



REPORT
OF THE
COMPTROLLER
AND
AUDITOR GENERAL OF INDIA
FOR THE YEAR ENDED 31 MARCH 1991
NO. 1
(COMMERCIAL)

GOVERNMENT OF UTTAR PRADESH

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PREFACE

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

- Government companies,
- Statutory corporations, and
- Departmentally managed commercial undertakings.

2. This report deals with the results of audit of Government companies and Statutory corporations including Uttar Pradesh State Electricity Board and has been prepared for submission to the Government of Uttar Pradesh for presentation to the Legislature under Section 19A of the Comptroller and Auditor General's (Duties, Powers and Conditions of Service) Act 1971, as amended in March 1984. The results of audit relating to Departmentally managed commercial undertakings are contained in the Report of Comptroller and Auditor General of India (Civil)- Government of Uttar Pradesh.

3. There are, however, certain companies which in spite of Government investment, are not subject to audit by the Comptroller and Auditor General of India as Government or Government owned/controlled companies/corporations hold less than 51 per cent of the shares. A list of such undertakings in which Government investment was more than Rs. 10 lakhs as on 31st March 1991 is given in Annexure-I.

4. In respect of Uttar Pradesh State Road Transport Corporation and the Uttar Pradesh State Electricity Board which are Statutory corporations, the Comptroller and Auditor General of India is the sole Auditor. In respect of Uttar Pradesh Financial Corporation and Uttar Pradesh State Warehousing Corporation, he has the right to conduct the audit of their accounts in addition to the audit conducted by Chartered Accountants appointed under the respective Acts. The Audit Reports on the accounts of all these corporations

are being forwarded separately to the Government of Uttar Pradesh.

5. The cases mentioned in this Report are those which came to notice in the course of audit of accounts during the year 1990-91 as well as those which had come to notice in earlier years but could not be dealt with in previous Reports. Matters relating to the period subsequent to 1990-91 have also been included, wherever considered necessary.

OVERVIEW

1. The State had 100 Government companies (including 42 subsidiaries), 6 companies under the purview of Section 619 B of the Companies Act, 1956 and 4 Statutory corporations as on 31st March 1991. Ten companies (including eight subsidiaries) were under the process of liquidation.

(Paragraphs 1.2.1, 1.2.5, 1.3.1)

The aggregate paid-up capital of 90 Government companies (excluding 10 companies which were under liquidation) as on 31st March 1991 was Rs. 1334.87 crores of which Rs. 1144.35 crores were invested by the State Government, Rs. 17.47 crores by Central Government and Rs. 173.05 crores by others. The State Government's loans to the extent of Rs. 435.01 crores were outstanding as on 31st March 1991 against 60 companies. The State Government had also guaranteed repayment of loans raised by 22 companies and payment of interest thereon. The amounts guaranteed and outstanding thereagainst as on 31st March 1991 were Rs. 409.33 crores and Rs. 324.77 crores respectively.

(Paragraph 1.2.2)

Only 10 companies had finalised their accounts for the year 1990-91 and the accounts of remaining 80 companies were in arrears for the periods ranging from 1 to 16 years. Of the 10 companies which finalised their accounts up to March 1991, 5 companies earned profit aggregating to Rs. 20.81 crores and 5 companies incurred losses aggregating to Rs. 16.57 crores. According to the latest available accounts, losses of Rs. 427.70 crores accumulated by 18 companies far exceeded their paid-up capital of Rs. 202.73 crores.

(Paragraphs 1.2.3 and 1.2.4)

Of the six companies coming under the purview of Section 619 B of Companies Act 1956, only four companies finalised their accounts for the year 1990-91 whereas one company did not finalise its accounts since inception and accounts of

another company were in arrears for the period from January 1980 to March 1991. The accumulated loss in respect of one company aggregating Rs. 0.27 crore had exceeded its paid-up capital of Rs. 0.24 crore.

(Paragraph 1.2.5)

The Uttar Pradesh State Electricity Board had finalised its accounts for the year 1988-89. The net deficit of the Board up to the year 1988-89 was Rs. 634.75 crores.

(Paragraph 1.4.2)

The Uttar Pradesh State Road Transport Corporation sustained an accumulated loss of Rs. 230.49 crores as on 31st March 1991 as against the capital contribution of Rs. 250.04 crores.

(Paragraph 1.5.2)

The Uttar Pradesh Financial Corporation had earned a profit of Rs. 1.30 crores during the year 1990-91.

(Paragraph 1.6.4)

The accounts of Uttar Pradesh State Warehousing Corporation were in arrears from 1988-89 onwards. The Corporation earned a profit of Rs. 2.25 crores during the year 1987-88.

(Paragraphs 1.3.3 and 1.7.4)

2. A review of the activities of two companies and of the Uttar Pradesh State Electricity Board revealed the following:

2.1. PROCUREMENT AND UTILISATION OF MATERIALS AND MACHINES IN UTTAR PRADESH RAJKIYA NIRMAN NIGAM LIMITED

Uttar Pradesh Rajkiya Nirman Nigam Limited was incorporated in May 1975 to serve as an agency for speedy execution of works at reasonable rates and replacing private contractors.

(Paragraph 2A.1)

Purchase Committee comprising unit head, Subordinate Engineer and a representative of Accounts Branch is vested with full powers to procure materials. However, the prescribed procedure of conducting market survey by visiting quarries, kilns, dumps and depots etc. was not followed with a view to ensuring cost control.

(Paragraph 2A.6.1)

Eighteen units of the Company incurred an extra expenditure of Rs. 0.99 crore on purchase of steel from re-rollers and dealers instead of the primary producers - Steel Authority of India Limited or Tata Iron and Steel Company Limited.

