

			Valuo
			(In lakhs of Rupees)
• •	es which did not move for thre tore	o years or	80 · 17
	es which did not move for two core but less than three years	years or	22 · 74
	s which did not move for one years	ır or mor o	108 · 26
	Total	••	211 • 17

The Board of Directors had ordered (September 1975) that non-moving items valued at about Rs.1 crore, which were lying at the stores, should be properly identified and items considered obsolete and surplus should be disposed of by tender within two months. No action has been taken in this regard (January 1977).

Mention was made in paragraph 54 of the Report of the Comptroller and Auditor General of India for the year 1971-72 about non-utilisation of 37 pieces of imported conveyor belts with vulcanised ribs valued at Rs.0.89 lakh. A test check of records showed that only 11 pieces of belt were utilised up to April 1973 and the remaining 26 pieces valued at Rs.0.63 lakh were lying unutilised (January 1977).

A test check of records further showed that 19,200 rft of seamless steel pipes of 12¾" dia valued at Rs.5.40 lakhs procured for transmission of gas to Calcutta were lying unutilised at Belmuri and at the premises of the Oriental Gas Company's Undertaking at Narkeldanga since 1963.

13.08. Physical verification of stores: The Company followed the perpetual inventory system of stock verification, but all the items are not being covered once a year.

The consultant engaged by the Company in December 1973 for advising on material management observed (September 1974) that there was no proper identification of stores items, particularly spares, and as such physical stock verification was ineffective.

Physical verification of capital goods in stores had not been done. There was no system of conducting physical verification of stores lying in different sites of works. Estimated quantities of materials were being issued from stores for use in different deposit works; when a portion of these materials became surplus, it was kept in the construction and distribution division without proper accounting.

Physical verification of raw materials, stores and spare parts, including finished goods, for the five years ending March 1976, revealed the following shortages excesses:

Yoar				als and stores are parts	Finished stock			
				Excess	Shortage	Excess	Shortage	
					(In lakhs o	f Rupces)		
1971-72	• •	••	••	••	24 · 19	••	0.18	
1972-73	• •	• •	• •	••	15.78	6 • 54	• •	
1973-74	• •	••	••	2.08	1.16	1 · 30	6.02	
1974-75	••	••	• •	63.03	28.23	14.86	• •	
1975-76	••	••	••	••	52.36	• •	14.79	

The Board of Directors had decided, in July 1965, that all cases of shortages should be investigated thoroughly by a duly constituted committee and action should be taken to fix responsibility to avoid such shortages in future. However, the value of shortages excesses was not exhibited separately in the accounts but the net value was written off in the accounts of the respective year without any investigation.

- 13.09. Inadequate storage facility: There was no proper facility for storage of materials, with the result that a large quantity of stores materials was exposed to weather and risk of deterioration. In June 1976, the Board of Directors noted that a large quantity of steel materials, spares, etc., was lying scattered all over the plant and even outside the plant without proper accounting. With a view to preparing proper accounts for all these materials a committee was set up in March 1976. It was also decided by the Board of Directors that a complete report of all such unaccounted for materials in the stores should be submitted to it as early as possible, but not later than four months from the date The committee submitted its report to the Board of Directors of the decision. in December 1976, i.e., after nine months. The report showed that stores materials valued at Rs.29.60 lakhs (approximately) were lying scattered all over since long. The Board of Directors observed (December 1976) that the report although long overdue did not provide a complete list of materials and desired that all such materials should be physically identified and a supplementary report with complete list be submitted to it as early as possible. The Board of Directors also directed that the materials identified should be kept in safe custody and a team of officers, one each from purchase and sales, power plant and internal audit should submit every month a list of such materials physically identified and taken into account till the entire exercise was over.
- 13.10. Inspection of materials: The Company has an inspection unit under the Controller of Stores and Purchase which is responsible for inspection of the production facility of suppliers before placement of order and checking of materials before despatch. The procedure followed was not adequate to ensure that the materials supplied were according to the prescribed specification. Defects came to notice after the materials had been issued to sites for use.

A test check of records showed that a large number of stores items supplied by various firms was rejected by the Company for being defective, damaged or not according to the prescribed specifications. Stores materials in respect of

which Rs.10.97 lakhs had been paid in advance were lying rejected as on 31st March 1976 as detailed below:

			Up to March 1972		1972-73		1973-74		1974-75		1975-76	
			Number of items	Amount (In lakhs of Rupees)	Number of items	Amount (In lakhs of Rupees)	Number of items	Amount (In lakhs of Rupees)	Number of items	Amount (In lakhs of Rupees)	Number of items	Amount (In lakhs of Rupees)
Power plant stores	••	••	32	0.47	26	0.40	31	0.61	56	0.77	47	1.71
Coke oven stores	••	••	56	1.33	48	0 · 42	48	0 · 28	73	1.27	83	2.04
Coal washery stores	••	••	12	0.27	7	0.13	12	0.08	3 0	0.91	19	0.28
	Total	••	100	2.07	81	0.95	91	0.97	159	2.95	149	4.03

These stores had not been replaced repaired by the suppliers concerned (January 1977). Prompt action had also not been taken by the Company to recover the cost of the rejected materials from bank guarantees or other securities furnished by the suppliers.

- 13.11. Stores accounting: The Company Auditors in their report on the accounts of the Company for 1975-76 mentioned the following deficiencies in the accounting of stores:
 - (i) Purchase as per goods receipt notes of value Rs.4.82 lakhs were taken into stores but were not recorded in the purchase day book.
 - (ii) Bin card balances did not tally with the stores ledger balances.
 - (iii) There were shortages excesses in physical balances compared to bin card balances.
 - (iv) Result of internal verification of stores (net shortage of Rs.0.68 lakh) was not adjusted in the accounts.
 - (v) Valuation of certain items of stores in stores ledger was made at rates other than that noted in the bin card.
- 13.12. Under-loading of coke wagons: The Railways charge freight on the basis of the capacity of wagons. As such the customers pay freight to the Railways, in the first instance, on consignments of coke on the basis of the capacity of wagons. However, freight is payable by the customers on the basis of the actual quantity of coke despatched. If the wagons are under-loaded, the balance frieght (idle freight) is to be borne by the Company. In September 1969, the Company had decided to reimburse to the customers idle freight of coke against the despatches made from 1st April 1969. Rupces 2.17 lakhs had been paid for idle freight during the period from 1969-70 to 1972-73. An assessment made by the 'Company during the years 1973-74, 1974-75 and 1975-76 indicated that amounts aggregating Rs.10.17 lakhs were payable to different parties on account of freight of the quantity under-loaded in wagons.

The Management stated (October 1976) that loading to the extent of correct wagon capacity was not possible because of:

- (i) tilted position of loading belt;
- (ii) inadequate supervision;
- (iii) inadequate available time and rapid loading process;
- (iv) infrequent utilisation of loading stream of coke;
- (v) absence of registering type of weigh-bridge; and
- (vi) absence of mechanical device to load coke in covered wagons.

Though as per agreements, loading contractors were responsible for any under-loading of coke wagons caused due to their negligence, the contractors were not made liable for any recovery.

13.13. Demurrage charges: The Company has been incurring heavy demurrage charges from year to year. Against Rs.42.50 lakks provided in the accounts for demurrage payable for the years 1971-72 to 1975-76, payments made to the Railways aggregated Rs.9.38 lakks, of which Rs.0.40 lakk were recovered from the loading and unloading contractors.

The Management stated (October 1976) that demurrage charges were unavoidable due to limitation of yard layout, inadequacy of locomotive power, bunching of wagons in exchange yard, congestion in exchange and factory yard, back loading of wagons in advance, absence of mechanical device to unload coal from covered wagons, irregular movement of oil rakes and absence of space in the fourth track of the power station and difficulties in the screening plant.

In order to remove the inherent defects in the movement of wagons in the yard, the following measures have been adopted by the Company from time to time:

- (i) Receipt of coal for power plant by road;
- (ii) procurement of 11 locomotives between February 1960 and August 1972 at a total cost of Rs.42.82 lakhs;
- (iii) installation of a tippler capable of tippling open wagons in coal washery, in March 1968;
- (iv) installation of a wagon tippler in December 1965 capable of tippling 10 box wagons per hour within the power plant, at a cost of Rs.13.72 lakhs; and
- (v) procurement of three pumps for accelerating detanking of oil wagons for the power plant at a cost of Rs.0.55 lakh.

In spite of all these measures, the liability on demurrage continued to be heavy as shown below:

Year				A	Amount of demurrage provided in the accounts
					Rs.
1973-74	••	••	••	••	5,66,442
1974-75	• •	••	••	••	14,15,890
1975-76	• •	••	••	••	7,82,981

13.14. Consultant: In May 1968, a consultant was engaged to investigate into the inventory control system of the Company. The consultant submitted his report in 1968-69. The report analysed the deficiencies in respect of inventory control, phased purchasing programme, proper maintenance of stores, etc., and outlined steps to be taken for improving the material management organisation as a whole. None of the major recommendations was implemented.

Government informed the Committee of Public Undertakings (April 1976) that the recommendations were considered obsolete and a new consultant had been entrusted to make a similar study of the matter. The Committee on Public Undertakings expressed dissatisfaction and observed that they could not understand as to why such a valuable report was considered obsolete and inquired at whose instance a second committee had been appointed. The Company had not advanced any reason as to why the report was considered obsolete.

The Company engaged another consultant in December 1973, at a fee of Rs.1.08 lakhs plus out of pocket expenses, to make a study on the same subject.

In September 1974, the consultant recommended, inter alia, as follows:

- (i) Intensive physical stock vertification should be undertaken on a perpetual inventory basis to establish the identity of items, make comprehensive list of obsolete and non-moving stores, and establish accuracy of records.
- (ii) A stores catalogue containing all stock items should be prepared.
- (iii) Stores terms should be classified into stock items and non-stock items. Indenting of stock items should be the sole responsibility of stores. Non-stock items should be indented by the user departments through stores. All emergency purchases should be done by the purchase department.
- (iv) Purchase work relating to spares—both indigenous and imported—should be brought under a common set-up within the purchase department located at Durgapur.
- (v) Proper reporting system should be instituted to keep the top management informed on the working of the material management department.
- (vi) Average delay between raising of indent and placing of order for indigenous items should be reduced.
- (vii) Imported spares should be recouped on periodic review basis and indigenous spares on order level basis.
- (viii) Bulk items having an annual consumption value of about Rs.40,000 and more should be indented annually and recouped on staggered delivery basis.
 - (ix) Obsolete stocks should be scrutinised to utilise them as substitutes, if necessary, by modification or to dispose of them.

No decision has been taken on these recommendations (January 1977).

14. Township

- 14.01. As on 31st March 1976, the Company owned 3,318 quarters of different types and 71 shops and stalls of book value Rs.95.26 lakhs in its township. In addition, 353 quarters were taken on rent from Government at an annual rent of Rs.1.14 lakhs.
- 14.02. Out of 3,671 quarters available, 3,226 were given on rent to employees of the Company, 206 were given to outsiders and 202 were given rent-free to organisations engaged in essential services, viz., fire service, intelligence cell, security, hospital, etc. Eighteen quarters owned by the Company and 19 quarters hired from Government are under unauthorised occupation; the cases are sub judice (January 1977).
- 14.03. The financial benefits granted by the Company by way of free and concessional accommodation to its employees were worked out to Rs.90.72 lakhs during the period from 1971-72 to 1975-76. Other benefits (viz., supply of water, electricity at concessional rates, municipal and hospital services, etc.) as evaluated by the Company amounted to Rs.230.85 lakhs during the period from 1971-72 to 1975-76.

15. Budgetary control and internal audit

- 15.01. Budgetary control: The Company prepares annual operating budgets and capital budgets. However, the budgets are not prepared and approved before commencement of the financial year. For instance, the budgets for 1975-76 were approved by the Board of Directors in September 1975 and the revised budgets for 1975-76 were prepared and approved by the Board of Directors in August 1976 on the basis of the actuals for that year. Progress of the actual expenditure is not watched against the budget provisions.
- 15.02. Internal audit: The Company has an internal audit unit which functions under the control of the Controller of Finance and Accounts. The unit is headed by an Accounts Officer. No manual laying down annual audit programme and the quantum of checks to be exercised has been prepared (January 1977). In actual practice, the main items of work attended to by the internal audit unit are physical verification of stores and stocks and fixed assets in limited areas, and carrying out of some specific investigation work as and when desired by the Management.

In December 1975, the Managing Director directed the unit to investigate the quantity of gun metal purchased and utilised and to submit its report by 31st January 1976. The matter has not been investigated (January 1977). There is no system of periodical submission of reports of internal audit to the Board of Directors.

16. Mechanisation of accounting system

- 16.01. With a view to improving efficiencey, prompt submission of information for quick management decisions and economy in expenditure by reduction of manual labour, the Board of Directors had decided in September 1965, to instal unit record machines for mechanisation of the following applications:
 - (i) stores accounting including inventory control for about 20,000 items;
 - (ii) preparation of pay rolls with all schedules, etc., for about 6,000 employees;
 - (iii) provident fund accounting along with monthly schedules for about 6,000 employees;
 - (iv) consumer billing;
 - (v) cost accounting;
 - (vi) accounts receivable and accounts payable; and
 - (vii) general ledger.
- 16.02. In September 1965, the Company entered into an agreement with a firm in New Dehli for hiring 10 machines at a monthly rental of Rs.6,263 for one year, subject to extension from year to year or outright purchase of the machines. The machines were installed and were ready for use in July 1966. The suppliers gradually increased the hire charges and the Company had to pay an enhanced rate ranging from Rs.9,962 in February 1967 to Rs.13,380 in March 1976 and onwards, on the ground of replacement by machines lately developed, installation of two additional machines and increase caused by devaluation of the Rupee.
- 16.03. The Company incurred a total expenditure of Rs.15 lakhs on installation and hire of the machines up to October 1976, as per the details given below:

(In lakhs of Rupees)

(a)	One time charge including excise duty	•••	0.57
(b)	Monthly hire charges up to October 1976	•••	14.38

(c) Control Panel Board ... 0.05

Total ... 15.00

16.04. The Company did not go in for outright purchase of the machines, the cost of which was estimated to be Rs.3.71 lakhs, because the monthly maintenance charges were estimated to be about one third of the total monthly rental charges.

- 16.05. Before installation of the machines, it was estimated that 13 persons at a total monthly expenditure of Rs.3,500 would be required for working the whole system. The Company had (September 1976) engaged 21 persons at a monthly expenditure of about Rs.11,600.
- 16.06. Since their installation in July 1966, the machines had been used mostly for making pay rolls and provident fund schedules (numbering about 6,000 each) up to April 1967, when postings of stores ledger (coke oven and byproduct plants) were also taken up. In 1969, sales billing was taken up.
- 16.07. The data processing section of the Company did not maintain any log book for each machine showing the hours of utilisation of the machine. Details were also not available to show the machine time used for preparation of pay rolls, provident fund schedules, sales billing, etc. In December 1975, the Managing Director desired submission of a comprehensive report in regard to each machine and directed that log book for each machine should be maintained. Reports on the working of the machines were not available. Log book for each machine is not being maintained (January 1977).
- 16.08. The consultant engaged by the Company in December 1973 observed (February 1975) that electricity bills of domestic consumers were being issued after about a month and in respect of bulk consumers there was delay of about 15 days from the date of meter reading.

SECTION III

WEST BENGAL SMALL INDUSTRIES CORPORATION LIMITED

1. Introduction

1.01. The West Bengal Small Industries Corporation Limited was incorporated as a private limited company on 29th March 1961 and commenced business from 1st June 1961. By virtue of Section 43A(1A) of the Companies Act, 1956 (Amendment Act, 1974), the Company became a public limited company.

1.02. The main objects of the Company are:—

- (i) to aid, advise, assist, protect and promote the interest of the small industries in the State;
- (ii) to provide them with capital, credit, means, resources and technical and managerial assistance for the conduct of their work and business; and
- (iii) to enable them to develop and improve their methods of manufacture, management, marketing and techniques of production.

2. Uapital Structure

The authorised capital of the Company, which was Rs.10 lakhs at the time of incorporation, was increased to Rs.150 lakhs in 1971-72, divided into 1,50,000 equity shares of Rs.100 each. The paid-up capital of the Company, contributed by Government (excluding 7 shares contributed by non-Government directors), was Rs.52.11 lakhs as on 31st March 1976. In addition, Government contributed Rs.33.11 lakhs towards share capital during 1976-77, of which Rs.10.50 lakhs were for the purpose of acquiring shares of 'West Bengal Handicraft Development Corporation Limited', a subsidiary of the Company.

The Company also obtained from time to time loans from Government at rates varying from 5 to 8 per cent and from banks at rates varying from 11 to 16 per cent. The balance of loans outstanding as on 31st March 1976 was Rs.416.83 lakhs and Rs.39.99 lakhs from Government and banks respectively. Interest on loans from Government outstanding on 31st March 1976 was Rs.42.02 lakhs. Sums of Rs.9.88 lakhs and Rs.5.29 lakhs being instalments of principal and interest respectively were overdue on 31st March 1976.

3. Organisational set-up

The Management of the Company is vested in a Board of Directors headed by a Chairman. There are nine other directors of whom three are non-Government directors. The Managing Director, who is the Chief Executive of the Company, is appointed by Government.

There is no Financial Adviser to assist the Board of Directors. The post of Accounts Officer, the head of the Accounts Department, is vacant since March 1976 (February 1977).