(Paragraph 2A.6.3)

Utilisation of higher class bricks (M 150) in place of lower class bricks (M 75) stipulated in work agreements resulted in an extra expenditure of Rs. 0.30 crore which could not be recovered from the clients in the absence of any provision in the agreements.

[Paragraph 2A.6.4(a)]

The Company purchased materials at rates higher than the rates based on which contracts were entered into, resulting in an extra expenditure of Rs. 0.62 crore which could not be recovered from the clients in the absence of enabling clause in the contracts.

(Paragraph 2A.6.9)

As compared to the Central Public Works Department norms for consumption of material, excess materials valuing Rs. 2.21 crores were consumed in 52 works executed by the different units for which no action had been taken by the Company to fix responsibility.

(Paragraph 2A.7.2)

Materials valuing Rs. 1.35 crores were consumed in excess of sanctioned estimates in 13 works by 11 units without the approval of the clients.

[Paragraph 2A.7.5(a) and (b)]

In the case of works involving supply of material by clients, the relevant contracts stipulated the consumption norms and consumption, if any, in excess of the norms entailed recovery from the Company at double the normal rates of recovery. In three works executed by the Company during the period from 1984-85 to 1990-91, the company incurred a liability of Rs. 0.52 crore on account of excess consumption of materials provided by the clients.

(Paragraph 2A.7.8)

Norms of requirement and utilisation of shuttering material were not fixed by the Company. However, 19 units procured 0.68 lakh square metres of shuttering material for a shuttered area of 2.48 lakh square metres during 1988-89 to 1990-91 against the requirement of 0.33 lakh square metres, resulting in excess procurement of 0.35 lakh square metres and locking up of Company's funds to the extent of Rs. 1.40 crores.

[Paragraph 2A.8 (iii)]

Cases of shortage of materials valuing Rs. 0.39 crore outstanding against sub-engineers were neither investigated to fix responsibility nor was recovery effected.

(Paragraph 2A.10.4)

2.2. DEVELOPMENT OF INDUSTRIAL AREAS BY UTTAR PRADESH STATE INDUSTRIAL DEVELOPMENT CORPORATION LIMITED

Uttar Pradesh State Industrial Development Corporation Limited was incorporated in March 1961 to promote industrial development of the State. The Company took up the development of industrial areas including infrastructure facilities with a view to making available developed plots to entrepreneurs

at economical rates. Up to March 1991, the Company had developed 116 industrial areas in 45 districts of the State.

[Paragraphs 2B.1, 2B.6.1, 2B.6.2.1, 2B.6.3.1 (vii)]

A sum of Rs. 0.63 crore was recoverable from the district authorities, Sultanpur and Kanpur, being provisional compensation paid in excess for acquisition of land. Besides, Rs. 0.48 crore had also not been refunded by district authorities, Moradabad, although the land acquisition proceedings stood quashed.

[Paragraphs 2B.6.2.3 (a) and (b),
2B.6.2.4]

The Company under its own scheme acquired 27977 acres of land up to March 1991, out of which 24899 acres of land could be developed and the balance 3078 acres of land valuing Rs. 5.04 crores was yet to be developed.

(Paragraphs 2B.6.3.1)

The Company had spent Rs. 0.16 crore during 1990-91 and 1991-92 in providing facility for water supply in a developed industrial area of Allahabad without considering the feasibility of recovery of cost from the existing allottees. The Company had also not revised the rate of premium to be charged from future allottees to recover the cost.

[Paragraph 2B.6.3.2 (iii)]

Allotment of 151 plots (48.72 acres) in Panki industrial area at Kanpur valuing Rs. 4.93 crores remained suspended since May 1989 without reasons on record.

[Paragraph 2B.6.4.2 (i)]

48 plots (83.37 acres) in Mathura industrial area valuing Rs. 0.40 crore were under unauthorised occupation of a religious institution since 1981-82. Besides, 32 plots (15.32 acres) allotted to entrepreneurs were also in

unauthorised possession of the same institution as a result, Rs. 0.17 crore remained unrealised from entrepreneurs.

[Paragraph 2B.6.4.2 (iii)]

The Company incurred an expenditure of Rs. 0.28 crore during 1987-88 to 1988-89 on subdivision of developed plots into smaller size plots in industrial areas of Agra and Bareilly without corresponding increase in the rates of premium so as to effect recovery of expenditure so incurred.

(Paragraph 2B.6.4.4)

Against the No Industry District (NID) Scheme 1983 of the Central Government, scheduled to be completed in December 1988, the Company had not so far undertaken the development of 69.06 acres of land in three centres resulting in locking up of Government subsidy of Rs. 0.82 crore on the purchase of land.

(Paragraph 2B.7.3)

Under the industrial housing scheme of the Company, allotment of housing plots developed during 1985-86 to 1988-89 was very poor, ranging up to 12.2 *per cent*. As a result, plots valuing Rs. 2.51 crores remained unallotted. Besides, of the 325 dwelling units constructed in 1989-90 in four NIDs, 280 units valuing Rs. 2.49 crores also remained unallotted (May 1991).

[Paragraphs 2B.8.1 (ii) and (iv)]

The Company had not taken adequate action for enforcing recovery of outstanding dues of Rs. 6.87 crores as on 31st March 1990 by issue of recovery certificates and cancellation of plots of defaulters.

(Paragraph 2B.9)

2.3. KANPUR ELECTRICITY SUPPLY ADMINISTRATION

The Kanpur Electricity Supply Administration (KESA), engaged in generation and distribution of power within the municipal limits of Kanpur city was taken over by the Uttar Pradesh State Electricity Board in April 1959. Subsequently, the Board added two more units of 15 MW each between 1960 and 1962 raising the capacity to 75 MW, which was, however, derated to 65 MW from 1964-65 due to ageing of plant.

(Paragraphs 3A.1)

The percentage of capacity utilisation of the power house declined from 11.44 in 1986-87 to 1.68 in 1990-91. The loss of generation due to lower capacity utilisation was 1083 million units valuing Rs. 104.53 crores.

The auxiliary consumption during 1986-87 to 1990-91 ranged between 12.83 to 37.84 *per cent*. Compared to the minimum of 12.83 *per cent* achieved during 1987-88, the excess consumption was 4.99 Mkw h valuing Rs. 0.50 crore.

(Paragraph 3A.4.1)

The consumption of coal per Kwh was constantly on the increase during 1986-87 to 1990-91. Taking 1.30 Kg coal per Kwh consumed in 1987-88, the excess consumption of coal aggregated 19843 MT valuing Rs. 3.94 crores.

(Paragraph 3A.4.2)

Deployment of manpower in excess of the norm of 7 persons per MW resulted in an avoidable expenditure of Rs. 9.83 crores on establishment during the five years up to 1990-91. Despite the deployment of surplus manpower, the Management paid overtime of Rs. 1.96 crores.

(Paragraph 3A.4.5)

The Board had retired the power house in March 1991. The services of surplus staff have not been utilised elsewhere,

resulting in a nugatory expenditure of Rs. 3.20 crores on their pay and allowances from April to December 1991.

[(Paragraph 3A.4.5 (ii))]

Though the closure of the power house was imminent, 350 coolies were appointed during 1989-90 resulting in an additional expenditure of Rs. 1.32 crores up to December 1991.

[(Paragraph 3A.4.5 (iii))]

The revenue arrears of Rs. 27.92 crores at the end of March 1987 increased to Rs. 43.85 crores at the end of March 1991. The number of defaulting consumers at the end of March 1991 were 38 under large and heavy power category, 3416 under small and medium category and 1.62 lakhs under light and fan category against whom dues of Rs. 7.44 crores, Rs. 2.49 crores and Rs. 33.91 crores, respectively, were outstanding. The KESA, however, could issue 1380 recovery certificates valuing Rs. 2.14 crores only during the five years up to 1990-91.

(Paragraph 3A.5.4)

Additional security from 189 large and heavy power consumers amounting to Rs. 3.10 crores had not been recovered.

(Paragraph 3A.5.6.4)

Distribution losses, after excluding sale to one consumer through an extra-high voltage line, ranged between 32.4 and 49 per cent during 1986-87 to 1990-91 as against 11 per cent recommended by Central Electricity Authority. The excess distribution losses deprived the Board of an additional revenue of Rs. 116.37 crores during the period.

(Paragraph 3A.7)

The Board incurred a loss of Rs. 0.34 crore in 11 deposit works due to short provision of establishment and contingency charges in the cost estimates.

(Paragraph 3A.11)

2.4. PARICHHA THERMAL POWER STATION

Parichha Thermal Power Station of the Uttar Pradesh State Electricity Board with an installed capacity of 220 MW, comprising two units of 110 MW each, commenced commercial operation since April 1985 (Unit I) and December 1985 (Unit II).

(Paragraph 3B.1)

Though the work of erection, testing and commissioning of boilers and turbo-generator sets was executed by BHEL on turn-key basis, an extra expenditure of Rs. 0.31 crore incurred on the repairs of turbine damaged during trial-run had not been recovered from BHEL.

(Paragraph 3B.6.3.2)

During the period from July 1984 to February 1985, consumption of 4702 kilolitres of furnace and light diesel oil by Unit I, as compared to 443 kilolitres by Unit II during the same period, was considered excessive by the Board. A claim of Rs. 1.57 crores on BHEL for excess consumption of 4259 kilolitres of oil was yet to be settled.

(Paragraph 3B.6.3.3)

The supplier of 'Ash and coal mill reject handling plant' offered in August 1986 to operate and maintain the plant and also to train the staff of the Board at Rs. 0.85 lakh per month. However, while placing the order, the Board failed to include a clause regarding training of its staff, resulting in continuous award of operation of the plant to the supplier and consequential avoidable expenditure of Rs. 0.57 crore up to November 1991.

(Paragraph 3B.6.5)

The actual time taken by the project for annual maintenance and major overhauling during 1986-87 to 1990-91 was 18866 hours against 7392 hours recommended by the Technical Committee on power appointed by the State Government, resulting in an estimated loss of generation of 1262.14 MkwH of energy valuing Rs. 87.70 crores.

(Paragraph 3B.7.3.1)

The auxiliary consumption was much above the norms prescribed in the project report. During 1986-87 to 1990-91, 114.721 MkwH energy was consumed in excess, depriving the Board of an estimated revenue of Rs. 7.97 crores.

(Paragraph 3B.7.4)

During 1986-87 to 1990-91, 657717 tonnes of coal valuing Rs. 42.72 crores and 43476 kilolitres of oil valuing Rs. 14.56 crores had been consumed in excess of the norms prescribed in the project report.

(Paragraphs 3B.8.3, and 3B.8.4)

2.5. FUEL MANAGEMENT IN HARDUAGANJ AND PANKI THERMAL POWER STATIONS

The Harduaganj Thermal Power Station (HTPS) and Panki Thermal Power Station (PTPS) with installed capacity of 530 MW and 284 MW had been in operation since 1976-77 and 1967-68, respectively.