4. Activities

The Company took up mainly the following schemes for implementation from time to time, at the instance of the State Government:

- (i) Procurement and distribution of raw materials such as, tallow, coke, chanks, zinc, yarn, iron and steel materials, etc.
- (ii) Sale of handloom and handicraft products through the Company's sales emporia.
- (iii) Financing supply of indigenous machinery to educated unemployed on hire purchase terms.
- (iv) Running of commercial and industrial estates.
- (v) Financial assistance to small scale units for procurement of imported/indigenous materials.
- (vi) Distribution of margin money under 'Half a Million Jobs Programme', sponsored by the Government of India in December 1971.
- (vii) Administration of funds for consultancy services.
- (viii) Equity participation.
 - (ix) Price support scheme for stick lac growers and supply of seed lac to the State Trading Corporation of India Limited.

Some of the important features of the schemes implemented by the Company are discussed hereunder.

5. Procurement and distribution of raw materials

- 5.01. The work of procurement and distribution of raw materials was taken up by the Company since inception. For this purpose, it has opened raw material depots from time to time. As on 31st March 1976, there were six depots at Sonai, Cossipore, Howrah, Kalyani, Durgapur and Siliguri, besides a central depot in Calcutta.
- 5.02. Distribution of mutton tallow/palm oil: (a) The Company took up procurement of mutton tallow/palm oil and its distribution to the small scale units of the State, in September 1967. The table below indicates the

allocation for the State and the quantity offered thereagainst by the State Trading Corporation of India Limited (STC) during the four years up to 1975-76:

Year				Allocation	Quantity offered by the STC against allocation		
				(In tonnes)			
1972-73	• •	• •	••	7,100	4,055		
1973-74	• •	••	• •	5,335	5,335		
1974-75	• •	• •	••	800	33.8		
1975-76	• •	••	••	3,848	800		

(b) On the basis of the quantity allotted, STC offers mutton tallow/palm oil to the Company from time to time. On receipt of the offer, the Company arranges payment and obtains delivery order for handing over the same to the filling contractors for lifting the material. The offer of STC stipulates a certain time limit regarding payment and lifting. In the case of failure to lift the goods within the period specified, the validity of the offer can be extended on payment of additional charges on the balance quantity not lifted. Against the allotment for 1973-74, the Company could not lift 1,720.85 tonnes of mutton tallow/palm oil within the free time allowed (15 to 35 days) and had to pay between August 1974 and February 1975, Rs.1.11 lakhs as additional charge for the delay in lifting.

The Management stated (August 1975) that owing to delay in appointment of lifting contractor and paucity of funds the materials could not be lifted within the free time. The Company, however, passed on this excess expenditure to the small scale units by inclusion of the same in the selling price.

- (c) For the purpose of lifting, filling and distribution, the Company appointed contractors from time to time. One of the contractors appointed (March 1973) for lifting the quota for 1972-73 delivered between March 1973 and November 1973, 3,979.13 tonnes of tallow as against 4,055.03 tonnes lifted, leaving a balance of 75.90 tonnes. Of the delivered quantity, 81 drums containing 15.2 tonnes of tallow were not accepted by the Company as the material contained impurities. The quantity short delivered and that not accepted were valued at Rs.5.31 lakhs. The net amount due from the contractor worked out to Rs.3.10 lakhs after adjustment of the pending bills (Rs.1.14 lakhs), security deposit (Rs.1.00 lakh) and value of the unaccepted material disposed of (Rs.0.07 lakh). The amount has not been claimed (December 1976).
- (d) For inspection and certification of the quantity and quality of mutton tallow/palm oil filled in by the filling contractors, the Company appointed a surveyor firm in September 1971. The total payment made to the surveyor on this account for 1971-72 to 1974-75 worked out to Rs.0.63 lakh. This

has, however, not been included in the cost of tallow/palm oil, though the pricing policy adopted by the Company since inception was to get reimbursement of all the expenditure plus profit ranging from 3 to 5 per cent. Th Managment stated (July 1976) that in future this type of expenditure would be taken into account while determining the cost.

- (e) For lifting mutton tallow/palm oil, the Company makes advance payment to STC on the basis of the quantity offered by it. Though in each case there was a difference between the amount advanced and the amount of the bills, such differences were neither adjusted nor refunded by STC. As a result, sums aggregating Rs.70.99 lakhs were lying with STC pending adjustment as in December 1976.
- 5.03. Hard coke: (a) In November 1972, the Company was asked by Government to procure hard coke for distribution through its depot to small scale units against permits to be issued by the Director of Industries. The following table indicates the position of procurement and distribution of coke during the three years up to 1975-76:

					1973-74	1974-75	1975-76
			. ••			(In tonnes)	
Estimated requirement	• •	••	• •	• •	36,000	63,582	43,941
Procurement	• •	• •	• •	••	25,764	53,460	44,769
Distribution		• •	• •	• •	23,659	47,820	41,719

The Management stated (August 1975) that the difference between the estimated requirement and the procurement was due to less quantity of coke allotted by the Coal Controller, and the shortfall in the distribution of coke was due to less quantity lifted by the small scale units concerned.

The pricing policy followed by the Company aims at getting reimbursement of all expenses incurred in the procurement and delivery of materials plus a profit of 3 per cent on the base price. Whenever any change in the base price is effected by the supplier, the Company revises the selling price. The selling price was revised on 1st July 1975 owing to revision in the base price. The revision, however, did not take into account the following statutory charges levied from the dates mentioned against each:

				Rupees per tonne	Date from which effective
Excise duty	••	••	• •	2.50	lst April 1975
	• •	• •	• •	3.10	lst July 1975
Cess	••	••	••	3 · 63	lst April 1975
Royalty	•	••	• •	6.00	lst July 1975

The selling price was revised from 1st April 1976 to include the above charges. Non-inclusion of the above charges in the selling price from the dates of levy, resulted in a loss of Rs.4.48 lakhs on 41,719 tonnes of coke sold during April 1975 to March 1976.

The Management stated (June 1976) that the price revised from April 1976 took care of the statutory levies. Non-revision of the price from April 1975 and July 1975 had offset a major portion of the margin of profits left for the Company.

(b) The Company increased its sale price from 1st July 1975, i.e., the date on which the supplier enhanced the base price. The revision was, however, given effect to in August 1975 owing to late receipt of revision of price from the supplier. The Company decided (August 1975) to realise the price difference from the customers who had, in the meantime, taken delivery at the old rates. The Company failed to recover Rs.0.72 lakh from 22 parties though further deliveries were made at the enhanced rate. In addition, Rs.0.73 lakh were outstanding from buyers of coke up to August 1976. Some of these buyers were not in business with the Company.

The Management stated (August 1976) that the balance amount would be realised.

5.04. Sales emporia: For marketing the products of cottage and small scale units, the Company opened from time to time, 15 sales emporia in different parts of the State and in three places (Agra, New Delhi and Rourkela) outside the State. All these emporia, excepting the one in New Delhi, had to be closed down due to uneconomic running. Excepting in the case of one, the loss suffered by the emporia could not be assessed in the absence of separate profit and loss accounts of these units. It was, however, seen that the Company suffered loss to the extent of Rs.18.31 lakhs as a result of sale of goods at reduced price (Rs.16.10 lakhs) and shortages in stock (Rs.2.21 lakhs) during the period from 1967-68 to 1973-74. The shortages were not investigated.

The Management stated (August 1975) that reduction in value helped the Company to dispose of the accumulated stock and the shortages were handling shortages detected during annual stock verification.

After closure of the emporia at Malda, Siliguri, Cooch Behar, Jalpaiguri, Suri and Rourkela, these were transferred to a co-operative society during 1974-75. The closing stock and furniture of the four emporia at Malda, Siliguri, Cooch Behar and Jalpaiguri valued at Rs.0.89 lakh and Rs.0.14 lakh were taken over by the co-operative society at Rs.0.44 lakh and Rs.0.05 lakh respectively. The Company thus incurred a loss of Rs.0.54 lakh in the above transfer. The society had not (December 1976) paid a sum of Rs.0.28 lakh.

5.05. Bengal Emporium, New Delhi: An emporium now known as 'Manjusha' was opened on Janpath, New Delhi in September 1965 to market the products of the small scale and cottage industries of West Bengal. Although the Company was to run the emporium on no profit no loss basis, the operational results from 1968-69 to 1975-76 indicated an accumulated loss of Rs.1.34 lakhs.

The Company took possession of the accommodation allotted by the State Government at Unit II in the State Emporia Buildings on 25th March 1971 but did not vacate the premises at Janpath till 9th May 1975. Terms and conditions of allotment had not been fixed (December 1976). The New Delhi Municipal Committee served a notice on the emporium claiming damages to the extent of Rs.1.07 lakhs (excluding the period from January 1973 to January 1974) for unauthorised use and occupation of the premises at Janpath.

The Management stated (August 1976) that renovation and decoration work of the new accommodation at the State Emporia Buildings could not be completed before July 1974. Disposal of accumulated unsaleable stock of the emporium further delayed the vacation of the premises at Janpath till 9th May 1975. It was further stated (December 1976) that the matter relating to damages claimed by the Municipal Committee was under negotiation.

Government advanced interest-free loan of Rs.3.47 lakhs (between March 1972 and April 1973) to the Company for renovation and decoration of the emporium. Other terms and conditions for recovery of the loan have not been specified by Government (December 1976). The work was awarded in September 1973 to a Calcutta firm at an amount of Rs.2.17 lakhs to be completed within the scheduled date (February 1974). It was stated that some additions and alterations to the work were made at the instance of the Company after February 1974 and the work was finally completed in July 1974. Total expenditure on the work was Rs.2.41 lakhs.

5.06. Airport Emporium: At the instance of the State Government, the Company opened a sales emporium at the New Terminal Building of the Calcutta Airport on 16th October 1975. Running of the emporium has been entrusted from the same date to a co-operative society and the recurring expenditure on rent (Rs.1,076 per month) and pay of personnel (Rs.725 per month) incurred by the society are being re-imbursed by the Company. The Company, however, does not obtain any return from the society. No agreement has been entered into with the society in this respect (December 1976). Government is also not reimbursing the expenditure.

The Management stated (August 1976) that the emporium was set up on promotional basis and not for profit making.

5.07. Trading in chanks: Procurement and distribution of chanks to chank artisans and co-operative societies were taken up by the Company in 1961-62. Up to the end of March 1972, the total turnover was Rs.68.05 lakhs on which the Company sustained a loss of Rs.2.51 lakhs. In June 1974, the Company decided to procure and distribute chanks through a co-operative society for which a loan of Rs.15 lakhs was to be given by the Company. The Company was to recover interest and godown charges each at one per cent per month and a net margin of one per cent on the amount disbursed. Losses, if any, were to be borne by the society.

The society refunded the entire amount of Rs.14.66 lakhs paid by the Company as loan along with interest of Rs.1.72 lakhs. Godown charges of Rs.1.72 lakhs subsequently reduced to Rs.0.15 lakh by the Board of Directors and net margin of Rs.0.15 lakh have not been paid by the society (December 1976).

5.08. Shortage of steel materials: The Company engaged a firm for transportation of steel materials from railway wagons to its raw material depots during 1974-75. As against 19,704.214 tonnes of materials despatched by the supplier, the transport contractor delivered during April 1974 to January 1975, 19,357.716 tonnes, leaving a balance of 346.498 tonnes valued at Rs.4.92 lakhs. Though as per the agreement, the contractor was required to submit detailed accounts in respect of individual wagons with reference to railway receipt/invoice weight, this was not enforced before releasing payments for transportation charges.

The Company appointed (March 1975) a task force headed by the General Manager to examine the reasonableness of the shortage. The General Manager in his report dated 1st July 1976 suggested that shortage of 0.67 per cent, being equal to that of the previous year, could be accepted as normal and the balance (1.03 per cent) of 203 tonnes valued at Rs.2.98 lakhs should be recovered from the contractor. The Management decided in August 1976 to adjust Rs.1.72 lakhs from the pending bill (Rs.0.72 lakh) and security deposit (Rs.1.00 lakh) of the contractor and to take legal action for realisation of the balance amount. No further action has been taken (February 1977).

6. Raw material import financing and warehousing scheme

With a view to assisting the small scale industrial units in the State, the Company introduced in 1966-67 a promotional scheme for financing and warehousing of raw material imports. Under the scheme, the Company clubbed all import licences/release orders obtained by the small scale industrial units for import of raw materials in bulk and placed orders on the foreign suppliers or the STC, as the case may be. Against deposit of earnest money ranging from 15 to 25 per cent of the CIF value, the Company was to arrange to buy these raw materials in bulk, clear them from the Customs and store them up to a period of 90 days, for which

a service charge at 2 per cent of the landed cost up to 60 days, and 2.5 per cent up to 90 days was to be levied. For the period exceeding 90 days an additional service charge at 1 per cent per month was to be charged on the landed cost. Up to 1969-70, goods valued at Rs.19.12 lakhs were imported on behalf of 39 units. Funds to the extent of Rs.8.29 lakhs got blocked up to 1971-72 as nine units failed to lift the materials in time. No additional service charge on this account was levied by the Company.

During 1968-69 and 1969-70, the Company imported, on behalf of two units, spare parts for tractors and emery abrasives, valued Rs.4.59 lakhs and Rs.0.02 lakh respectively, and stored them in a raw material depot. The abrasives were received in damaged condition. Some of the spare parts were reported to have been lost in a burglary on 2nd May 1971. A claim for Rs.0.34 lakh was lodged with an insurance company in June 1971 but was settled (April 1975) at Rs.0.18 lakh. Physical verification of the spare parts conducted in November 1972 revealed a net shortage of Rs.1.16 lakhs. Responsibility for the shortage and the damage had not been fixed. The goods had not been lifted by the units and were lying with the Company (December 1976). No earnest money, though envisaged in the scheme, was realised from the parties.

In addition, goods valued Rs.2.03 lakes imported by the Company between March 1973 and December 1975 on behalf of five units were lying with the Company (August 1976). In these cases also, no earnest money was realised from them.

7. Hire purchase scheme

In December 1971, the Company was entrusted by Government with a centrally sponsored hire purchase scheme, which envisaged purchase of indigenous machinery and equipment on behalf of the registered small scale units. The Company introduced the scheme in 1972-73.

Up to 31st March 1974, Government advanced Rs.34.12 lakhs (Rs.26.38 lakhs in 1972-73 and Rs.7.74 lakhs in 1973-74) to the Company carrying interest at 8 per cent per annum, with a rebate of 2 per cent for prompt payment.

Before a machine was delivered, a unit had to execute an agreement with the Company and to pay 10 per cent of the cost of machine as security deposit. The balance of the cost including other charges, service charges at 6 per cent and interest at 8 per cent per annum had to be paid in half-yearly instalments (varying from 5 to 13) starting from the first anniversary date of supply of the machine.

Up to 31st March 1976, the Company supplied 67 machines and equipment valued at Rs.30.56 lakes to 57 units. Though loans were not to exceed Rs.1 lake in each case, in four cases loans beyond this limit (Rs.1.08 lakes,

Rs.1.05 lakhs, Rs.2.21 lakhs and Rs.2.98 lakhs) were paid by the Company.

The following table indicates the position of instalments due, instalments received and the position of outstanding up to November 1976:

Amount

(In lakhs of Rupees)

Instalments du	ıe	•••	•••	•••	17.34
Instalments pa	id	• • •	•••	•••	4.48
Outstanding at	t the end of	November 19	976	•••	12.86

In 30 cases involving a sum of Rs.8.84 lakhs the parties had not paid even one instalment (November 1976).

Although the agreement provides for realisation of penal interest at 10 to 12 per cent on delayed payment of instalments, no such penal interest (Rs.2.10 lakks) was realised from 23 units involving 37 instalments.

The Management stated (August 1976) that steps were being taken to issue demands under the Public Demand Recovery Act for realisation of the outstanding amounts. No step had been taken for realisation of the dues (December 1976).

8. Price support scheme for lac industry

With a view to protecting the interest of small growers of stick lac in West Bengal, Government nominated (August 1975) the Company for procurement, sale and processing of lac and its subsidiary products. The Company was to procure stick lac from the growers at Rs.3 per kg. and get it processed through manufacturers before delivery to the State Trading Corporation of India Limited (STC). As per agreement with STC (November 1975), the Company was to supply 500 tonnes of seed lac at a price of Rs.741 per bag of 75 kg each. The price was revised in May 1976 to Rs.714 for grade I, Rs.689 for grade II and Rs.664 for grade III. STC was to pay initially an advance to the Company of Rs.4.76 lakhs, free of interest, upon furnishing a bank guarantee. Up to May 1976, the Company could not avail of the interest-free advance. As against the full quantity valued at Rs.46.78 lakhs delivered to STC by June 1976, the Company received payment (July 1976) of Rs.32.57 lakhs. The balance amount of Rs.14.21 lakhs was realised after six months (December 1976).

9. Setting up of industrial and commercial estates

9.01. The State Government prepared a scheme (September 1973) for setting up industrial/commercial estates in the districts under the additional employment programme. The Fifth Plan of the State envisaged the construction of 2,225 sheds at a total cost of Rs.1,755 lakhs for providing infra-

structure facilities for promotion of small scale industrial units. Nationalised banks were to finance 90 per cent of the total cost of the project and the balance was to be met by Government as margin money. Government entrusted (October 1973) the Company with the work of implementation of the scheme. The limit of margin money was subsequently raised to 20 per cent.

The Company initally took up construction of the estates at Kidderpore, Tangra, Kalyani and Malda.