(Paragraph 3C.1)

In terms of the provisions of the agreements entered into with the contractors for unloading of coal, the amount of Rs. 2.17 crores paid by HTPS and Rs. 0.23 crore paid by PTPS during 1986-87 to 1990-91 as demurrage charges to Railways was recoverable from the contractors which had not been recovered so far.

(Paragraph 3C.5.2)

In HTPS, the coal supplied by Coal India Limited (CIL) during October 1986 to October 1989 contained 19104 MT of stone boulders. The amount of Rs. 1.22 crores, being the value of coal equivalent to the weight of boulders, was not deducted from the bills of CIL as was done in PTPS.

[Paragraph 3C.5.3 (b) (ii)]

Due to non-repair of defective mechanical equipments meant for unloading and shifting of coal, HTPS had to get the work done manually resulting in an avoidable expenditure of Rs. 0.24 crore during 1986-87 to 1990-91.

[Paragraph 3C.5.4.1 (a)]

Non-charging of heaters, low vacuum of turbines, large number of trippings and leakage of steam were mainly responsible for excess consumption of heat with consequential excess consumption of coal valuing Rs. 118.23 crores and Rs. 76.22 crores in HTPS and PTPS, respectively, during 1986-87 to 1990-91.

[Paragraph 3C.5.5 (ii)]

The consumption of oil exceeded the norms fixed by the Board by 16412 kilolitres valuing Rs. 5.25 crores in HTPS and by 1039 kilolitres valuing Rs. 0.39 crore in PTPS during the five years ended March 1991.

(Paragraph 3C.6.2)

2.6. RENOVATION AND MODERNISATION IN HARDUAGANJ AND PANKI THERMAL POWER STATIONS

Central Electricity Authority approved, in April/May 1985, renovation and modernisation (R&M) schemes of Harduaganj Thermal Power Station (HTPS) and Panki Thermal Power Station (PTPS) for Rs. 63.95 crores and Rs. 37.03 crores, revised to Rs. 82.95 crores and Rs. 44.66 crores in May 1988 and February 1989, respectively. All the R&M works in both the power stations were to be completed in totality within a period of three years so as to derive maximum

benefits from improvement in the plant load factor and increase in generation. The works which were scheduled for completion in March/April 1988 were, however, completed in March 1991 only.

(Paragraph 3D.1)

HP heaters, purchased at a cost of Rs. 0.78 crore during December 1982 to April 1988 and installed in a unit of HTPS, remained uncommissioned for want of completion of other works, resulting in locking up of funds and consequential loss of interest of Rs. 0.14 crore per annum.

[Paragraph 3D.5 (iv)]

Due to non-availability of funds, a consignment of spare parts purchased from a West German firm for Rs. 1.91 crores and lying at Bombay port since February 1990, could not be cleared, resulting in locking up of huge funds and consequential loss of interest of Rs. 0.49 crore up to December 1991, besides avoidable liability of Rs. 1.18 crores up to January 1992 on account of custom duty, port and demurrage charges incurred by Board.

(Paragraph 3D.8.2)

A contract for modification of ash disposal system from dry to slurry form in two units of PTPS for Rs. 0.89 crore was awarded in December 1984 to a firm of Delhi and the work was scheduled for completion in September 1985. Even after incurring an expenditure of Rs. 0.85 crore up to December 1990, the work was not yet complete due to non-completion of certain civil/electrical works by the power station, resulting in locking up of funds and avoidable expenditure of Rs. 0.16 crore in manual disposal of dry ash.

(Paragraph 3D.8.3)

3. Besides the reviews as mentioned above, a test check of the records of the Government companies and Statutory

corporations in general disclosed the following points of interest:

3.1.(a) In Uttar Pradesh State Electricity Board (Board), incorrect application of tariff resulted in under-assessment of revenue to the extent of Rs. 1.44 crores.

(Paragraph 4B.1)

(b) Application of incorrect multiplying factor by the Board resulted in short billing to the extent of Rs. 0.38 crore.

(Paragraph 4B.2)

3.2.(a) Failure of the Board to obtain the required clearance of the Government of India before commencement of the work of Pala Maneri Hydro Electric Project resulted in a nugatory expenditure of Rs. 3.24 crores.

(Paragraph 4B.8)

(b) The Board incurred an avoidable extra expenditure of Rs. 0.19 crore on procurement of 1670 numbers of 25 KVA transformers due to delay in granting waiver of the short circuit test to the supplier.

(Paragraph 4B.9)

CHAPTER I

GENERAL VIEW OF GOVERNMENT COMPANIES AND STATUTORY CORPORATIONS

CHAPTER- I

1. GENERAL VIEW OF GOVERNMENT COMPANIES AND STATUTORY CORPORATIONS

1.1. Introduction

This chapter contains particulars about the investment, state of accounts, etc., in respect of Government companies and Statutory corporations.

Paragraph 1.2 gives a general view of Government companies, paragraph 1.3 deals with general aspects relating to Statutory corporations and paragraphs 1.4 to 1.7 give more details about each Statutory corporation including financial and operational performance.

1.2. Government companies-general view

1.2.1. There were 100 Government companies (including 42 subsidiaries) as on 31st March 1991 as against 97 Government companies (including 40 subsidiaries) as on 31st March 1990.

According to the information received by Audit during the year 1990-91 three new Government companies (including 2 subsidiaries) were incorporated and 10 Government companies (including eight subsidiaries) were in the process of liquidation. The particulars of the companies formed and of those in the process of liquidation during the year are given below

(a) Government companies formed:

Name of company	Date of incorporation	Authorised Capital (Rupees in crores)
1. Uttar Pradesh Mahila Kalyan Nigam Limited	9th March 1988	5.00
2. Uttar Pradesh Hill Quartz (Subsidiary of Uttar Pradesh Hill Electronics Limited)	18th July 1989	0.10
3. *Uttar Pradesh Carbon & Chemicals Limited (Subsidiary of Uttar Pradesh State Industrial Development Corporation Limited)	12th January 1982	6.00

* The Company was incorporated on 12.1.1982 and became a Government Company in 1989-90.

(b) Government companies in the process of liquidation:

Name of the company	Date of incorporation	Date of going into liquidation *
(1)	(2)	(3)
1. The Indian Bobbin Company Limited	22nd February 1924	10th September 1973
2. The Turpentine Subsidiary Industries Limited (Subsidiary of the Indian Turpentine and Rosin Company Limited)	11th July 1939	1st April 1978
3. Uttar Pradesh Potteries (Private) Limited (Subsidiary of Uttar Pradesh Small Industries Corporation Limited)	28th June 1972	27th April 1985
4. Uttar Pradesh Buildwares (Private) Limited (Subsidiary of Uttar Pradesh Small Industries Corporation Limited)	28th June 1972	12th April 1988
5. Uttar Pradesh Prestressed Product (Private) Limited (Subsidiary of Uttar Pradesh Small Industries Corporation Limited)	30th September 1972	5th April 1989
6. Uttar Pradesh Abseott (Private) Limited (Subsidiary of Uttar Pradesh Small Industries Corporation Limited)	28th June 1972	19th April 1986
7. Uttar Pradesh Roofings (Private) Limited (Subsidiary of Uttar Pradesh Small Industries Corporation Limited)	24th November 1973	8th December 1987
8. Krishna Fasteners Limited (Subsidiary of Uttar Pradesh Small Industries Corporation Limited)	14th December 1973	22nd July 1988
9. Faizabad Roofings Limited (Subsidiary of Uttar Pradesh Small Industries Corporation Limited)	16th February 1974	8th September 1987
10. The Gandak Samadash Kshetra Vikas Nigam Limited	15th March 1975	7th June 1977

1.2.2. Annexure-2 gives the particulars of paid-up capital, outstanding loans, guarantees given by Government, amount outstanding thereagainst, working results, etc., in respect of all the Government companies. The position is summarised as under:

(a) Against the aggregate paid-up capital of Rs. 1216.65 crores of 89 companies (including 34 subsidiaries but

excluding 8 companies under liquidation) as on 31st March 1990, the aggregate paid-up capital as on 31st March 1991 stood at Rs. 1334.87 crores in 90 companies (including 34 subsidiaries but excluding 10 companies under liquidation), as given below:

Particulars	Number of companies	Investment by			Total
		State Government	Central Government	Others	
		(Rupees in crores)			
(1) Companies wholly owned by State Government	38	1084.47	..	..	1084.47
(2) Companies jointly owned with Central Government/others	18	59.03	17.47	1.94	78.44
(3) Subsidiary companies	34	0.85	..	171.11	171.96
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	90	1144.35*	17.47	173.05	1334.87
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(b) The balance of long-term loans outstanding in respect of 60 companies (including 21 subsidiaries) as on 31st March 1991 was Rs. 1046.10 crores (State Government: Rs. 435.01 crores others: Rs. 605.76 crores and deferred payment credits: Rs. 5.33 crores), as against Rs. 1180.55 crores (State Government: Rs. 557.67 crores; others: Rs. 551.98 crores and deferred payment credits: Rs. 70.90 crores) in respect of 62 companies including 21 subsidiaries) as on 31st March 1990.

(c) The State Government had guaranteed repayment of loans raised by 22 companies and payment of interest thereon. The amounts guaranteed and outstanding thereagainst as on 31st March 1991 were Rs. 409.33* crores and Rs. 324.77* crores respectively.

No guarantee commission is required to be paid by the companies to Government in consideration of guarantee.

* The figure as per Finance Accounts is Rs. 875.44 crores and the difference of Rs. 268.91 crores was under reconciliation.

* The figures as per Finance Accounts are Rs. 269.15 crores and Rs. 164.75 crores respectively in respect of 28 companies the difference of Rs. 140.18 crores and Rs. 160.02 crores was under reconciliation.

1.2.3. A synoptic statement showing the financial results of all the 90 companies (excluding 10 companies under liquidation) based on the latest available accounts is given in Annexure-3.

Out of total 90 companies for which accounts up to 1990-91 were due, 10 companies had finalised their accounts for the year ending 31st March 1991 (serial numbers 7, 13, 27, 29, 30, 33, 59, 60, 66 and 86 of Annexure-3). In addition, 37 companies had finalised their accounts for some earlier years since the previous Report (serial numbers 1, 2, 5, 6, 8, 10, 11, 16, 18, 19, 20, 21, 22, 23, 24, 25, 26, 28, 35, 36, 39, 45, 46, 47, 50, 52, 53, 57, 63, 72, 75, 77, 78, 80, 81, 82, 84, of Annexure-3).