The table below indicates the number of sheds taken up for construction up to March 1976 as against the proposed number:

Name of the estate	•			Number of she as per Fift Plan		Number of sheds taken up for construction
Kidderpore	• •	••	••	}	500	95
Tangra	• •	• •	• •	}		
Kalyani'(Nailia)	• •	••	• •	• •	500	33
Malda	• •	••	••	••	50	512 (stalls)

At Malda, the design specification has been changed to stalls to suit the convenience of the occupants.

The following table indicates the estimated cost of the estates, margin money invested by Government, bank loan obtained and the total expenditure incurred up to 31st March 1976:

Name of estate			Estimated cost	Margin money invested by Government	Bank kan obtained	Total expenditure	
					(In lakhs of Rupees)		
Kedderpe re		••	• •	27.12	5.42	21.70	25.78
Tangra	• •	••	••	64 · 83	12.96	Nil	31 · 29
Kalyani	• •	••	••	35 · 82	7.17	Nil	19.48
Malda		• •		31 - 15	6.23	20.00	27.20

Expenditure on Tangra and Kalyani estates was met by diverting funds from other sources. Bank loans for Tangra and Kalyani have been sanctioned in November 1976. The Company has taken up construction of estates at Kharagpur, Durgapur, Siliguri and Raigunj during 1976-77. Government has invested Rs.25.37 lakhs as margin money for the construction of these estates.

The following table indicates the targets and the actual dates of completion as at the end of November 1976:

Name of ostato			Targot d	Actual date of			
			Original	Revised		–	completion
Kidderpore	• •	• •	December 1974		••		May 1975.
Tangra	• •		June 1976		July 1976	••	October 1976.
Kalyani	••		December 1975		July 1976		Incomplete.
Malda	• •		June 1976		August 1976	• •	Incomplete.

Water supply arrangement at Kalyani has not been completed (March 1977). The sanitary and plumbing works of two blocks of Malda estate had not been taken up (November 1976).

The delay in completion of the estates, as stated by the Management (August 1976), was due to delay in procurement of departmental material and stoppage of work by the engineers of the Company for about two months.

The work of Malda estate was divided into four parts of which one (valuing Rs.7.02 lakhs) was awarded in January 1974 at 4.77 per cent below the P.W.D. schedule of rate. The second and third parts (valuing Rs.3 lakhs and Rs.12 lakhs) were awarded in June 1974 at 2 per cent and 7.77 per cent above the scheduled rates. The Management has not explained why varying rates were allowed at the same time for work at the same worksite. Had the rate allowed for the second part (2 per cent above) been applied to the third part there would have been a saving of Rs.0.69 lakh.

- 9.02. Uneconomic fixation of rent: The construction of Kidderpore Industrial Estate was completed in May 1975 at a total expenditure of Rs.30.02 lakhs (up to August 1976). The estate has a net rentable floor space of 40,878 sft. It was let out in June 1975 at a monthly rental of 45 paise per sft., which did not cover even the direct expenses involved. As against a monthly expenditure of Rs.30,814 by way of interest (Rs.22,150), ground rent (Rs.5,164) and maintenance charge (Rs.3,500), the income realisable by way of gross rent is Rs.18,395. Ten per cent rebate is allowed for prompt payment of rent. The monthly deficit, thus, worked out to Rs.12,419 and the Company lost Rs.2.36 lakhs during the period from June 1975 to December 1976. The Management stated (August 1976) that the rent structure was under revision. Up to December 1976, the rent structure had not been revised.
- 9.03. Outstanding rent: The sheds of the Kidderpore Industrial Estate were allotted and occupied in June 1975. Out of the 32 allottees, 11 have not been paying their dues regularly. Though the Company appointed a private agency (May 1975) at a monthly remuneration of Rs.3,500 for

management of the estate, the outstanding rent up to November 1976 amounted to Rs.1.67 lakhs. The Management stated (August 1976) that action would be taken to realise the outstanding dues by resorting to the Public Demands Recovery Act. No action has been taken so far (December 1976).

- 9.04. Kalyani Industrial Estate: Before the estate was complete in all respects, the Company let out four sheds between August 1975 and April 1976 to three small scale industrial units. The Company had not preferred any bill for rent of the space occupied by the units (August 1976). The Management stated (August 1976) that since water and electricity had not been made available no rent was claimed.
- 9.05. Siliguri Industrial Estate: The Siliguri Industrial Estate of Government was transferred to the Company in March 1974. The terms of transfer provided that the Company would recover rent from the occupants and pay it to Government after deducting maintenance charges. Out of nine sheds in the estate, four were under occupation (one covering 3,307.9 sft., from 1st February 1975, one covering 3,307.9 sft., from 19th August 1975 and two covering 6,615.6 sft., from 1st July 1975) by three parties. Rent bills had not been preferred against the parties (August 1975). The Management stated (August 1976) that as no water could be made available to the occupants, rent bills were not preferred. It may, however, be stated that regular supply of water was available from the wells in the campus. Two sheds were occupied by the Company to house its raw material depot and three sheds remained vacant.

Though the sheds belonged to Government, the Company undertook repair work at a cost of Rs.1.29 lakhs. Government had neither reimbursed the expenditure nor authorised the Company to undertake major repairs (December 1976).

10. Financial assistance under 16-point programme

Government directed (February 1972) the Company to grant financial assistance to the extent of Rs.1 lakh to a small scale industrial unit under its 16-point programme drawn up for revival of industries in West Bengal and for encouraging fresh investment, especially in the small and medium A sum of Rs.1 lakh was accordingly paid to the firm in two instalments of Rs.50,000 each during 1972-73. The loan was to carry a simple interest of 10 per cent per annum. The terms of repayment provided that ten per cent of the value of bills preferred by the firm with another Government Company would be realised by the Company and the balance of principal and interest would be repaid by May 1975. July 1976, a sum of Rs. 6,275 was realised from the firm, leaving a balance (principal: Rs.0.94 lakh and interest: Rs.0.38 lakh). of Rs.1.32 lakhs Although provided in the agreement, no legal steps had been taken to realise the amount (December 1976).

11. Consultancy services

With a view to helping the small scale industrial units in receiving technical consultancy services in different stages of their operation, Government introduced (March 1974) a scheme through the Company and placed a sum of Rs.7.31 lakhs in April 1974 at its disposal. The amount was intended to cover the fees payable to consultants for rendering services to 275 small scale units at specified rates (Rs.2,200 each for 200 units and Rs.3,000 each for 75 units) plus Rs.0.66 lakh to meet establishment charges of the Company. Up to March 1976, the sponsoring authority referred 64 cases to the consultant firms for their services. Up to the end of December 1976, Rs.4,950 were paid by the Company for consultancy services.

12. Equity participation

Though the State Government placed at the disposal of the Company a sum of Rs.1.00 lakh in 1972-73 for participation in the share capital of private enterprises, the amount had not been utilised for the purpose (December 1976).

13. Payment of commitment charge

The Company has cash credit arrangement with the State Bank of India since 1965-66. From January 1971, the bank introduced a commitment charge, which was calculated on the unutilised portion of the quarterly drawal forecast made by the Company. In the absence of any cash flow budget, the drawal forecasts made by the Company were much higher than the amounts actually drawn, resulting in payment of Rs.1.76 lakhs as commitment charges during January 1971 to October 1975.

14. Railway claims

The Company preferred claims with the Railways for Rs.2.47 lakhs for short receipt of steel material during 1973 and onwards. Claims of Rs.0.60 lakh involving seven cases were rejected by the Railways in March 1976 as time-barred.

The Management stated (August 1976) that due to delay in obtaining relevant certificates of shortage from the concerned Station Masters, the claims could not be preferred in time.

15. Demurrage charges

During the four years up to 1975-76, the Company had to pay demurrage charges owing to delay in clearing wagons/consignments as shown in the following table:—

Year					Amount
				(In l	akhs of Rupees)
1972-73	• •	• •	••	••	3.88
1973-74	• •	• •	••	••	0.18
1974-75	••	••	••	••	1.00
1975-76	• •	• •	••	• •	0.60

In two cases during 1975-76, demurrage charges amounting to Rs.0.35 lakh had to be paid owing to delay on the part of the Company in taking up the matter with the Calcutta Port Trust authorities. The above charges were not, however, recovered from the customers.

16. Detention charges on wagons

On 24th September 1973, the Company took possession of a plot of land at Chetla Railway Yard from Calcutta Port Trust on payment of standard rent for use as coke dump. The area was suitable for placement of five wagons at a time. The Company booked complete rakes, each consisting of 20 to 30 wagons, which resulted in payment of detention charges of Rs.1.91 lakks during the period from October 1973 to August 1974. The coke dump was shifted to another place in November 1974.

17. Shortage on physical verification of stock

Physical verification of stocks held by the Company at the end of 1974-75 revealed shortages and excesses valuing Rs.12.73 lakhs and Rs.3.58 lakhs, respectively. The net shortage (Rs.9.15 lakhs) has been written off in the accounts for 1974-75 without any investigation (December 1976).

18. Asian Trade Fair

As directed by Government, the Company participated in the Third Asian Trade Fair held in New Delhi in 1972. While the Company earned a gross profit of Rs.0.17 lakh by selling goods worth Rs.0.55 lakh in the fair, the total expenditure incurred was Rs.0.90 lakh. In addition, goods valued at Rs.0.36 lakh were lost by way of shortage and damage. No investigation of the shortage and damage had been conducted (December 1976).

The Management stated (August 1975) that "participation in the fair was under the direction of the State Government besides publicity and sales promotion and in future necessary investigation for damage and shortage would be conducted".

19. Financial position

(a) The table below summarises the financial position of the Company under broad headings for the three years up to 1975-76:

						1973-74	1974-75	1975-76
						(In l	akhs of Ru	pees)
Liabiliti	es.							
(a)	Paid up capita	1	••	••	••	49 · 11	52-11	52•11
(b)	Reserve and su	rplus	••	••	••	8.66	28.36	35 · 74
(0)	Borrowings	••	• •	••	••	585 • 26	504 • 70	453 · 28
(<i>d</i>)	Trade dues an provisions).	d other	current	liabilities	(including	234 · 45	338 • 24	274 · 98
				Total		877 • 48	923 • 41	816.11
Assets								
(e) (Gross block	• •	• •	••	••	5 · 72	27.50	89 · 13
(<i>f</i>)	Less Depreciati	ion	••	••	• •	2.06	3.08	6.69
(g) :	Net fixed assets		••	• •	••	3.66	24 · 42	82 · 44
(<i>h</i>)	Capital work-in	-progress	s	• •	••	11.56	64 · 61	81.28
(i)]	Investments	••	••	••	••	0.03	0.03	0.03
(j)	Current assets,	loans and	l advanc	205	••	862 · 23	834 · 35	6ŏ2·36
				Total	••	877 • 48	923 • 41	816-11
Capital e	employed	••	••	••	••	631 • 44	520 · 53	459 · 81
Net wor	th	••	• •	• •		57-77	80 · 47	87-85

Notes: (1) Capital employed represents net fixed assets plus working capital.

⁽²⁾ Net worth represents paid-up capital plus reservos less intangible assets.

(b) Working results

	1973-74	1974-75	1975-76
	(Ir) (800	
Income			
(i) Sales (excluding sales tax)	978 • 75	1,188 · 63	669-15
(ii) Other income	3.46	9.41	8•82
Total	982 • 21	1,198.04	677•97
Expenditure			
(i) Purchase of goods	948.62	1,255 · 33	310.30
(ii) Direct expenses	20 · 42	36.25	19.40
(iii) Establishment and other expenses	24.10	29.03	29.86
(iv) Selling and other expenses	1.90	2.38	2•74
(v) Interest	12.74	17.55	20.96
(vi) Depreciation	0.46	1.07	3.60
(vii) Difference in opening and closing stock of goods.	(-)63.83	(-)204.51	(+)267-60
Total	944 • 41	1,137.10	654•46
(viii) Net profit	37.80	60.94	23.51
(ix) Percentage of profit to sales and other income.	3.86	5.09	3.47

20. Internal audit

The Company had made arrangements for internal audit which were discontinued in March 1973. The Management stated (August 1975) that the internal audit cell of the Company would be organised soon. No action has been taken in this regard (March 1977).

21. Budgetary control

The Company does not prepare any budget for its income and expenditure nor does it set any targets in different spheres of its activities.

SECTION IV

OTHER POINTS OF INTEREST

WEST BENGAL ESSENTIAL COMMODITIES SUPPLY CORPORATION LIMITED

The Company was incorporated on 15th March 1974 with the main objects of promoting, counselling and financing production, purchase, storage, processing, movement and sale of food grains and other essential commodities to the public in West Bengal or to other States Governments.

Some points noticed during the course of test check are mentioned below:

1. Guarantee fee

To facilitate procurement of essential commodities, the Company opened on 18th May 1974 a letter of credit-cum-cash credit with a bank for Rs.10 crores, the repayment of which was guaranteed by the State Government. Guarantee fee at 50 paise per Ils.100 per annum was payable to Government. The Company utilised Rs.157 lakhs out of the cash credit in April 1975. Consequent on restrictions on movement of food grains imposed by the Government of India in March 1975, which the Company came to know on 9th May 1975, the scope of procurement was restricted. The Company did not, however, assess the probable requirement of cash credit with a view to bringing down its maximum limit. Following a proposal of the bank (July 1975) to levy commitment charge on the undrawn balance of the cash credit, the Company reduced the maximum limit of the letter of credit-cumcash credit to Rs.3 crores with effect from 11th August 1975. The Company, however, did not inform Government of this till 25th February 1976. Meanwhile, the credit-cum-cash credit facility was withdrawn by the bank from 15th December 1975 on instructions from the Reserve Bank of India on the ground that Government did not furnish to it an estimate of procurement operations during 1975-76 kharif season.

Government claimed (April 1976) guarantee fee of Rs.3.54 lakhs on the limit of Rs.10 crores from 1st April to 15th December 1975, which was paid by the Company in August 1976. The Company incurred extra expenditure of Rs.0.90 lakh on guarantee fee for the period from 10th May to 11th August 1975 as a result of the delay in reducing the limit of cash credit and Rs.1.21 lakhs for the period from 12th August to 15th December 1975 as a result of not informing the State Government of the reduction in the letter of credit-cum-cash credit limit.

The Management stated (September 1976) that the credit facility was assessed on yearly basis and was not revised every now and then.

2. Non-payment of advance income tax

The Company failed to furnish its return of estimated income and pay income tax in advance for the year 1974-75 by 15th March 1975 under Section 212(3) of the Income Tax Act, 1961. The Company filed the return of its actual income (Rs.11.75 lakhs) for the year and paid income tax (Rs.6.79 lakhs) on 28th August 1975. The Income Tax Officer made the final assessment on 22nd October 1975 and demanded Rs.0.33 lakh as interest for the Company's failure to pay the tax in advance. The Company paid the interest on 10th November 1975 and appealed (December 1975) for remission of the amount; the appeal is pending (March 1977). The Management stated (August 1976) that payment of advance tax would have increased the burden of interest on funds borrowed from bank. It, however, held Rs.57.00 lakhs in short term deposits earning interest at 5.5 per cent during the period.

STATE FISHERIES DEVELOPMENT CORPORATION LIMITED

3. Purchase of trawlers

By virtue of an arrangement made (September 1974) by the Government of India with a shipbuilding firm of Mexico for purchase initially of 20 trawlers and subsequently of 10 trawlers for different parties in India, the Company entered into a contract with the firm on 4th September 1974 for purchase of there trawlers at a price of U.S. \$3,04,430 each ex works.

As per the terms of the contract, 20 per cent of the contract price was to be paid within 30 days of the date of signing the contract and the balance 80 per cent in 13 equal semi-annual instalments. A letter of credit/guarantee for 80 per cent of the contract price from an Indian bank acceptable to the firm's bank was to be furnished to the latter bank within 45 days of the date of contract. The buyer was to obtain an endorsement from a New York bank acceptable to the firm's bank on the letter of credit/guarantee furnished by the buyer's bank. There was no price escalation clause except that if the buyer failed to furnish a letter of credit/guarantee within 45 days of the date of contract, the value of the contract was to be increased by one per cent for each month of delay from the 45th day of signing the contract.

The Company failed to adhere to the time schedule and paid Rs.14.52 lakhs towards 20 per cent of the contract price on 9th April 1975 and opened a letter of credit on 12th August 1975 with an Indian bank on payment of a commission of Rs.0.24 lakh, but the letter of credit did not reach the firm's bank through the New York bank. The letter of credit had to be cancelled (November 1975) due to amendment in the terms of the contract (mentioned below).

The Company also contracted for another trawler in September 1975, this being treated as an integral part of the original contract.

After effecting some modifications in the design at the instance of the Government of India, the price of each trawler was negotiated and settled in September 1975 at \$3,11,569 ex works consisting of a basic price of \$2,85,843 and escalation of \$25,726. The following terms and conditions were agreed to and included (September 1975) in an addendum to the original contract:

- (1) If 20 per cent of the revised price was not paid by 30th September 1975, the Company would pay one per cent per month on 20 per cent up to 30th November 1975 and 2 per cent thereafter.
- (2) If the Company failed to open a letter of guarantee (form of which was adopted at the time of negotiation) countersigned by a U.S. bank for the balance 80 per cent by 31st Octber 1975, the Company would pay one per cent per month thereon up to 31st December 1975 and 2 per cent thereafter.