It will be observed from Annexure-2 and 3 that the accounts of 80 companies (including 28 subsidiaries) were in arrears ranging from 1 to 16 years. The position of arrears is summarised as under:

Extent of arrears	Number of years involved	Number of companies involved		Investment				Reference to serial number of Annexure 3
		Companies	Subsidiaries	Government companies	Share capital	Loans	Holding companies	Share capital
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(Rupees in crores)								
1975-76 to 1990-91	16		1			0.02		15*
1977-78 to 1990-91	14	1		0.03				4
1978-79 to 1990-91	13	1		1.23	0.05			9
1979-80 to 1990-91	12		2		0.86	0.07		61*, 71*
1980-81 to 1990-91	11		1			0.03		67*
1981-82 to 1990-91	10	2	1	6.33	1.20	0.26		28, 47*, 49
1982-83 to 1990-91	9	2	3	14.10	12.96	0.34	0.10	18, 25*, 39*, 58*, 65
1983-84 to 1990-91	8	4	2	10.11	9.79	1.03	0.81	31, 40*, 41, 53, 56*, 62
1984-85 to 1990-91	7	4	1	3.32	1.93	0.001		22*, 34, 50, 52, 69

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1985-86 to 1990-91	6	3		26.33	3.68			6,10,64
1986-87 to 1990-91	5	4	1	36.72	3.41	0.08	0.09	19,46,54, 70,79*
1987-88 to 1990-91	4	5	1	28.01		0.02		35,45,51, 55,74,85*
1988-89 to 1990-91	3	8	2	69.36	15.01	37.61	0.60	2,11,24, 26,38,72*
1989-90 to 1990-91	2	8	7	604.80	302.89	42.89	3.44	73*,76,77,88 5,8,12*
1990-91	1	10	6	110.42	26.92	8.89	1.64	16*,21*,32 36*,37*,57 63,68*,75, 83,89*,90* 1,3,14, 17,20*,23 42*,43,44 48*,78,80* 81,82*,84* 87*
Gross total		52	28	910.76	378.70	91.24	6.68	

In the absence of finalisation of accounts for a number of years (ranging from 1 to 16 years) in respect of a large number of Government companies, the productivity of investment of Rs. 1289.46 crores (capital: Rs. 910.76 crores and loans: Rs. 378.70 crores) by the State Government in these companies could not be conclusively vouchsafed nor could their performance and state of affairs be evaluated.

The position of arrears in finalisation of accounts was last brought to the notice of Government in November 1991 at the level of Chief Secretary.

1.2.4. In regard to working results of the companies, the following further observations are made:

(a) Out of 10 companies which finalised their accounts for 1990-91, 5 companies (including 1 subsidiary) earned profit aggregating Rs. 20.81 crores during the year. The profits during the year 1990-91 as compared to the previous year are given below:

* Subsidiary companies.

Name of Company	Paid up capital		Profit(+)/Loss(-)		percentage of profit to paid-up capital		Reference to serial number of Annexure-3
	1989-90	1990-91	1989-90	1990-91	1989-90	1990-91	
	(Rupees in crores)						
1. U.P. State Textile Corporation Limited	113.04	116.37	(+) 5.03	(+) 15.14	4.45	13.01	7
2. The Pradeshiya Industrial and Investment Corporation of Uttar Pradesh Limited	94.78	103.58	(+) 5.57	(+) 5.03.	5.88	4.86	13
3. U.P. Electronics Corporation Limited	49.27*	55.33	(+) 0.02*	(+) 0.04	0.05*	0.07	27
4. Harijan Evam Nirbal Varg Nigam Limited	0.15	0.15	(+) 1.65	(+) 0.58	1100.00	386.67	60
5. Uptron Powertronics Limited (Subsidiary of Uttar Pradesh Electronics Corporation Limited)	0.22	0.22	(-) 10.06	(+) 10.02	..	9.09	66

(b) The remaining 5 companies (all subsidiaries) incurred losses aggregating Rs. 16.57 crores during the year 1990-91. The particulars giving comparative position of the previous year, are given below:

Name of the Company	Paid-up capital		profit(+)/Loss(-)		Reference to serial Number of Annexure-3
	1989-90	1990-91	1989-90	1990-91	
(Rupees in crores)					
(1)	(2)	(3)	(4)	(5)	(6)
1 Uttar Pradesh State Spinning Company Limited (Subsidiary of Uttar Pradesh State Textile Corporation Limited) (Successors of Uttar Pradesh State Spinning Mills Company No. (I) Limited)	43.51	46.02	(-)16.94	(-)18.82	29

* Period from October 1987 to March 1989

(1)	(2)	(3)	(4)	(5)	(6)
2. Uttar Pradesh Yarn Company Limited (Subsidiary of Uttar Pradesh State Textile Corporation Limited) (Successor of Uttar Pradesh State Spinning Mills Company No. (II) Limited)	23.57	24.40	(-12.79	(-14.17	30
3. Uttar Pradesh Instruments Limited (Subsidiary of Uttar Pradesh State Industrial Development Corporation Limited)	2.02	2.02	(-11.48	(-11.72	33
4. Bhadoi Woollens Limited (Subsidiary of Uttar Pradesh State Textile Corporation Limited)	3.17	3.76	(-10.81	(-11.46	59
5. Shreetron India Limited (Subsidiary of Uttar Pradesh Electronics Corporation Limited)	1.14	1.14	(-10.28	(-10.40	86

(c) During the year 1990-91 only one company declared dividend as per particulars given below:

Name of the company	Year of accounts	Distributable surplus	Amount retained in business	Dividend declared	Percentage of dividend to paid-up capital	Reference of serial number of Annexure-3
				(Rupees in crores)		
1. Uttar Pradesh Mineral Development Corporation Limited	1986-87	0.94	0.72	0.22	8%	26

The dividend of Rs. 0.22 crore declared by one Government company worked out to 0.02 per cent of the total investment of Rs. 1144.35 crores by the State Government in 90 Government companies (including 34 subsidiaries).