The Company paid Rs.6 lakhs towards 20 per cent of the price on 29th September 1975 for all the four trawlers, after adjustment of the amount paid earlier, but failed to open a letter of guarantee within the stipulated date. The Government of India opened through the State Bank of India a letter of guarantee in March 1976.

The price of each trawler was again revised in March 1976 to \$3,43,582 ex works due to non-fulfilment of the terms including escalation of \$14,955, which was not accepted and paid by the Company.

The Company incurred an extra expenditure of Rs.0.24 lakh as bank commission for the period from 12th August to 29th November 1975 on the cancelled letter of credit and an extra liability of \$1,02,904 (Rs.8,46,900) tor the four trawlers owing to price escalation.

The Management, while admitting that owing to the delay in fulfilling the terms of the contract the Company had to pay some penal interest, stated (September 1976) that it was due to the fact that the terms of payment negotiated by the Government of India were very stiff and the time schedule to complete the banking transactions was inadequate.

DURGAPUR CHEMICALS LIMITED

4. Purchase of salt

The Company, after negotiation, entered into a contract on 31st May 1975 for purchase of 4,000 tonnes of common salt from Westinghouse Saxby Farmer Limited. As per the contract, 1,000 tonnes of salt were to be supplied within 7 days from the date of contract at Rs.250 per tonne and the balance quantity during June and July 1975 at the rate of 1,500 tonnes per month at Rs.240 per tonne.

At the request of the supplier (June 1975 and August 1975), the order was revised ex post facto on 10th September 1975 as under on the ground of increase in freight and price of salt:

Period of supply				Quantity	Previous rate	Revised rate
				(Tonnes)	(Rupees per tenne)	
12th June—15th July 1975	••	• •	• •	704 • 649	250	260
16th July—onwards	••	• •		3,295 · 351	240	280

The revised purchase order stipulated three months' credit facility but sums aggregating Rs.5.78 lakhs were advanced (July 1975 to December 1975) to the supplier. Westinghouse Saxby Farmer Limited actually supplied 5,400 tonnes of salt during June-December 1975 against this contract. The excess quantity was paid for at Rs.280 per tonne for 600 tonnes and at Rs.255 per tonne for the remaining 800 tonnes.

In this connection it may be mentioned that the Company also purchased 2,320 tonnes of common salt between January 1975 and January 1976 at Rs.122.60 to Rs.190.00 per tonne from other suppliers.

The above deal resulted in an extra expenditure of Rs.4.52 lakhs with reference to the maximum prevailing market price (Rs.190 per tonne).

The matter was reported to the Company Government in October 1976; replies are awaited (March 1977).

THE KALYANI SPINNING MILLS LIMITED

5. Loss on import of cotton

The Company decided (December 1974) to import 606 bales of Sudan cotton through the Cotton Corporation of India Limited. Cotton valued at Rs.26.05 lakhs arrived at the Calcutta port in June 1975, but the Company did not clear the consignment. The consignment was cleared (August 1975) by the Cotton Corporation of India Limited and kept in its custody subject to payment of storage and other charges by the Company. For the import, the Company paid (February 1975) a sum of Rs.2.08 lakhs to Indian Cotton Mills Federation.

Manufacture of yarn from the imported cotton having been found (February 1976) uneconomical (as anticipated earlier by the Company's Accounts Department), the Company decided in July 1976 to sell the cotton through the Cotton Corporation of India Limited. The cotton was sold on 12th August 1976 at Rs.32.58 lakhs as against the total cost of Rs.37.03 lakhs (Rs.26.05 lakhs landed cost and Rs.10.98 lakhs other charges). The Company thus incurred a loss of Rs.6.55 lakhs, including Rs.2.08 lakhs paid to the Indian Cotton Mills Federation.

The Management stated (November 1976) that at the time of arrival of the consignment on 27th June 1975 the textile industry in the country was passing through serious recession and the Company's financial condition was too bad to clear the consignment. Considering the yarn price as uneconomical, the Company decided (July 1976) to dispose of the cotton rather than use it.

WEST BENGAL INDUSTRIAL DEVELOPMENT CORPORATION LIMITED

6. Construction of a paper mill

Based on a project report prepared (June 1968) by its technical adviser, the Company decided (November 1969) to set up a small paper mill at Jhargram with a capacity of 1.75 tonnes per day at a capital cost of Rs.3.51 lakhs (revised to Rs.4.17 lakhs in May 1970). In May 1970, the construction work was started. In August 1970, when the work was in progress, the Company raised some doubts regarding techno-economic aspects of functioning of the mill and decided to suspend the construction work temporarily.

On the basis of advice taken in November 1970 from a consultant firm, that in order to make the project economically viable the mill should be of higher capacity, the Company decided in March 1972 to abandon the project.

The assets of the mill valued at Rs.0.72 lakh were sold (July 1976) at Rs.0.19 lakh, resulting in a loss of Rs.0.53 lakh in addition to loss of interest due to blocking of capital for more than six years.

CHAPTER II

SECTION V

STATUTORY CORPORATIONS

Introduction

There were six Statutory Corporation in the State as on 31st March 1976, viz., West Bengal State Electricity Board, Calcutta State Transport Corporation, North Bengal State Transport Corporation, Durgapur State Transport Corporation, West Bengal Financial Corporation and West Bengal State Warehousing Corporation.

A. WEST BENGAL STATE ELECTRICITY BOARD

1. Loan capital

The aggregate of long-term loans, including loans from Government, bonds, debentures and deposits obtained by the Board, stood at Rs.25,740.40 lakhs at the end of 1975-76 representing an increase of Rs.4,446.07 lakhs over the total long-term loans of Rs.21,294.33 lakhs at the end of the previous year.

2. Guarantee

Government have guaranteed repayment of loans of Rs.10,824.58 lakhs obtained by the Board under Section 65 of the Electricity (Supply) Act, 1948, against which Rs.10,754.19 lakhs were outstanding as on 31st March 1976*.

3. Surplus

The working results of the Board showed a surplus of Rs.113.86 lakhs during 1975-76 as against Rs.66.14 lakhs in the previous year.

A synoptic statement showing the summarised results of working of the Board is given in Annexure 'B'.

B. OTHER STATUTORY CORPORATIONS

The accounts of the following four Corporations for the years mentioned against each had not been received (December 1976):

Name of the Year for which Corporation accounts were in arrears

Calcutta State Transport ... 1975-76

Corporation

North Bengal State Transport ... 1973-74 to 1975-76

Corporation

Durgapur State Transport ... 1973-74 to 1975-76

Corporation

West Bengal State Warehousing ... 1974-75 and 1975-76

Corporation

^{*}Figure as per the records of the Board.

1. Paid-up capital

The contribution towards the capital of the North Bengal State Transport Corporation by the Government and the Railways as on 31st March 1973 was Rs.192.04 lakhs and Rs.96.01 lakhs respectively. The contribution towards the capital of the Calcutta State Transport Corporation by the Central and the State Governments was Rs.100.00 lakhs and Rs.608.46 lakhs respectively at the end of 1974-75. The capital of the remaining two Corporations at the close of the years mentioned against each was as follows:

				Year	(In lakhs of Rupees)
West Bengal Financial Corporation	• •	• •	• •	1975-76	170.00
West Bengal State Warehousing Corpo	ration	••	• •	1974-75	92.00

2. Loans

The aggregate of long-term loans obtained by three Corporations, viz., Calcutta State Transport Corporation, North Bengal State Transport Corporation and West Bengal Financial Corporation at the close of the years mentioned against each was as noted below:

			Year	(In lakhs of Rupees)
Calcutta State Transport Corporation	• •		1974-75	3,522 · 94
North Bengal State Transport Corporation	• •	• •	1972-73	75 · 87
West Bengal Financial Corporation	• •		1975-76	889.06

3. Guarantees

Govenment have guaranteed repayment of loans of Rs.579.26 lakhs obtained through issue of bonds by two Corporations, viz., Calcutta State Transport Corporation and West Bengal Financial Corporation, and these loans in their entirety were outstanding, as detailed below:

Name of the Corporation		Outstanding amount of loan gua- ranteed by Government	As on 31st March
	(In lakhs of Rupees)	
Calcutta State Transport Corporation	••	110.00*	1975
West Bengal Financial Corporation	• •	469 • 26 *	1976

Government have also guaranteed repayment of principal and payment of interest in respect of borrowing of Rs.568.34 lakhs by the Calcutta State Transport Corporation from the Industrial Development Bank of India, of which Rs.364.99 lakhs* were outstanding as on 31st March 1975.

^{*}Figures as per the records of the Corporations.

4. Profits Losses

According to the latest available annual accounts, the profit loss of four Corporations was as given below:

			Year	Net profit (+)
				Net Loss (-)
				(In lakhs of Rupees)
(a) Calcutta State Transport Corporation	••		1974-75	(-)938·79
(b) North Bengal State Transport Corporation	••	••	1972-73	$(-)94 \cdot 00$
(c) West Bengal State Warehousing Corporation	• •	••	1973-74	(+)1.71
(d) West Bengal Financial Corporation	••	• •	1975-76	$(+)26 \cdot 42$

A synoptic statement showing the summarised financial results of working of four Corporations, on the basis of the latest available accounts, is given in Annexure 'B'.

SECTION VI

NORTH BENGAL STATE TRANSPORT CORPORATION

1. Introduction

The North Bengal State Tranport Corporation was established on 15th April 1960 under Section 3 of the Road Transport Corporations Act, 1950. The Corporation owes its origin to a small passenger service opened by the then Maharaja of Cooch Behar in April 1945 with a fleet of three buses. When Cooch Behar was integrated with the State of West Bengal (1950), the management of the passenger service was taken over by the State Government and the organisation contained to function departmentally. The service was extended to all the five districts of North Bengal, viz., Darjeeling, Cooch Behar, Jalpaiguri, West Dinajpur and Malda in 1956. The Corporation continued operating its service in all these districts with a fleet strength of 109 buses.

Subsequently, the Corporation introduced long distance services to Calcutta (October 1967). An inter-State service connecting Siliguri with Gauhati in Assam was also introduced (February 1970). The service was, however, withdrawn in March 1972.

Apart from passenger services, the Corporation has also engaged itself in carriage of goods by road in West Bengal since April 1965, starting with a fleet strength of 3 trucks.

2. Objects

The Corporation was formed with the following objects in view:—

- (i) Developing road transport in the districts of Cooch Behar, Darjeeling, Jalpaiguri, West Dinajpur and Malda in West Bengal, and thereby helping the public, trade and industries.
- (ii) Co-ordinating the road transport with rail transport in the said districts.
- (iii) Extending and improving facilities for road transport in the said districts and providing an efficient and economical system of transport service.

3. Organisational set-up

The management of the Corporation vests in the Board constituted under Section 5 of the Act. As on 31st March 1976, the Board consisted of 19 members, including the Chairman and representatives of the Central and the State Governments. The Chief Executive of the Corporation is the General Manager. He is appointed by the Government under Section 14(1) of the Act. The Chief Accounts Officer who is appointed by the Government under Section 14(1) of the Act is in charge of the Accounts Branch. There was no regular incumbent of the post during the period from 4th January 1972 to 5th August 1975.

At the end of March 1976, there were 16 operating depots. Besides, one central workshop and store, one divisional workshop and store, and 16 depot stores were functioning.

The area of operation of the Corporation has been divided into two administrative divisions, viz., Cooch Behar and Raigunj. The General Manager is in overall charge of the Corporation while the Deputy General Manager is in administrative charge of Raigunj division under the control of the General Manager.

The provision of Section 11(1) of the Road Transport Corporations Act, 1950 to the effect that the board of the Corporation should meet at least once in every three months has generally not been observed.

4. Capital structure

4.01. Funds raised: The details regarding the funds raised by the Corporation from various sources up to 31st March 1976 are given in the table below:

81. No.	Source and nature of funds	Amount raised	Terms of repayment	Rate of interest per annum	Amount repaid	Overdue interest as on 31st March 1976
		(In lakhs of Rupees)	(Per cent)	(In lakha	of Rupees)
1.	Capital-					
	•State Government	212.04	Not yet finalised	4 to 61	Nil	101 · 04†
	**Government of India (Railway).	106.02	Ditto	41 to 61	Nıl	8 · 28†
2.	Loan-					
	State Government	326 · 80	Ditto	4 to 61	Nil	Included in the amount of Rs. 101.04 lakhs men- tioned above.
3.	Borrowings from banks-	-				
	State Bank of India	19.00	Seven years	101 to 161	8.95	••
	A nationalised bank	7.14	Five years	10	1.19	••
4.	Borrowings from the Industrial Development Bank of India. (Bill rediscounting)	13·60 (moludi interest Rs. 2·4 lakhs).	of	7·80	7.81	••

[•]Value of 25 trucks received from the State Government during 1972-73 amounting to Rs. 13·34 lakhs has not been included in the above table. Value (not known) of 30 trucks received in the second lot during 1972-73 has also not been included.

^{**}The share of capital contribution is in the ratio of 1:2 between the Central and the State Governments.

[†]Figures as intimated by the Corporation.

4.02. Internal resources: Section 29(2) of the Road Transport Corporations Act, 1950 provides that provisions for depreciation and reserves should not be utilised for any purpose, other than that for which these were created, without the previous approval of the State Government. The West Bengal State Transport Corporations Rules, 1960, also provide that the cash balances of depreciation, reserve and other funds which are not immediately required for disbursement may be invested by the Corporation.

The Coporation has not, however, invested the balances in the funds fully as indicated in the following table, the shortfall having been utilised to meet its internal requirements:

					As on 31st March 19	
					Balance in fund	Investment made
			•		(In lakhs	of Rupees)
Depreciation Reserve Fund	• •	• •	• •	• •	288 · 46	2 · 10
Accident Reserve Fund	••	• •	• •	••	1.00	0.15
Price Equalisation Fund	••	• •	• •	••	0.60	Nil
Development Rebate Reserve I	fund	••	••	••	1 • 20	Nil

The Management stated (July 1976) that owing to paucity of funds further investment was not possible.

4.03. Cash credit: The Corporation has been availing of a cash credit facility with a nationalised bank since February 1974 against hypothecation of stores. Government has guaranteed repayment to the extent of Rs.10 lakhs to be utilised for obtaining supplies of spares, stores and tyres, subject to payment of half per cent as service charge. No service charge had, however, been paid to Government (January 1977). The cash credit utilised as on 31st March 1976 was Rs.9.39 lakhs.

The bank charged interest at 16 per cent up to April 1976 and 16.5 per cent thereafter.

Interest paid on cash credits availed of amounted to Rs.1.19 lakhs and Rs.1.43 lakhs during 1974-75 and 1975-76 respectively.

5. Profitability analysis

5.01. Arrears in account: Preparation of accounts of the Corporation has been in arrears in contravention of the provisions of the Act. The annual accounts for the years from 1969-70 to 1971-72 and for 1972-73 were adopted by the Corporation in September 1976 and in January 1977 respectively, Annual accounts for 1973-74 onwards are in arrears (January 1977),

The Management stated (November 1976) that shortage of staff in the Accounts Section had caused arrears in accounts leading to delay in the preparation of final accounts.

5.02. Financial position: The financial position of the Corporation at the end of each of the three years up to 1972-73 is indicated below:

			1970-71	1971-72	1972-73
Α.	Liabilities		(In	lakhs of Rupe	es)
	(a) Capital and loan—				
	(i) State Government	••	166.57	204 · 57	248.90
	(ii) Central Government (Railways)	••	35.00	81.78	96.02
	(b) Reserve and surplus—				
	(i) Accident Reserve Fund	••	1.00	1.00	1.00
	(ii) Contributory Provident Fund	••	31.06	41.73	52.03
	(iii) Price Equalisation Fund	••	0.60	0.60	0.60
	(iv) Development rebate reserve	• •	0.47	0.75	0.94
	(v) Gratuity Fund	••	4.63	4.58	4.55
	(c) Deposits	• •	1.48	1.56	1.66
	(d) Loans	••	Nil	Nil	19.00
	(e) Current liabilities—				
	(i) Sundry creditors	••	16.30	18.21	22.31
	(ii) Bank overdraft	•••	3.56	15.83	25.66
	(iii) Others	• •	22.48	33 · 25	55 • 27
	(f) Difference in accounts	• •	0.10	0.15	0.19
	Total	••	283 • 25	404.01	528·1 3
в.	Assets—				
	(a) Fixed assets—				
	(i) Gross fixed assets	• •	220 · 47	263 · 63	336 · 27
	(ii) Less depreciation reserve	• •	134.22	. 152.79	189.05
	(iii) Net fixed assets	••	86.25	110.84	147.22
	(b) Investment	• •	20.30	32.18	40.16
	(c) Deposits with banks	• •	18.94	32.94	25.00
	(d) Current assets, loans and advances	••	49.36	71 • 15	65 · 10
	(e) Miscellaneous expenses	• •	1.97	2 · 39	2 · 35
	(f) Reconciliation of capital advance (pre- corporation loss).	••	3.90	3.69	3 · 48
	(g) Accumulated losses	••	102.53	150 · 82	244 · 82
	Total	••	283 · 25	404.01	528 · 13

5.03. Working results: The following table gives the working results of the Corporation for the three years up to 1972-73:

	1970-71	1971-72	1972-73
	(Amoun exce	Rupeos to l)	
(a) Operating revenue	171 - 65	185 • 44	222.08
(b) Non-operating revenue	4.43	5 · 32	3.98
(c) Total revenue	176.08	190 · 76	226.06
(d) Operating expenses	180 · 71	194 · 63	299 · 45
(e) Non-operating expenses	37 · 41	44.43	20 · 61
(f) Total expenses	218.12	239.06	320.06
(g) Operating loss (a—d)	9.06	9.19	77.37
(h) Net loss (cf)	42.04	48.30	94.00
(i) Ratio of operating revenue to operating expenses	95:100	95 : 100	74:100
(j) Total operating expenses per effective kilometre (paise)	124 · 73	134 · 68	152 · 38
(k) Total operating revenue per effective kilometre (paise)	118.48	128.32	126.73
(l) Loss per effective kilometre (paise) (j-k)	6 · 25	6 · 36	25 · 65

By the end of 1972-73, the total loss amounted to Rs.244.82 lakhs.