(d) As shown in Annexure-2 the accumulated loss in respect of the following 18 companies (including 13 subsidiaries) as reflected in the accounts received up to the period noted against each exceeded their paid-up capital as at the end of that year:

Sl. Name of the No. Company	Year up to which accounts received	Paid-up capital at the end of the year	Accumulated loss up to the year	Percentage of accumulated loss to paid- up capital	Serial number of Annexure-2	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
(Rupees in crores)						
1. Uttar Pradesh State Agro Industrial Corporation Limited	1984-85	7.54	14.94	198.14	6	
2. Kichha Sugar Company Limited (Subsidiary of Uttar Pradesh State Sugar Company Limited)	October 1987 to March 1989	7.04	9.88	140.30	12	
3. The Uttar Pradesh State Cement Corporation Limited	1989-90	68.28	155.26	227.40	14	
4. Auto Tractors Limited	1989-90	7.50	57.07	760.90	17	
5. Trans Cables Limited (Subsidiary of Kumaon Mandal Vikas Nigam Limited)	1988-89	0.63	1.05	166.66	21	
6. Uttar Pradesh State Spinning Company Limited (Subsidiary of Uttar Pradesh State Textile Corporation Limited)	1990-91	46.02	84.73	184.10	29	
7. Uttar Pradesh State Yarn Company Limited (Subsidiary of Uttar Pradesh State Textile Corporation Limited)	1990-91	24.40	36.68	150.30	30	
8. Uttar Pradesh Inst- ruments Limited (Subsi- diary of Uttar Pradesh State Industrial Deve- lopment Corporation Limited)	1990-91	1.93	10.18	527.50	33	
9. Uttar Pradesh Pashudhan Udyog Nigam Limited	1983-84	0.81	1.19	146.90	34	
10. Nandganj-Sihori Sugar Company Limited (Subsidiary of Uttar Pradesh State Sugar Corporation Limited)	July 1988 to March 1989	23.21	30.20	130.10	36	
11. Uttar Pradesh Tyres and Tubes Limited (Subsidiary of Uttar Pradesh State Indus- trial Development Corporation Limited)	1989-90	1.83	6.15	336.10	48	

(1)	(2)	(3)	(4)	(5)	(6)	(7)
12.	Bhadoli Woollens Limited (Subsidiary of Uttar Pradesh State Textile Corporation Limited)	1990-91	3.76	6.15	163.60	59
13.	Handloom Intensive Development Project (Bijnore) Limited (Subsidiary of Uttar Pradesh State Handloom Corporation Limited)	1978-79	0.02	0.03	150.00	61
14.	Uttar Pradesh State Horticultural Produce Marketing and Processing Corporation Limited	1984-85	1.91	2.55	133.50	64
15.	Uttar Pradesh Digitals Limited (subsidiary of Uttar Pradesh State Industrial Development Corporation Limited)	1988-89	0.35	0.71	202.90	68
16.	Vindiyachal Abrasives Limited (Subsidiary of Uttar Pradesh State Mineral Development Corporation Limited)	December 1985 to June 1986	0.00003	0.02	66666.70	79
17.	Ghatampur Sugar Company Limited (Subsidiary of Uttar Pradesh State Sugar Corporation Limited)	1989-90	6.36	8.22	129.30	80
18.	Shreetron India Limited (Subsidiary of Uttar Pradesh Electronics Corporation Limited)	1990-91	1.14	2.69	236.00	86
Total			202.73	427.70	210.97	

1.2.5. In addition there were six companies covered under Section 619B of the Companies Act, 1956, as detailed below out of which only four companies had finalised their accounts for the year 1990-91:

Sl. No.	Name of the Company	Date of incorporation	Year of accounts ending	Paid up capital contributed by				Total	Profit(+)/ Loss(-)
				State Government	Government companies	Corporations	Others		
					(Rupees in crores)				
1.	Almora Magnesite Limited	27th August 1971	31st March 1991	..	1.22	..	0.78	2.00	(+)0.02
2.	Command Area Poultry Development Corporation Limited	5th October 1979	31st March 1991	..	..	0.21	0.03	0.24	(+)0.10
3.	Uttar Pradesh Seeds and Tarai Development Corporation Limited	6th June 1969	31st March 1991	0.69	0.52	0.32*	0.75	2.28	(+)0.19
4.	Uptron Colour Picture Tubes Limited	8th November 1985	31st March 1991	..	17.97	12.87	11.64**	42.48	(-)38.81
5.	Steel and Fasteners Limited	4th October 1962	31st December 1979	..	0.37	0.18	0.35	0.90	(-)0.45
6.	Electronics and Computers India Limited	Not Available	Accounts not finalised since inception						

The accumulated loss in respect of Command Area Poultry Development Corporation Limited amounting to Rs. 0.27 crore had exceeded its paid-up capital of Rs. 0.24 crore.

The accounts of Steel Fasteners Limited for the period from January 1980 to March 1991, that of Electronics and Computers (India) Limited for the period from 1975 to March 1991 were in arrears.

1.2.6. (i) The Companies Act, 1956 empowers the Comptroller and Auditor General of India to issue directives to the Auditors of Government companies in regard to the performance of their functions. In pursuance of the directives so issued, reports of the Company Auditors on the accounts of 14 companies (serial numbers 3, 5, 6, 7, 8, 16, 29, 30, 38, 55, 57, 59, 62 and 73 of Annexure 2) were received during April 1990 to March 1991. Important points noticed in these reports are summarised below:

* Represents shares held by Govind Ballabh Pant University of Agriculture and Technology.
* Includes shares for Rs. 2.19 crores held by Commercial Bank.