Although accounts have not been compiled for 1973-74 and onwards the following table indicates that the financial position of the Corporation has been deteriorating from year to year:—

Year				Total earnings	Shortfall of total earnings to cover total expenses				
				(In lakhs of Rupees)					
1973-74	• •	• •	••	248.76	363 · 79	115.03			
1974-75	• •	• •		240-91	384.80	143.89			
1975-76	• •	• •	••	283 · 65	446.80	163 · 15			

Note: The above figures are provisional.

The reasons for the loss as stated by the Management in September 1976 were as follows:

- (a) increase in the cost of operation, and
- (b) static fare structure.

Government appointed (September 1972) a Commission of Inquiry condisting of a retired judge of Calcutta High Court for recommending economically viable and sound fare structures in the stage carriage service in West Bengal, having regard to the interests of the travelling public as well as the operators and all others concerned. The Commission of Inquiry in its report (1974) observed that there were "losses incurred on account of pilferage and leakages of revenue amounting to 30 to 35 per cent of the total expenditure".

It further observed that "the economic imbalance of the Corporation" was not "due to the failure of the existing fare structure to adjust itself to ever increasing costs but to the existence of wasteful practices and corruption and absence of business like management and proper books of account in the organisation".

The Corporation does not prepare profit and loss accounts for its passenger and goods services separately, nor does it maintain route-wise profit and loss accounts. However, on test check of records of two depots it was noticed (July 1976) that operation on some routes was uneconomic as shown below:

- (a) Mathabhanga depot: In the following routes the average earnings per km was Rs.1.66 while the average expenditure worked out to Rs.2.49 per km.
 - (i) Mathabhanga—Sitai (52 km.)
 - (ii) Mathabhanga—Sitalkuchi (21 km.)
 - (iii) Mathabhanga—Giladanga (26 km.)
- (b) Jorai depot: The average earning and expenditure per km of the following routes were Rs.2.03 and Rs.2.49 respectively:
 - (i) Jorai—Alipurduar (31 km.)
 - (ii) Jorai—Sankosh (29 km.)
 - (iii) Jorai—Cooch Behar (53 km.)
 - (iv) Jorai-Kulkulirhat (24 km.)

6. Nationalisation of passenger services

At the time of formation of the Corporation the total nationalised road length was 1,762 km which rose to 7,472 km at the end of 1975-76.

The comparative position for the four years ending 1975-76 was as below:

			At		
Particulars		1972-73	1973-74	1974-75	1975-76
Total road length nationalised (in	km.)	7,420	7,420	7,472	7,472
Number of routes operated	••	205	205	206	209
Total route length (in km.)	••	18,552	18,552	18,680	19,114
Average route length (in km.)	• •	90•4	90 • 4	90.6	91.4

Out of 7,472 route kms nationalised up to 31st March 1976, the Corporation operates on 2,859 kms to the exclusion of other operators. In respect of the remaining nationalised route kms, private bus services operate along with the Corporation. The Management stated (June 1976) that due to poor outshedding of Corporation buses, Government issued permits to private operators to meet its obligations to the public.

7. Fleet acquisition and replacement

The Corporation operates passenger as well as goods transport services. The different types of passenger transport services provided are ordinary, express and "rocket".

The 'ordinary' service is confined to short distance routes. The 'express' service operates on long distant routes and also connects Calcutta. The 'rocket' service is operated between Calcutta and Raigunj, Malda and Siliguri only.

7.01. Fleet acquisition: (a) Passenger service.—The fleet strength of the Corporation rose from 109 buses in April 1960 to 353 buses in March 1976.

The table below indicates the growth of the fleet strength during the three years up to 1975-76:

Type of vehic	ole				1973-74	1974-75	1975-76
Single decker	• •	• •	• •		295	305	324
Trailer (double de	ecker)	• •	• •	• •	2	2	2
Semi-double deck	er	• •	• •	••	1	1	1
Mini bus	••	• •	••	••	17	19	26
			Total	••	315	327	353
Make of vehi	cle						·
Tata Mercedez Be	nz	••	••	••	110	121	147
Leyland	••	••	• •	••	196	196	196
Bedford	••	••	• •	• •	••	2	2
Dodge	••	••	• •	•	9	8	8
			Total	, - • •	315	327	353

The Estimates Committee in their Sixteenth Report (March 1974) advocated operation of double decker buses because revenue earnings from a double decker bus were generally higher by at least 50 per cent than from a single decker, cost operation though of of a double decker marginally higher. The Management had 1975) stated (February in reply that the recommendation was not acceptable as there was only one route on which double decker could be used. It was noticed that no action was taken to place more double decker buses on this route and single deckers also plied along with the two (double decker) trailers.

(b) Goods transport service.—A goods transport service was started by the Corporation in 1965, with a fleet of three trucks. The number increased to 97 trucks on 31st March 1976.

The table below indicates the details of the trucks held by the Corporation during the three years up to 1975-76:

Make of	vehicle				1973-74	1974-75	1975-76
Leyland	••	• •	••	••	42	42	42
Bedford	••	• •	••	••	25	23	22
Volvo	• •	• •	••	• •	1	1	4
Others	• •	••	••	• •	••	28	29
			Total	••	68	94	97

7.02. Replacement: A Study Group (City Service) of the Association of State Road Transport Undertakings, New Delhi, recommended (June 1971) that the life of a single decker should be taken to be 5 lakh kms (or about 8 years) and that of a double decker 7.5 lakh kms (or about 12 years). The Study Group also recommended that the percentage of 'Young' (with less than four years service) buses to the total fleet strength should not be less than 60 and that of 'age-old' fleet should normally be nil and in any case it should not be allowed to exeed 5 per cent.

The Estimates Committee in their Sixteenth Report stated (March 1974) that although these norms were applicable to city services, the standard should approximate to the above norms as possible even in rural areas.

The following table indicates the composition of vehicles in terms of years as at the end of March 1976:

Age of vehicles in years				Double decker (including trailer and semi-double decker)	Singlo dockor (including mini bus)	Total
Passe	nger servi	сө :				
(i) Over 12 years	••	••	••	Nil	48	48
(ii) Above 8 years but no	t exceedin	ng 12 years	• •	Nil	111	111
(iii) Above 5 years but n	ot exceedi	ing 8 years	••	1	50	51
(iv) 5 years and less	••	••	••	2	141	143
		Total	••	3	350	353
.Good	s service :					Trucks
(i) Over 12 years	••	• •	••	• •	••	Nil
(ii) Above 8 years but no	t exceedin	ng 12 years	• •	••	••	35
(iii) Above 5 years but no	ot exceedi	ng 8 years	••	• •	••	5
(iv) 5 years and less	• •	••• į	• •	••	••	57
		Total	••	••	••	٤7

It would be seen from the above tables that the percentage of old vehicles as on 31st March 1976 was 45 and 36 in respect of passenger service and good service respectively.

The Estimates Committee were (March 1974) of the opinion that "a serious imbalance in the fleet strength had been emaciating the economic health of the organisation for a considerable number of years".

The Management had stated (February 1975) in reply that the ratio of uneconomical vehicles was large and that the imbalance was due to non-replacement of old buses on account of paucity of funds.

The following table indicates the position of fleet strength of the Corporation during the four years ending 31st March 1976:

**			
Passen	OAT	service	۰

g	1972-73	1973-74	1974-75	1975-76
(a) Number of vehicles held in fleet on 1st April	239	277	315	327
(b) Number of vehicles added to the fleet during the year	04	38	13	26
(c) Number of vehicles condemned during the year	26	Nil	1	Nil
(d) Number of vehicles held in fleet on 31st March	277	315	327	353
Goods service :				
(a) Number of vehicles held in fleet on lst April	40	68	68	94
(b) Number of vehicles added to the fleet during the year	28	Nil	28	4
(c) Number of vohicles condemned during the year	Nil	Nil	2	1
(d) Number of vehicles held in fleet on 31st March	68	68	94	97

No criterion has been fixed by the Corporation for declaring a vehicle as condemned.

A condemnation committee consisting of the General Manager, the Chief Accounts Officer, the Chief Engineer of the Corporation, the Deputy Transport Commissioner (Tech.), Government of West Bengal, the Principal, Jalpaiguri Engineering College and two representatives of chassis manufacturers (Leyland and Tata) recommends condemnation after physical inspection of each vehicle.

The condemnation committee recommended condemnation of 44 buses pertaining to Raigunj division (November 1975) and of 43 buses relating to Cooch Behar division (May 1976). The Corporation approved (September 1976) the recommendation and decided to dispose of the condemned buses by auction. Information regarding disposal of the said buses is awaited (January 1977).

Records in respect of the disposal of old vehicles prior to the cases referred to above were not made available (January 1977).

8. Operational efficiency

The following table gives the details of operations of passenger service during the four years up to 1975-76:

			1972-73	1973-74	1974-75	1975-76
Number of routes at the c	ond of the	year-				
(a) Regular service	• •	• •	157	157	158	161
(b) "Hat" service	••	••	48	48	48	48
	Total	• •	205	205	206	209
Route kilometres	••	••	18,552	18,552	18,680	19,114
Average route distance (in	kilometi	ros)	90.4	90 • 4	90 · 6	91.4
Effective kilometres opera	stod (in la	khs)	175-24	173.86	151 · 39	160 • 74
Number of passengers car	ried (in le	akha)	223 · 91	255 • 50	248 · 20	260.03
Number of passengers carrlakhs)	ried per b	ous (in	1 · 12	1 · 32	1.55	1.35

The Corporation has not worked out a schedule of services for each route. The average number of buses placed on road is taken as the number of schedules operated. In the absence of prescribed schedules of services and scheduled kilometres the operational efficiency could not be worked out.

The Management stated (July 1976) that the schedules operated and the routes were not the best for the Corporation's economy and that utilisation of the vehicles was not satisfactory.

8.01. Fleet and vehicle utilisation: The table below shows the number of vehicles held in fleet, vehicles on road, percentage of fleet utilisation, etc., for the four years up to 1975-76:

	1972-73	1973-74	1974-75	1975-76
A. Passenger service :				
(1) Average number of buses—				
(i) Hold during the year	258	296	321	340
(ii) On road	200	193	160	190
(iii) Off road	58	103	161	150
Percentage of fleet utilisation	77.5	65 • 2	49.8	55.9
Average vehicle utilisation per day (in kilometres)	145.7	102.3	103.5	80.8
Average carrying capacity per bus	46	46	46	46
	Seats	Seats	Scats	Seats
Total soat kilometres offered (in lakhs)	8,060 • 95	7,997 · 53	6,964 · 19	7,394 · 30
Total seat kilometres occupied (in lakhs)	4,628 · 88	5,138 · 22	4,946 · 88	5,760.00
Occupancy ratio (percentage)	57.4	$\mathbf{64 \cdot 2}$	71.0	77.9
2. (i) Gross kilometres operated (in lakhs)	175 • 94	174.92	152 · 16	161-17
(ii) Dead kilomotres (in lakhs)	0.70	1.06	0.77	0.43
(iii) Percentage of dead kilometres to kilometres operated	0.4	0.6	0.5	0.3
B. Goods service:				
Average number of vehicles—				
(i) Held in fleet	54	68	81	96
(ii) On road	40	40	37	51
(iii) Off road	14	28	44	45
Percentage of floot utilisation	74 · 1	58.8	45 • 7	53.1
Average vehicles utilisation per day (in kilometres).	145.7	102.3	103:5	80.8
Total kilometres operated (in lakhs)	21.5]	15.28	14.25	15.44
Effective kilometres operated (in laklis)	21.28	14.93	13.98	15.08
Dead kilometres operated (in lakks)	0.23	0.35	0.27	0.36
Percentage of dead kilometres to kilometres operated	1.1	2.3	1.9	2.3

The above table shows that while the average number of vehicles held in fleet increased from year to year, the average number of vehicles put on road and effective kilometres operated showed a downward trend up to 1974-75. Although there was some improvement during 1975-76 in the average number of vehicles on road, the position of average vehicle utilisation per day deteriorated.

8.02. Breakdowns: Complete records about breakdown of trucks were not maintained,

The following table indicates the breakdowns in the passenger service during the four years up to 1975-76:

		1972-73	1973-74	1974-75	1975-76
Gross kilometres operated (in lakhs)	••	175 · 94	174.92	152 · 16	161 · 17
Number of breakdowns—					
(a) Total	••	1,612	1,234	1,816	2,089
(b) per 10,000 gross kilometres	• •	0.92	0.71	1.19	1.30
(c) per day		4.42	3.38	4.97	5 · 71
(d) per vehicle on read	• •	8.06	6.39	11.35	11.00

In this connection, the General Manager observed (May 1976) that unscientific and irregular methods of servicing of vehicles disregarding the maintenance schedule were the primary cause of frequent breakdowns of buses en route.

The expenditure on repairs and maintenance of vehicles during the five years up to 1975-76 was as indicated below:

Year				Expenditure (In lakhs of Rupees)	Average number of vehicles (including trucks) on road	Expenditure per vehicle per annum (In lakhs of Rupees)
1971-72	••	••	••	74 · 30	228	0.33
1972-73	• •	• •	• •	94.32	240	0.39
1973-74	••	• •	••	115.25	233	0 • 49
1974-75		••	• •	118.37	197	0.60
1975-76	••	• •	• •	155 · 23	241	0.64

Note: Figures of expenditure from 1973-74 to 1975-76 are provisional.

The General Manager had remarked (May 1975) that no notice was taken by any one in the traffic maintenance section of minor defects of vehicles pointed out by drivers resulting in development of major defects. He, therefore, instructed that a driver complaint book should be maintained in the traffic section of the two main depots (Cooch Behar and Raigunj). Driver complaint book had not been introduced (December 1976) at the traffic section of Raigunj depot. Although a driver complaint book has been maintained at the Cooch Behar depot, it could not be ascertained whether the same included all defects reported by the drivers.

Some illustrations indicating defective maintenance of vehicles as evident from the records of the Corporation are cited below:

- (a) Vehicles with engines showing low oil pressure, heavy smoking, knocking noise and even weak pulling power were generally kept on road without taking remedial measures until the crank shaft broke.
- (b) Road springs were in most cases not fitted properly which resulted in their breaking.
- (c) Centre mounting bracket was not regularly checked which resulted in breakdown of the vehicles *en route*.
- (d) Wheel bearings were generally washed with pressurised water resulting in damage.
- (e) Notice was not taken of advance warning about defects in fuel pipes till these went out of order.

8.03. Accidents: The total number of accidents in which vehicles were involved during the four years up to 1975-76 is indicated below:

		1972-73	1973-74	1974-75	1975-76
Gross kilometres operated (in lakhs)	• •	197 • 45	190 • 20	166-41	176-61
Number of accidents—					
(a) Total	• •	31	25	50	55
(b) Per 10,000 gross kilometres	••	0.02	0.01	0.03	0.03
(c) Per day	• •	0.08	0.07	0.14	0.15
(d) Per vehicle on road	• •	0.13	0.11	0.25	0.23

Analysis of accidents according to their nature, viz., fatal, major, minor and insignificant, was not made.

However, scrutiny of the records showed that the following accidents occurred in the Raigunj division during the four years up to 1975-76:

Year				Number of accidents	Number of fatal cases
1972-73	• •	••	• •	29	9
1973-74	••	••	••	24	7
1974-75	••	••	• •	23	. 8
1975-76	••	••	••	15	2

The Management gave the following main reasons for the accidents:

- (a) Overloading, especially in trucks,
- (b) overspeeding, and
- (c) carelessness of drivers.

8.04. Regularity of service: Detailed records pertaining to scheduled trips, trips operated to time, cancelled trips, etc., were not maintained, On a test check (June 1976) of records of the Raigunj depot, it was noticed that buses did not start from the depot on scheduled time on all days. Out of 860 trips operated from the depot during March 1976, in as many as 174 cases the buses were late by more than one hour on an average, in starting from the scheduled points.

As analysed by the Management, the following were the reasons for late starting of vehicles:—

	Nu	mber of cases
(a) Late placement of vehicles from garage	•••	133
(b) Absence of crew	•••	9
(c) Late arrival of vehicle at Raigunj	•••	28
(d) Reasons not recorded	•••	4
	Total	174

8.05. Suspension of service: On a test check of records at the Raigunj depot it was noticed that there was suspension of services during the months March 1975 and March 1976 as indicated below:

				March 1975	March 1976
(i) Total scheduled trips	• •	••	••	1,178	1,178
(ii) Total trips cancelled	••	• •	• •	292	287
(iii) Total scheduled kilometres (in lakhs)	••	• •	• •	2 · 52	2.52
(iv) Total kilometres operated (in lakhs)	••	• •	• •	2.08	1.98
(v) Total kilometres involved in suspended	services (in lakhs)	• •	0.44	0.54
(m) Percentage of suspended services	••	••	••	17.5	21.5

The reasons for suspension of service as seen from the records was want of vehicles.

A survey made by the Raigunj division in March 1976 about operation of private services on the nationalised routes in West Dinajpur district showed that 51 private buses were plying there.

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8.06. Oil and lubricants: The expenditure on high speed diesel oil and lubricants during the four years up to 1975-76 was as follows:

Year					_	Amount spe	nt on	Total operating	Percentage of expendi-	Gross kilometres	Cost per gros	s kilometre
					•	H.S.D. oil L	abricants '	expenses	ture on fuel and lubri- cants to total operating expenses	operated	H.S.D. oil	Lubricants '
						(In lakhs of l	Rupees)	(In lakhs of Rupees)	· ·	(In lakhs)	(In pe	iise)
(1)						(2)	(3)	(4)	(5)	(6)	(7)	(8)
1972-73	••	••	••	••	••	48-49	7.09	299 • 45	18-6	197-45	24-55	3.59
1973-74	••	• •	••	••	••	44 • 44	5 · 35	363.79	13.7	190 • 20	23.36	2.81
1974-75	• •	••	••	••	••	41 • 67	11.12	384.80	13.7	166-41	25.04	6-68
1975-76	••	••	••	••	••	58.75	16-01	438-59	17.0	176 • 61	33.27	9.07

Note: Figures for the years 1973-74 to 1975-76 are provisional.

8.07. Consumption of H.S.D. oil: Norm of consumption of H.S.D. oil was fixed by the Corporation in September 1974 at 4 kilometres per litre. Scrutiny of the relevant records showed that 47.58 lakh litres of H.S.D. oil were consumed during 1975-76 for running 176.61 lakh kilometres, the average being 3.7 kilometres per litre. The cost of the excess consumption of H.S.D. oil during 1975-76 was Rs.4.24 lakhs. The Management stated (July 1976) that efforts were being made to increase the mileage run per litre of H.S.D. oil.

On a test check of relevant records at the Raigunj depot it was noticed that there was wide variation in consumption of H.S.D. oil by different vehicles (varying from 2.0 to 7.4 kilometres per litre). Further, there was variation in consumption by the same vehicle on different dates on the same route (varying from 2.7 to 7.4 kilometres).

The Management gave (June 1976) the following reasons for the variation in consumption of H.S.D. oil;

- (a) Driving efficiency of all drivers was not the same; consumption of diesel depended on the quality of driving.
- (b) Other conditions leading to high consumption of diesel oil were
 - (i) vehicle running with overloaded passengers in low gear,
 - (ii) frequent stoppages, and (iii) frequent application of brakes.
- (c) Some times proper measurement of fuel in the tank was not done.

While making a survey of the handling and use of oil, the General Manager observed (May 1975) that diesel was being used in wasteful manner by the maintenance staff without much care being exercised to avoid its spilling all over. It was also observed (July 1975) that while issuing diesel oil no care was exercised by pump attendants to avoid overflow resulting in avoidable wastage.

Proper checking of consumption of diesel oil at the time of inshedding of vehicle was not being done. There was no proper supervision as to the quantity of diesel oil drawn by a vehicle and the necessity and justification thereof. The Management considered (December 1975) that this was not only a case of carelessness but also a factor responsible for considerable avoidable loss.

It was instructed (December 1975) by the General Manager that on inshedding of a vehicle the kilometre run per litre of oil should be worked out and recorded on the log sheet by the Depot Inspector and that if the consumption was not as per expected standard of the vehicle he should record the action taken or to be taken on the log sheet itself. On a test check of records (January 1977) at Raiguni depot it was noticed that the order had not been given effect to.

The Management stated (January 1977) that reporting about discrepancies in the consumption of oil by different vehicles was not done regularly.

8.08. Consumption of engine oil: Norm of consumption of engine oil was fixed by the Corporation in September 1974 at 230 kilometres per litre (top-up). Average kilometres obtained per litre during 1974-75 and 1975-76 were 190 and 200 respectively. The Management stated (July 1976) that efforts were being made to achieve the norm.

The General Manager observed (July 1975) while making a review of the economy measures regarding use of oil, that little or no care was being exercised in the issue of lubricants and that loose engine oil was issued to buses without any reason which could lead to malpractices. It was further stated that leakage and misuse of engine oil was on the increase. Accordingly, the General Manager ordered (July 1975) that in exceptional circumstances loose engine oil should be carried in a vehicle under certificate issued by the Mechanic-incharge of the depot. On a test check (June 1976) of the fuel issue register of the Malda depot for March 1976, several instances of issue of engine oil in extra container came to notice. Certificates from competent authority in respect of such issue of loose engine oil could not be shown.

8.09. Change of oil: As per the norm fixed by the Corporation in May 1973, change of engine oil is warranted on completion of every 7,000 kilometres. Separate norm has not, however, been fixed for different makes of vehicles.

In the absence of any record maintained in this regard, it could not be checked whether change of oil was made in accordance with the norm.

The Management stated (May 1976) that changing of mobil oil was done once in a month purely on an assumption of distance covered by the vehicles.

Although an order was issued in May 1976 for maintenance of proper records in this regard, a test audit of records at Raigunj depot showed that the same had not been given effect to (December 1976).

8.10. Used oil: At Cooch Behar, no record was available (July 1976) regarding the quantity of used engine oil received from vehicles at the time of change of oil. At the Raigunj depot, however, stock account in this regard was introduced from 1st July 1975.

The Corporation gave a contract (March 1976) to a firm at Siliguri for reclamation of used mobil oil at a cost of Rs.3.25 per litre. The reclaimed oil had to be 50 to 60 per cent of the used mobil oil to be delivered to the firm. In May 1976, 4,200 litres of used mobil oil were issued to the firm for reclamation from the Raigunj division. Reclaimed oil had not been received back till the date of audit (June 1976). Similarly, 11,810 litres of used oil were issued to the firm up to June 1976 from the Cooch Behar division, out of which 4,746 litres of reclaimed oil were received back.

No separate account in respect of receipt and issue of the reclaimed oil was maintained at the Cooch Behar division.

Procedure for disposal of used oil prior to the arrangement for reclamation was not intimated (August 1976).

8.11. Tyres: The details of expenditure on tyres and tubes during the four years up to 1975-76 are indicated below:

Year				Gross kilometres operated	Total expenditure on tyres and tubes	Expenditure on tyres and tubes per kilometre
				(In lakhs)	(In lakhs of Rupees)	(In paise)
1972-73	••	••	••	197-45	18•71	9-47
1973-74	••	••	• •	190 • 20	24.60	12.93
1974-75	••	• •	••	166-41	33 · 40	20.07
1975-76	• •	• •	• •	176-61	40.66	23.02

Note: The figures of expenditure for the years 1973-74 to 1975-76 are provisional.

The Management stated (October 1976) that the increase in expenditure was due to increase in the cost of tyres and tubes.

No norm for retreading of tyres has been fixed by the Corporation. According to the norm followed by the Calcutta State Transport Corporation, a tyre should run for 50,000 kilometres, including retreaded life. A test check (July 1976) of records of the Cooch Behar workshop showed that, out of 51 tyres scrapped (without any retreading) during 1975-76, 31 tyres failed prematurely (before running 35,000 kilometres) as shown below:

Total distance c				Number of tyres scrappe		
(kilometres) before being scrapped (without retreading)				900 × 20 size	825 × 20 size	
Up to 4,999	••	••	••	Nil	Nil	
5,000 to 14,999	••	• •	••	6	Nil	
15,000 to 24,999,	• •	• •	••	9	1	
25,000 to 34,999	• •	••	••	14	1	
35,000 and above	• •	• •	••	18	2	
		Total	• •	47	4	

The above will indicate that tyres were not removed in time for retreading. Consequently, when the tyres were taken out from the buses they were already unfit for retreading.

Similarly, out of 15 retreaded tyres, 10 failed prematurely (before running 50,000 kilometres in all) as shown in the following table:

Total distance cov (kildmetres) before l scrapped (new a retreaded life	being and				Number of retreaded tyres scrapped
					900 × 20 size
Up to 19,999	••	••	••	••	1
20,000 to 29,999	••	• •	••	• •	2
30,000 to 39,999	••	• •	• •	• •	4
40,000 to 49,999	••	• •	• •	• •	3
50,000 and above	• •	••	••	••	5
			Total	• •	15

The premature failure of new and retreaded tyres was attributed (July 1976) by the Management mainly to (i) bad condition of roads and (ii) absence of suitable retreading resoling programme for want of new tyres.

8.12. Batteries: The expenditure on batteries during the four years up to 1975-76 is shown below:

Year					Gross 'kilometres operated (In lakhs)	Total expenditure on batteries (In lakhs of Rupees)	Expenditure on batteries per kilometre (In paise)
1972-73	••	••	••	• •	197.45	0.79	0 • 40
1973-74	-	• •	• •	••	190 • 20	2.17	1.14
1974-75	• •	••	• •	• •	166-41	1.51	0.91
1 k 1975-76	• •	• •	• •	• •	176.61	0.97	0.55

Note: The figures of expenditure for the years 1973-74 to 1975-76 are provisional.

No norm for consumption of battery was fixed. The reason for increase in expenditure per kilometre on battery as stated by the Management (October 1976) was that a considerable number of buses went off the road due to non-availability of stores, spares, tyres and tubes.

9. Goods transport service

After the proclamation of emergency in September 1962, the necessity was felt of Government having a goods transport service for maintenance of essential supplies in the strategic districts of North Bengal (instead of solely

depending upon the Railways and the private operators). Accordingly, Government decided to entrust the responsibility of running goods services to the Corporation, keeping in view that it already had workshops and depots in the districts of North Bengal. The Corporation had three trucks in 1965, in addition, Government supplied 25 trucks in 1965-66. The Corporation held in fleet 97 trucks as on 31st March 1976.

The goods services were operated mainly between Calcutta and different points in North Bengal. The merchandise carried from North Bengal was mostly tea, jute, timber, mango and other agricultural produce, while from Calcutta manufactured articles were carried. Besides, Government stores including medical supplies, agricultural seeds, fertilisers, etc., were also carried.

The performance of the goods service during the four years up to 1975-76 was as indicated below:

Year			Average number of vehicles on road per day	Quantity carried	d (]]	ffective istance run In lakh kilome- tres)	Gross earning (In lakhs of Rupees)
1972-73		••	40 {	1,85,818 qtl. <i>plus</i> 9,826 sft.	}	21•28	18•60
1973-74	••	••	40 {	1,83,448 qtl. plus 9,327 sft.	}	14.93	17.55
1974-75	••	••	37 {	1,88,478 qtl. plus 7,086 sft.	}	13.98	18•31
1975-76	••	••	51 {	2,31,535 qtl. plus 9,590 sft.	}	15:08	24 • 33

It would be seen that the effective distances run by the vehicles were disproportionate to the average number of vehicles on road per day, reasons for which have not been stated by the Management (January 1977).

Rate schedule for carriage of goods is fixed by the goods sub-committee of the Corporation depending upon market conditions. Any variation in rates is to be duly authorised by the sub-committee. Sometimes freight rates were, however, decided by other officials not so authorised.

No separate records were maintained to indicate the expenditure on goods transport services. Except for salary payable to employees, other expenditure on the goods service was mixed up with that of passenger traffic service. In the absence of separate accounts of goods transport service, profitability study of the service was not made by the Corporation.

The following shortcomings were noticed in the course of test check of records (July 1976):

- (i) Rates for carriage varied even for the same nature of goods and during the same period. The rates for transportation of a full truck load of mango logs between Raiguni and Calcutta varied between Rs.550 and Rs.600 and in respect of jute they ranged from Rs.550 to Rs.625.
- (ii) Sometimes, trucks ran completely partially empty between different points although there was scope for transporting goods between these places.
- (iii) Overloading of trucks persisted. The Management considered (September 1975) that overloading had resulted in damage to vehicles and excessive wear and tear of tyres and tubes and other parts.
- (iv) Longer period was taken to complete a round-trip (sometimes trucks took more than 14 days to complete one round-trip between Cooch Behar and Calcutta against the prescribed period of 5 days); reasons for such delay were not explained.
- (v) Control was lacking over the movement of trucks.
- (vi) Outstanding dues accumulated to Rs.9.87 lakhs at the end of 1975-76 as per the debtors ledger maintained, as indicated below; there was no system of reconciliation of the balance with financial ledgers:

Year				Due from Government organisa- tions	Due from non-Go- vernment parties
				(In lakhs o	of Rupees)
1965-66	••	••	••	0.03	Nil
1966-67	• •	••	••	0.18	Nil
1967-68	• •	• •	••	0 · 32	Nil
1968-69	• •	• •	••	0.06	0.05
1969-70	• •	• •	••	0.08	0.03
1970-71	• •	• •	••	0.27	0.04
1971-72	• •	• •	• •	$0 \cdot 32$	0.24
1972-73	• •	••	••	1.05	0.60
1973-74	••	• •	••	0.92	0.24
1974-75	• •	••	••	0.18	0.03
1975-76	• •	••	• •	3.58	1.64
		Total	••	7.00	2.87

Reply regarding the steps taken by the Management, if any, to recover the dues is awaited (January 1977).

In June 1966, the Board decided to engage a commission agent at a rate not exceeding 3.5 per cent of the freight actually booked by the agent. Commission has been regularly paid to the agent since 1967-68, at 2.5 per cent of the freight booked for securing business from some tea gardens. The records of the Corporation, however, showed (July 1976) that it had entered into agreements with the tea gardens direct. The nature of service rendered by the agent for the remuneration paid in all these years could not be verified from the records; amounts aggregating Rs.78,427 were paid as remuneration up to 1975-76.

10. Workshop

The Corporation has a two tier system of working in regard to maintenance of vehicles. Two workshops, viz., a Central workshop at Cooch Behar (established in 1945-46) and a divisional workshop at Raigunj (established in 1956-57), undertake overhauling and major repair works. These workshops, though not properly equipped according to the workshop authorities, also undertake body building and body renovation works. Besides, the 16 depot workshops provide facilities for running repairs, routine and preventive maintenance.

Though there is a large number of machines in the workshops, the Corporation has not maintained any inventory. The Commission of Inquiry, in the course of a visit to the central workshop, had observed (October 1973) that there was no inventory or record of valuable plant and machinery in the different sections of the workshop.

The Corporation started maintenance of history sheet for vehicles from October 1974. Information such as engagement of labour on repair overhauling, consumption of fuel, mileage covered, etc., were not, however, indicated in the history sheet. The workshops did not also maintain any record of replaced cannibalised parts and spares. The Corporation decided (February 1976) that there should be an account of fittings or parts removed from a vehicle. This had not been implemented (December 1976).

No record indicating the requirement of staff was available in the central workshop. There was also no machinery to verify whether the actual strength was fully utilised.

Job costing was not done in the workshops. Estimates for jobs undertaken were also not prepared.

The details of performance of the workshops during the three years ending 1975-76 are given below:

Made building and

			Roay Duila	ing unit	Performance (In number)		
Year					Central Workshop	Division Workshop	
1973-74			• •	• •	Nil	Not available.	
1974-75			• •		5	Not availabe	
1975-76	• •	• •	• •		13	12	

Overhauling unit

Year				Perfermance (in number)			
			-	Central Workshop	Division Workshop		
1973-74	••	••	••	82	79		
1974-75	• •	••	••	106	75		
1975-76	• •	• •	••	110	100		

Tyre retreading unit

The unit was established at Cooch Behar in November 1974. Prior to that, tyres were got retreaded mainly through the Calcutta State Transport Corporation. The performance of the unit is given below:

Year				Performance (In number)		
			•	Retreading	Repairing	
1974-75	••	••	• •	77	69	
1975-76	• •	• •	••	657	543	

During the year 1975-76, 45 tyres were got retreaded through private parties.

Capacity of different sections of the workshop was not determined and no evaluation of performance made.

11. Civil works

The Corporation has a civil works wing under the charge of Chief Engineer for execution of its civil construction and maintenance works.

The table below indicates the value of works done by the civil works wing during the five years up to 1975-76:

Year		Value of work			
				(In lakhs of Rupees)	
1971-72	• •	••	••	2.73	
1972-73	••	••	••	2 • 29	
1973-74	••	• •	••	4.07	
1974-75	• •	••	••	0.84	
1975-76	••	••	••	2.20	

The following points came to notice in the course of test check (July 1976):

- (i) works account records, viz., register of sanctioned estimates, works abstracts, register of works, contractors' ledgers, etc., were not maintained,
- (ii) cost of all construction materials like cement, steel and other stores was directly charged to works but accounts of consumption, issues to contractors, recovery of cost, etc., were not kept. It was, therefore, not possible to ascertain the value of materials issued to works and that actually consumed and also to keep watch on recovery of cost from contractors concerned,
- (iii) measurement in respect of works done was recorded in measurement books but the quantities executed were not watched against estimated quantities.

12. Printing of tickets

The Corporation has no press of its own. It gets the tickets printed through the press of the Calcutta State Transport Corporation. The expenditure on printing of 171.8 lakh and 236.10 lakh tickets was Rs.30,800 (approx) and Rs.47,600 (approx) during 1973-74 and 1974-75 respectively.

The rate charged by the Calcutta State Transport Corporation included 25 per cent departmental charges. The question of installation of a printing press at the Corporation headquarters was considered in January 1976 but no steps were taken in this direction (November 1976).

The following deficiencies were noticed (May 1976) while scrutinising ticket accounts at the depot level:

- (i) entries in respect of receipt and issue of tickets in the register therefor were not attested by any officer; no physical verification of balances at the end of each year was conducted,
- (ii) ticket receipt vouchers, requisitions for tickets and inter-depot ticket issue vouchers were not arranged separately and chronologically,
- (iii) discrepancies were noticed in issue of ticket books by the head office and their receipt at the depot, as illustrated in the table below:

Denomination of ticket	Sories	Number issued by head office	Number received by depot
Rs. 1.25	280	10,000	9,997
Rs. 1 · 25	281	10,000	9,997

13. Passenger fare structure

The fare structure of the Corporation in respect of its ordinary service has remained unchanged since its inception. The existing fare rate was approved (1956) by the Regional Transport Authorities of the five districts of North Bengal, at one anna per mile or roughly 3.75 paise per kilometre, subject to a!

minimum of 25 paise per stage of 4 miles, i.e., 6.5 kilometres. The Corporation has been charging on some routes rates below these approved rates. Attempts were made in July 1970 to rationalise the fare structure in accordance with the approved rates on all the routes but the same failed owing to public agitation.

The Commission of Inquiry in its report recommended (1974) that the Corporation's fare structure should be patterned on the basis of 3.75 paise per kilometre. If, however, the Corporation could overcome public opposition it might try to pattern the fare structure at 4 paise per kilometre. The rate of 4 paise per kilometre had not been implemented as the same had not been approved (July 1976) by the Regional Transport Authorities.

The rates for 'express' and 'rocket' services as approved by the Regional Transport Authorities are being charged by the Corporation from April 1975 as under:

'Express' services ... 5 paise per kilometre 'Rocket' services ... 7.5 paise per kilometre

13.01. Concessional tickets: The Corporation provides monthly concessional ticket facilities to certain-categories of commuters at the rates noted below:

- (i) Students 8 days' fare (both ways) subject to a maximum of Rs. 20.
- (ii) Prin ary school teachers ... 10 days' fare (both ways).
- (iii) Secur Cary school teachers ... 13 days' fare (both ways).
- (iv) Others 15 days' fare (both ways).

The Management assessed the value of the concession during 1975-76 at Rs.7.02 lakhs.

Free travel facilities are also provided to certain organisations engaged in social work and bona fide journalists of North Bengal.

13.02. Ticketless travel: Ticketless travel involved loss of revenue to the extent of about 30 to 35 per cent every year as stated by the Chairman of the Corporation in his evidence (December 1973) before the Commission of inquiry.

The Corporation had (March 1976) a staff strength of 267 for checking tickets in the buses. Two surprise squads were also formed in April 1975.

To effect better checking of all buses, the entire area of operation of the Corporation was divided into five surprise checking zones with a squad for each zone entrusted with full responsibility for checking the buses operated in that area. The surprise squads had not, however, produced the desired effect. The Management observed (December 1975) that the expected results from increasing the surprise squads to prevent leakage of revenue were not coming forth.

An ordinance was promulgated by Government in September 1975 to prevent ticketless travel in buses of State Transport Undertakings. Accordingly, all staff connected with the operation of bus services were ordered by the General Manager (October 1975) to follow with immediate effect the provisions of the ordinance. In terms of these, if any employee of a road transport undertaking failed to issue a ticket to a travelling passenger, he would be liable to punishment of a fine of Rs.250 or imprisonment extending to one month or both. Similar punishment was provided for non-paying travellers. The Management, while reviewing the earnings of buses, observed in December 1975 that the instructions issued did not achieve any fruitful result.

The following table indicates the number of checks exercised and the number of cases reported during 1971-72 to 1975-76:

Year			Total number of checks	Cash and ticket irregularities reported (in number)
1971-72	••	••	255	195
1972-73	• •	••	350	205
1973-74	••	• •	346	226
1974-75	• •	• •	397	307
1975-76	•	• •	503	403

14. Stores control

14.01. Purchase procedure: In terms of the "North Bengal State Transport Corporation (Purchase) Regulation, 1966" all purchases are ordinarily to be made by a Purchase Board consisting of members appointed by the Corporation.

Test check of records (June 1976) showed many instances of local purchases made at Raigunj. In many cases purchases were made piecemeal, in contravention of the rule that purchases should be made in bulk so as to secure better competition. The value of local purchases at Raigunj during the two years 1974-75 and 1975-76, were as indicated below:

Year		In cash		Purchases on credit	Total	
			(In lakhs of Rupees)			
1974-75	••	••	0.69	0.54	1.23	
1975-76	••	• •	1.57	1.36	2.93	

The Management stated that it often became necessary to make local purchases on emergent basis.

On a test check of records at the Raigunj division and the Malda depot it was noticed that sale proceeds of tickets were frequently utilised for local purchase of store items. The Management of Raigunj division stated (June

1976) that departmental receipts were utilised for emergent purchases only in unavoidable circumstances, and that owing to shortage of permanent advance and delay in recoupment by the headquarters, payments had to be met from departmental receipts.

14.02. Inventory control: The stores organisation of the Corporation consists of a central store at Cooch Behar, a divisional store at Raigunj and depot stores.

The value of stores held at the end of the year and the average value of stores held per vehicle during each of the five years up to 1975-76 are indicated in the following table:

Year				Number of vehicles held at the end of the year	Value of stores held at the end of the year	Average value of stores per vehicle held
					(In lakh	s of Rupees)
1971-72	••	• •	••	279	33.45	0.12
1972-73	• •	• •	• •	345	37.22	0.11
1973-74	••	• •	•••	383	36.01	0.09
1974-75	• •	••	• •	421	50 • 44	0.12
1975-76	••	• •	• •	450	52.00	0.12

Note: Figures of value of stores from 1973-74 to 1975-76 are provisional.

Test check of the store records disclosed the following deficiencies:

- (i) Minimum, maximum and re-ordering levels of stores and spares had not been fixed.
- (ii) Stores manual laying down stores procedure had not been compiled. The Estimates Committee in its Sixteenth Report (March 1974) had stated that inventory of stores was not maintained according to scientific methods. The Committee had suggested that a comprehensive material management manual should be drawn up.
- (iii) Priced store ledgers were not maintained at the Raigunj divisional store nor had any stock card been introduced. Only bin cards were maintained. The local management stated (June 1976) that priced store ledgers could not be opened for want of required staff.
- (iv) Physical verification of stores at Raigunj divisional store for 1972-73 and onwards was not conducted. Physical verification of stores at the central stores for 1973-74 and onwards was conducted but the verification reports were not completed as pricing of closing balances of stores and of materials found short excess was not done in the report, and remarks for such shortages excesses were not recorded therein. Reports regarding physical verification in respect of

Raigunj divisional stores for 1971-72 and that of central stores for 1972-73 were not made available to Audit. The results of physical verification in all these years could not, therefore, be ascertained.

- (v) Balances as per the priced store ledgers at the central stores were not reconciled with those in the bin cards. Differences between the priced store ledgers and financial accounts were also not reconciled.
- (vi) No record of rejected materials scraps was maintained. The Estimates Committee in their Sixteenth Report (March 1974) had observed that the state of affairs in the matter of disposal of scraps and materials was unsatisfactory. The Committee found that heaps of scraps and materials, either condemned or awaiting condemnation, were lying exposed to sun and shower only to deteriorate in value.
- (vii) No record was maintained in respect of replaced stores and spares in exchange of which new ones were issued.
- (viii) Periodical review of inventory to assess and dispose of surplus obsolete items of stores and spares was not conducted. The Corporation, however, prepared (October 1974) a list of idle stores (without any movement for four years) relating to Leyland Comet (Model 350 and 370) at the central store containing 853 items, out of which 788 were valued at Rs.3.20 lakhs. On a test check (July 1976) it was noticed that only a small number of some of the items out of the list had since been issued. A test check (June 1976) also showed that there were many slow moving and non-moving items at the Raigunj divisional stores.
- (ix) At the Raigunj divisional stores, printed requisition slips were not always used against issue of stores. Name of the indenting section, job number, designation of the person taking delivery, etc., were generally not recorded. The local management stated (June 1976) that printed stores requisition books were not supplied regularly from the headquarters and as a result, plain paper was being used for issuing store materials to the workshop.
- (x) Adequate security deposits had not been collected from some store officials, according to the scale prescribed by the Corporation.
- (xi) Test check of records at the Raigunj divisional store (June 1976) showed that in several cases new items of stores were acquired when there was sufficient balance in hand. The local management stated (June 1976) that this occurred due to supply of items either from the central store or from the manufacturers against orders placed earlier or by transfer of surplus stock from the depot stores.

In the Administration Report of the Corporation it was stated (July 1976) that no effective stores reorganisation could be made owing to shortage of accommodation and proper hands.

14.03. Spares: Owing to shortage of spares, manpower and capacity of the workshops were not fully utilised resulting in delay in completion of repairing job, thereby affecting outshedding of vehicles. The General Manager observed (September 1975) that used parts were indiscriminately discarded even if they were serviceable or serviceable with a little amount of reconditioning. Many serviceable parts were thrown away; reasons in most cases were stated to be ignorance and or lack of supervision. The General Manager instructed that a separate team should work in bigger workshops for stripping and reconditioning used spares and procuring serviceable items. No such system has been introduced (January 1977).

The General Manager also found (September 1975) that no system had been adopted for controlling issue of new spares. Instructions had been issued to the effect that the Chief Engineer should be provided with data regarding the requirement of stores by different units which would eliminate unnecessary and excess demand before issue of stores by the Store Officer.

14.04. Payment of demurrage: The following amounts were paid as demurrage for delay in taking delivery of stores at the central store during the four years up to 1975-76:

Year					Amount
					(Rupees)
1972-73	••	••	• •	• •	1,710
1973-74	••	• •	• •	• •	11,522
1974-75	••	• •	• •	• •	2,397
1975-76	• •	••	• •	• •	4,159

The Management stated (July 1976) that owing to paucity of funds, documents negotiated through banks could not be retired in time and payment of demurrage became inevitable.

15. Manpower analysis

The table below indicates the extent of staff utilisation during the five years up to 1975-76:

	At the end of					
	1971-72	1972-73	1973-74	1974-75	1975-76	
Average number of vehicles held	275	312	364	402	435.5	
Average number of vehicles operated	228	240	233	197	241	
Number of employees of all categories—						
(a) Total	2,210	4,024	4,443	4,432	4,127	
(b) Per vehicle held	8.03	12.90	12.21	11.02	9.48	
(c) Per vehicle operated	9 · 69	16.76	19.07	22 · 49	17.12	

				At the end	of	
		1971-72	1972-73	1973-74	1974-75	1975-76
Operating staff—						
(a) Total	••	1,271	2,404	2,569	2,562	2,262
(b) Per vehicle held	••	4.62	7.71	7.06	6.37	5.19
(c) Per vehicle operated	• •	5.57	10.02	11.03	13.00	9•38
Works and Maintenance staff—						
(a) Total	••	447	1,040	1,370	1,368	1,365
(b) Per vehicle held	• •	1.62	3.33	3.76	3.40	3.13
(e) Per vehicle operated	• •	1.96	4.33	5.88	6.94	5.66
Administrative staff—						
(a) Total	••	492	58 0	504	502	50 0
(b) Per vehicle held	••	1.79	1.86	1.38	1.25	1.14
(c) Per vehicle operated	• •	2.16	2 · 42	2.16	2.55	2.07

No norm has been fixed by the Corporation about vehicle-staff ratio to be adopted.

There was a sharp rise in the number of employees during 1972-73 caused by mass appointment resulting in surplus staff. Ad hoc recruitment was made mainly in the categories of drivers, conductors, cleaners and workmen without proper assessment of staff resulting in increase in the ratio of operation and maintenance staff to the number of vehicles held.

There were also large scale promotions (1,113 cases) during the period from June 1972 to April 1973. As per the Management's estimates (September 1976) the additional expenditure on account of such *ad hoc* recruitment and promotions is Rs.68.40 lakhs per year.

A review committee was formed by the Corporation (November 1974) to go into the mass recruitment and promotions. The committee observed (March 1975) that the mass recruitment promotion had been the main cause for the Corporation's 'downfall'. The committee, however, felt that retrenchment and demotion would result in law and order problem. The Corporation was unable to come to any decision and forwarded (April 1975) the recommendations of the review committee to Government. Decision in the matter is awaited (Januarý 1977).

The Management stated (January 1977) that as a remedial measure a scheme for rescheduling of buses was adopted and given effect to in November 1976.

The overtime allowance paid by the Corporation during the five years up to 31st March 1976 is indicated below:

Year					Amount
				(1	In lakhs of Rupees)
1971-72	••	••	••	••	3.11
1972-73	• •	••	••	••	3.36
1973 74	••	••	• •	••	4.81
1974 75	••	• •	• •	• •	4.37
1975-76	••	• •	• •	• •	6.06

Even after the *ad hoc* recruitment and promotions on large scale the overtime allowance paid has been on the increase.

The Management agreed (May 1975) that overtime allowance was on the increase without having similar effect on the output. Government is also reported to have pointed out (July 1975) that overtime allowance paid was high especially when surplus manpower was existing. The Management stated (July 1976) that all possible steps were being taken to minimise the overtime allowance.

The table below indicates the expenditure incurred on staff amenities during the four years up to 1975-76:

D			Expenditure incurred during								
Particulars			1972-73	1974-75	1975-76						
				(Rup	6 0 8)						
Medical facilities	• •	• •	296	1,800	650	1,191					
Welfare expenses	• •	• •	22,071	1,81,988	56,039	83,462					
Ex-gratia grant for me	dical treatn	nont	2,295	7,408	1,050	700					

16. Cost accounting and internal audit

16.01. Cost accounting: There is no system of cost accounting in vogue in the Corporation, although its activities viz., (i) Traffic operation, (ii) Repairs and overhauling of vehicles, (iii) Building of bus bodies, (iv) Retreading, etc., of tyres and tubes, (v) Goods services, etc., require regular computation of cost.

There is no system for computing the cost of operation per bus-kilometre. History sheets for vehicles do not contain information such as, deployment of labour on repair overhauling, consumption of fuel, etc.

A proposal for recruitment of personnel with professional qualifications for the purpose of costing and management information system was sent to Government in April 1976. Decision is awaited (January 1977). 16.02. Internal audit: There is an internal audit wing under the control of the Chief Accounts Officer of the Corporation but there is no manual prescribing the functions, procedures and periodicity of audit. It has, however, been stated (July 1976) by the Management that the internal audit cell is to visit the different depots and to examine original books of accounts and to report to the General Manager with the observations of the Chief Accounts Officer.

In terms of Rule 26 of the West Bengal State Transport Corporations Rules, 1960, the accounts of the Corporation should be subjected to internal (departmental) concurrent audit supplemented by inspection of initial records. Rule 20 *ibid* also provides that, subject to such limitations as the Corporation may lay down, payments, other than those made from permanent advance, should be made after pre-audit by internal auditors. The internal audit wing of the Corporation, however, did not exercise any check on the initial records maintained at the different depots, including its Calcutta Office. The Management stated (July 1976) that the internal audit staff could not be spared for audit work as they were engaged in headquarters "otherwise" for examination of various bills and in other sections of accounts.

17. Other points of interest

Maintenance of cash at Calcutta Office: Some deficiencies in the maintenance of cash account, such as irregular and incomplete posting of transactions in the cash book, overwritings, non-attestation of entries, nonverification of day-to-day cash balances, drawal of advance by different officials for purchase of spares, payment of fuel bills out of sale proceeds of tickets without proper authority, non-maintenance of advance register, etc., were noticed in the course of test audit during the years from Shortages of cash (Rs.15,537.56 during 1970-71; Rs.10,160.59 1975-76. during 1973-74 and Rs.5,467.74 during 1974-75) were detected by the Management during casual verification of cash balances; final action was awaited in those cases (October 1976).

17.02. Non-payment of road tax: Payment of road tax by the Corporation is in arrears since July 1973. Rupees 23.10 lakhs were due as on 31st March 1976 on this account, the year-wise break-up of which is given below:

Year	Amount					
	(In lakhs of Rupees)					
1973-74	6.30					
1974-75	8.40					
1975-76	8.40					

Note: Figures are provisional.

The Management stated (July 1976) that payment of road tax was not possible owing to paucity of funds and that Government had been informed of this.

SECTION VII

OTHER POINTS OF INTEREST

WEST BENGAL STATE ELECTRICITY BOARD

1. Purchase of aluminium brass condenser tubes

In order to replace, in a phased way, about 25 per cent of the 38,960 condenser tubes of the four units of Bandel Thermal Power Station by February 1974, an indent for 8,800 condenser tubes was placed in February 1971. On the date of indenting, 938 condenser tubes having been held in stores, the General Superintendent, Bandel Thermal Power Station, on the basis of open tender, placed (October 1972) two orders for supply of 6,000 and 2,000 aluminium brass condenser tubes with two firms of Delhi and Bombay respectively. The order placed with the Delhi firm was subsequently cancelled (June 1973) in the absence of any response.

The Bombay firm supplied (November 1974) 2,038 tubes valuing Rs.4.70 lakhs. Up to June 1976, only four tubes could be utilised. In the meantime, the guarantee on the remaining 2,034 tubes against manufacturing defect and bad workmanship expired in November 1975. The Management stated (January 1977) that it was necessary to change all the tubes simultenously and since adequate number of tubes was not available only four of these tubes were used in the condenser to find out if the quality of the same was in order.

Procurement of more tubes has not been made (January 1977).

2. Under-realisation of service connection charges

For service connections, intending high tension (H.T.) consumers are required to deposit the service connection charges as per the demand of the Board. The Board fixes such charges on estimates prepared by it in each case. After depositing the amount, the consumers are required to enter into an agreement, in standard form, with the Board. The agreement provides, *interalia*, that a specific sum towards the cost of extension of high voltage line equipment, etc., for the purpose of giving supply at the consumer's point, is payable to the Board:

(a) After execution of agreements (September 1974 to February 1975) for supply of power to five H.T. consumers under a rural electrification and distribution circle, it was detected (June 1975) by the circle authorities that the service connection charge realised from each of the consumers did not, through inadvertence, include an amount of Rs.16,622, being the cost of 11 KV metering switchgear. Supplementary demands raised in June 1975 were not accepted by the consumers and, therefore, the cost of the switchgears (Rs.0.83 lakh) could not be realised. The Board ordered (December 1975) that the matter be referred to its Legal Adviser and steps taken against those responsible for the underassessment of service connection charges. The order has not been complied with (January 1977).

(b) In another circle, the cost of 11 KV metering oil circuit breaker was mistakenly worked out (July and September 1975 at Rs.29,000 each in the estimates for service connection charges of four H.T. consumers and at Rs.19,890 each in the estimates for service connection charges (August and December 1973) of four other consumers. The actual cost. as determined in October amounted to Rs.35,020 each. The Additional Chief Engineer (Operation & Maintenance), North Bengal instructed (January 1976) that the actual cost of circuit breakers should be realised from the consumers where no agreement had been executed. all agreements had been executed between January 1974 and November 1975, the undercharge of Rs.0.85 lakh could not be realised

The Management stated (November 1976) that agreements were executed after the service connection charges were paid and after the execution of agreements service connection charges could not be enhanced.

Such under-recovery could have been avoided had the agreement provided for recovery of the actual cost price instead of providing a fixed price based on estimates.

3. Energisation of pump sets

Out of a loan of Rs.291.50 lakhs at 14 per cent interest per annum sanctioned (December 1973) by a nationalised bank for energisation of 6,625 irrigation pump sets in Nadia and Murshidabad districts, the Board drew Rs.64.40 lakhs in January 1975 and Rs.50 lakhs in February 1975. The Board had undertaken to energise 2,600 pump sets by 31st July 1975. The number of sets energised within the stipulated date was, however, only 34. The total number of sets energised up to July 1976 was 1,721 at a total cost of Rs.116.64 lakhs.

In November 1975, the Accounts Member of the Board observed, inter alia that "we had ourselves failed fairly extensively to do the needful in respect of a large number shallow tube-wells".

4. Purchase of steel tubular poles

To meet its immediate requirements for electrification of the Salt Lake city, quotations for supply of 1,200 steel tubular poles were invited by the Board from three Calcutta firms in May 1973. The lowest offer from a firm at Rs.205 per pole was valid up to 24th August 1973. A letter of intent was issued to the firm on 31st July but the formal order was issued on 1st October 1973, i.e. after the validity of the offer had expired. There was no response from the firm.

Subsequently, open tenders were invited in March 1974 and the same firm quoted the lowest rate at Rs.353 per pole. An order was placed on the firm in May 1974. The firm supplied 1203 poles between July 1974 and August 1975

at Rs.353 per pole (1003 poles) and at Rs.333 per pole (200 poles). The supply of 200 poles at the reduced rate was on the basis of subsequent negotiation. Delay in issuing the formal order against the earlier offer of the firm resulted in extra expenditure of Rs.1.74 lakhs.

5. Loss of revenue

(a) The Bihar State Electricity Board (later referred to as the consumer) has been purchasing power from the Massanjore Hydel Power Station which was brought under the management of the Board from the Irrigation and Waterways Department of the State Government with effect from April 1973. Following the transfer, the Board did not ask the consumer for payment at its own rate for H.T. supply but continued to charge at the lower rate applied earlier by the Irrigation and Waterways Department. While buying power from the Bihar State Electricity Board at Dalkhola and Islampore, the Board was, however, paying at the general tariff rate applicable for H.T. supply and not at any concessional rate on a reciprocal basis.

The Management stated (December 1974) in reply to an audit inquiry that on legal advice the Board had not applied its own rate pending finalisation of the terms of transfer of the power station. After revision of the Board's tariff in December 1974, the consumer was charged at the revised rates. However, the terms of transfer had not been settled (September 1976). The consumer accepted (December 1974) the revised rates. During the billing period from July 1973 to November 1974, energy sold to the consumer amounted to 0.852 Mkwh for which it was charged at 9.25 paise per Kwh instead of at 18 paise per Kwh as per the Board's tariff, resulting in a loss of revenue of Rs.0.75 lakh.

The Management stated (December 1976) that status quo was maintained up to 30th November 1974 as agreement with Bihar State Electricity Board was not entered into.

(b) In pursuance of an agrement (July 1965), the Board undertook to supply electricity to a bulk consumer for five years up to April 1972. A bank guarantee of Rs.0.50 lakh furnished in April 1966 by the consumer as security deposit lapsed in April 1969; no further deposit was taken from the consumer. Supply of power was discontinued in November 1969 when the outstanding dues amounted to Rs.0.26 lakh, including shortfall of annual minimum guaranteed revenue. The dues increased to Rs.0.82 lakh after the annual minimum guaranteed revenue for the years up to 1971-72 was claimed subsequently.

The Board did not take legal action against the consumer for recovery of the dues, contrary to the advice of its Legal Adviser in January 1970, nor did it present its claims to the Official Liquidator following voluntary liquidation of the consumer company in October 1972. The Secretary to the Board ordered (February 1975) the write off of Rs.0.26 lakh and an enquiry to fix responsibility for allowing the dues to accumulate. The order had not been implemented nor had any investigation been made (November 1976).

6. Short receipt of material

An order for transportation of 100 tonnes of galvanised corrugated iron sheets from New Jalpaiguri Railway Station to the Jaldhaka hydel project stores was placed (October 1974) on a transport contractor at Rs.39.00 per tonne. The order stipulated unloading from railway wagons, loading into trucks, transporting up to the stores and stacking as per directions. Between February and June 1975, the contractor transported 9,188 sheets to the stores but these had not been weighed while delivery was taken from the Railways. The weight of the sheets, calculated by the Stores-in-charge (September 1975) on the basis of the weight of each stack of 10 sheets, was 153.091 tonnes against the invoiced weight of 184.620 tonnes. No claim for the shortage of 31.529 tonnes valuing Rs.1.26 lakhs was lodged either with the Railways or with the transport contractor (March 1976).

The matter was reported to Government Board in September 1976; reply is awaited (January 1977).

7. Avoidable expenditure

Two transformers were purchased at a cost of Rs.47.07 lakhs from a firm of Japan in April 1974 for the Howrah sub-station. Order for potential transformers (costing Rs.0.23 lakh) required for commissioning the transformers were placed with a Yugoslav firm in November 1972. Even though the Board was aware (December 1974) that the potential transformers could not be made available before June 1975, two erectors of the Japanese firm were brought to Calcutta in March 1975 for a stay of 90 days, as per the terms of contract, to supervise commissioning of the transformers. The erectors stayed for 89 days (from 4th March 1975 to 31st May 1975) but the work could not be completed as the potential transformers did not arrive. The expenuditure incurred by the Board for their stay was Rs.3 lakhs.

The crectors, who were again brought (one reached Calcutta on 22nd and the other on 26th July 1975) at an additional cost of Rs.0.64 lakh towards fees, accommodation and air fare, completed the work on 13th August 1975 using 220 KV coupling capacitor (purchased in April 1975) as substitutes for the potential transformers.

The Board stated (January 1977) that due to non-replacement of some damaged|stolen parts of 220 KV circuit breakers before the second week of May 1975 the progress of installation was delayed.

CALCUTTA STATE TRANSPORT CORPORATION

8. Extra expenditure

Orders were placed in July 1973 on a Calcutta firm for construction of 20 bus bodies on Leyland Cometised Titan double decker chassis at Rs.58,000 each plus sales tax and other levies. The firm constructed and delivered 16 bus

bodies between November 1973 and September 1974. In April 1975, the firm demanded, for the remaining four bodies, Rs.84,840 each plus sales tax and other levies for various increases, which were not covered by any escalation clause in the order. Inspite of specific direction (April 1975) of the Corporation Chairman to the contrary, three chassis were delivered (May 1975) to the firm before finalisation of its claim for enhanced price and bodies were got constructed (October 1975) thereon. The firm billed Rs.2,94,088 (at the increased rate) inclusive of taxes and other levies. The Corporation released (October 1975) payment of Rs.2,64,679, being 90 per cent of the claim. This resulted in extra expenditure of Rs.0.84 lakh (representing the difference between 90 per cent of the original rate and that of the enhanced rate) in the deal.

The Management stated (December 1976), inter ulia, that the Corporation would have incurred much larger expenditure in getting these buses built by a new party.

9. Demurrage charges

The Corporation having failed to take delivery of stores materials within the scheduled time from the Railways carriers, incurred demurrage in 328 cases during 1975-76 and paid sums aggregating Rs.0.89 lakh on this account. In some cases, the demurrage exceeded the freight charges payble on the consignments concerned.

The Management stated (August 1976) that owing to paucity of funds, timely retirement of documents from the bank could not be made. After clearance of documents, delivery of the consignments could not be obtained in time on account of shortage of transport facility.

(R. K. GANGULY)

Accountant General-11, West Bengal.

Calcutta,

The 19 6 JUL 197177.

Countersigned

(A. BAKSI)

New Delhi,

The 18 3111 1977977. Comptroller and Auditor General of India.

ANNEXURE 'A'

(Reference: Paragraph 1 of section I, Page 1)

Statement showing summarised financial results of Government Companies

Sl. No.	Name of the Company	Name of the Department	Date of incorpo- ration	Period of accounts	Total capital invested	Profit(+) Lcss(-)	Total interest charged to Pro- fit and Loss Account	Inte- rest on long term lcan	Total return on capital invested (7+9)	Percentage of total return on capital invested	Capital employed	Total return on capital employed (7+8)	Percentage of total return on capital employed
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
						(Figures	in column	s 6 to 10	, 12 and 13	indicate l	lakhs of R	upees)	
1.	The Kalyani Spin- ning Mills Ltd	Public Under- takings.	13-1-1960	1975-76	623 · 83	(-)250.96	49 • 94	21.75	(-)229·21	••	(-)8.60	(-)201.02	••
2.	The Durgapur Projects Limited	Ditto	6-9-1961	1975-76	6177-12	(-)23.93	24 0 · 9 5	240.95	$(+)217 \cdot 02$	3.51	3,699 · 50	(+)217.02	5-87
3.	Durgapur Chemicals Limited	Ditto	31-7-1963	1975-76	1562.35	(-)227·08	59.48	51.86	(-)175.22	••	470 · 39	(-)167-60	• •
4.	State Fisheries Development Corporation Limited	Fisheries	30-3-1966	1975-76	260 · 34	(-)0·25		••	(-)0.25	••	175 · 64	(-)0·25	••
5.	West Bengal Industrial Development Corporation Limited	Commerce and Industries.	6-1-1967	1975-76	••	(+)22.74	52 · 32	52·32	••	••	1,329 · 49	(+)75.06	5.65
6.	West Bengal Mineral Develc p- ment and Trading Corporation Ltd		23-2-1973	1975-76	40 · 15	(+)1·42	••		(+)1·42	3 · 53	32 · 79	(+)1·42	4·33

7.	West Bengal Sugar Industrics De- velopment Corporation Limited	Ditto	30-5-1973	1975-76	180.82	(-)45·55	16.49	13.61	()31 · 94	••	113-18	(-)29·06	••	
8.	West Bengal Electronic Indus- try Development Corporation Ltd.	Ditto	4-2-1974	1975-76	22.00	(+)0.05	••	••	(+)0.05	0.23	13.43	(+)0.05	0.37	
9.	West Bengal Essential Commodities Supply Corperation Limited	Food and Supply.	15-3-1974	1975-76	62 · 22	(+)3·23	4.66	2.68	(+)5.91	9 · 50	62 · 22	(+)7.09	12.68	
10.	West Bengal State Minor Irrigation Corporation Limited	Agriculture and Commu- nity Develop- ment.	29-1-1974	1975-76	200 · 32	(+)0.91	••	••	(+)0.91	0.45	199-47	(+)0.91	0.46	
11.	West Bengal Small Industries Corporation Ltd	Public Undertakings.	29-3-1961	1975-76	504.68	(+)23.51	20 496	11.19	34.70	6.88	459 · 81	44 · 47	9.67	147
12.	Westinghouse Saxby Farmer Limited	Ditto	19-7-1969	1975-76	452.32	$(+)2\cdot 32$	55 · 60	26.92	29 · 24	6 • 46	248.79	57.92	23.28	
13.	West Bengal Forest Development Corporation Ltd	Forest	19-7-1974	1975-76	167.39	(+)0.40	••	••	0 · 40	0 · 24	167.38	(+)0.40	0.24	
14.	Electro-Medical and Allied Industries Limited	Public Undertakings.	29-6-1961	1974-75	51·75	(+)0·19	1 · 36	1.36	1.55	2.99	31 · 36	1 · 55	4.94	
15.	West Bengal Pharmaceutical and Phyte chemi- cal Development Corporation Limited	Commerce and Industries.	28-3-1974	1974-75	4.75	(-)0·78	••	••	(−)0·78	••	3 ·59	(-)0.78	••	

ANNEXURE 'A'-contd.

Sl. No.	Name of the Company	Name of the Department	Date of incorporation	Period of accounts	Total capital invested	Profit(+) Lcss(-)	Total interest charged to Profit and Loss Account	Interest on long term loans	Total return on capital invested (7+9)	Percentage of total return on capital invested	Capital employed	Total return on capital employed (7+8)	Percentage of total return on capital employed
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13	(14)
16.	West Bengal Live Stock Processing Development Corporation Limited	Animal husbandry and Veterinary Service.	9-4-1974	1974-75	3.00	(-)0·03	••	••	(-)0.03	••	2.79	(-)0.03	••
17.	West Bengal Agro- Industries Corporation Limited	Public Undertakings.	16-8-1968	1974-75	546.10	(+)22.08	2 · 43	1.28	(-)23·36	4.28	5 46 ·10	(+)24·51	4.49
18.	West Bengal Handloom and Powerloom Development Corporation Limited	Cottage and Small Scale Industries*.	25-9-1973	1974-75	27.50	(-)11·57	0.84	••	(—)11·57 ·	••	29·71	(-)10·73	••
19.	West Bengal Dairy and Poultry Development Corporation Limited	Public Undertakings.	4-2-1969	1973-74	72 · 78	(+)1·83	••	••	1.83	2.51	43.23	(+)1.83	4 · 23

^{*}The Administrative Control of West Bengal Handloom and Powerloom Development Corporation Limited was transferred to Public Undertakings Department on 21-11-75.

Note: (1) "Capital invested" represents paid-up capital plus long-term loans plus free reserves at the close of the year.

^{(2) &}quot;Capital employed" (except in case of West Bengal Industrial Development Corporation Limited) represents net fixed assets (excluding works-in-progress) plus or minus working capital. In case of West Bengal Industrial Development Corporation Limited, "Capital employed" represents mean capital employed i.e., mean of aggregate of opening and closing balances of (i) paid-up capital, (ii) bonds and debentures, (iii) reserves, (iv) borrowings including refinance, and (v) deposits.

(Reference: Paragraph 3 of section V, page 105)

Statement showing summarised financial results of Statutory Corporations

SI No.	Name of the Corpo- ration/Board	Name of the Department	Date of incorporation	Period of accounts	Total capital invested	Profit(+) Loss(-)	Total interest charged to Profit and Loss Accounts	Interest on long- term lcans		Percentage of total return on capital invested	employed	Total return on capital employed (7+8)	Percentage of total return on capital employed
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	(i) Electricity	Board		(Fig	ures in col	umn 6 to 10	, 12 and	13 indice	ite lakhs of	Rupees)			
1.	West Bengal State Electricity Board	Power	1-5-1955	1975-76	28,275 · 79	(+)113.86	390 · 30	335-07	448.93	1 · 59	17,934 · 65	504 · 16	2.81
	(ii) Other Statutory	Corporations											
2.	West Bengal Financial Corporation	Public Undertakings	1-3-1954	1975-76	••	(+)26.42	5 2 · 02	52.02	••	• •	1,079+65	78 • 44	7-27
3.	West Bengal State Ware-housing Corporation	Ditto	31-3-1958	1974-75	99 · 48	(+)3·23	0.02	• •	3.23	3.24	124.57	3.25	2.61
4.	Calcutta State Transport Corporation	Home (Transport)	15-6-1960	1974-75	4,231 · 40	(-)938·79	260 · 18	260-18	(-)678·61	• •	(—)106·78	()678·61	••
5.	North Bengal State Transport Corporation	Ditto	15-4-1960	1972-73	363.93	(-)93·30	19.91	19-91	(-)73·39	••	134 • 10	(-)73·39	••

Note: (1) "Capital Invested" represents paid-up capital plus long-term loans plus free reserves at the close of the year.

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^{(2) &}quot;Capital employed" (except in the case of West Bengal Financial Corporation) represents net fixed assets (excluding works-in-progress) plus or minus, working capital. In case of West Bengal Financial Corporation, "Capital employed" represents mean capital employed i.e., mean of aggregate of opening and closing balances of (i) paid-up capital, (ii) bonds and debentures, (iii) reserves, (iv) borrowings including refinance, and (v) deposits