Sl. Nature of defects No.	Number of companies where defects were noticed	Reference to serial number of Annexure-2
(1)	(3)	(4)
1. Absence of Accounting Manual	7	5, 7, 8, 29, 55, 57, 59
2. Absence of adequate budgetary system	6	5, 8, 16, 55, 57, 59
3. Internal audit system not commensurate with nature and size of business	3	3, 5, 38
4. Defective/non-maintenance of property/ land/assets register	3	3, 5, 62
5. Absence of system of ascertaining idle time for labour and machinery	8	3, 5, 6, 8, 16, 29, 30, 55
6. Non-fixation/non-observance of maximum re-order level of stores and spares	6	3, 7, 8, 16, 57, 59
7. Non-fixation of norms for man-power	1	8
8. Non-preparation of separate manufacturing account	1	5
9. Absence of uniformity in pricing of stores issued	1	3
10. Absence of uniformity in valuation of inventory	2	16, 38
11. Absence of system for obtaining confirmation from debtors	7	5, 7, 8, 16, 57, 59, 73
12. Non-maintenance of proforma accounts in respect of service units/town slip	2	7, 8
13. Absence of standard costing system	5	3, 7, 29, 30, 55
14. Non-disposal of surplus/obsolete/ unserviceable stores	4	8, 29, 57, 62
15. Non-determination of surplus/obsolete/ unserviceable stores	2	3, 7
16. Absence of project report/norms fixed by the management in respect of construction of raw material	3	7, 16, 55
17. Non-reconciliation/delay in reconciliation of control accounts with general ledger/subsidiary ledgers	5	3, 5, 6, 16, 63
18. Non-vigorous follow-up of debts and advances	3	3, 5, 7
19. Lack of defined accounting policies	1	62
20. Unsatisfactory procedure for write- off, discounts, refunds etc.	4	3, 5, 55, 62
21. Non-determination of surplus/obsolete/ unserviceable stores	2	3, 7
22. Absence/non-observance of purchase procedure	2	3, 38
23. Unsatisfactory system of physical verification of finished/semi-finished goods/stores/share parts/raw materials etc.	6	3, 6, 16, 38, 62, 73
24. Absence of Internal Audit Manual	5	3, 5, 57, 59, 62

(ii) Under Section 619 (4) of the Companies Act, 1956, the Comptroller and Auditor General of India has the right to comment upon or supplement the report of the Statutory Auditors. Under this provision, a review of the annual accounts of Government companies is being conducted in selected cases. Fortyseven accounts relating to 36 companies were selected for such review during the period from January 1991 to October 1991. Out of these 36 companies selected for review, accounts of 4 companies already audited by statutory Auditors underwent revision and the issues pointed out were complied with in the revised accounts. As a result of revision profit and loss of the two companies were reduced by Rs. 0.05 crore and Rs. 2.19 crores, respectively. Where as in case of two other companies there was no effect on their profitability. The effect of the important comments as a result of Audit in respect of remaining 32 companies were as follows:

Details	Number of accounts	Monetary effect (Rupees in crores)
Decrease in profit	1	0.04
Increase in loss	8	38.06
Non-disclosure of material facts	13	--

Some of the major errors and omissions noticed in the course of review of annual accounts of some of these companies, not pointed out by Statutory Auditors, are mentioned below:

A- Gorakhpur Mandal Vikas Nigam Limited (accounts for the year ended 31st March 1984)

Loss for the year was understated by Rs. 2.61 lakhs due to non provision of depreciation on certain fixed assets.

B- U.P. Electronics Corporation Limited (accounts for the year ended 31st March 1990)

1. The profit for the year (before tax) was overstated by Rs. 2.23 lakhs due to excess charging of remuneration of Managing Director, General Manager, and Accounts Officer in the EPP and LTDC Schemes.

2. The profit for the year after tax was overstated by Rs. 1.28 lakhs due to non disclosure of 'provision for income tax for the year' in the profit and loss Accounts.

C- U.P. Alparthak Evam Laghu Jal Vidyut Nigam Limited
(accounts for the year ended 31st March 1988)

Instead of preparing a profit and loss account as required under section 210 of the Companies Act, 1956, the Company prepared "The statement of incidental expenditure during construction period."

D- U.P. Scheduled Castes Finance and Development Corporation Limited (accounts for the year ended 31st March 1987)

Loans and Advances were overstated by Rs. 17.79 lakhs due to non-adjustment of undisbursed amount.

E- U.P. State Brassware Corporation Limited (accounts for the year ended 31st March 1988)

Loss for the year was understated by Rs. 1.85 lakhs due to under provision of Bonus Rs. 1.09 lakhs and non provision of sales tax for 1985-86 Rs. 0.76 lakh.

F- Uttar Pradesh Small Industries Corporation Limited
(accounts for the year ended 31st March 1988)

1. Under the scheme of Package Assistance programme for Educated Unemployed introduced by the Government of India (July 1972) for assisting educated unemployed, the State Government released Rs. 35 lakhs in January 1973 and Rs. 35 lakhs in March 1973. One third of the fund was released as grant and the balance as loan to be advanced to assisted units at interest rate of 8.5 per cent per annum. For implementation of the scheme the Company also raised during 1974-75 bridging loan of Rs. 31.50 lakhs from Indian Overseas Bank and Rs. 31.50 lakhs from Bank of Baroda for construction of industrial sheds at Amausi (Lucknow) and Rs. 26 lakhs from State Bank of India for construction of industrial sheds at Ranipur (Hardwar). Neither the assets created out of the grants and loans mentioned above nor the bridging loan of Rs. 89 lakhs had been brought to accounts upto 1984-85.

Consequent upon directive received from the State Government, the Company started accounting for transactions pertaining to the scheme from 1985-86 leaving the transactions (income/ expenditure and assets/liabilities) upto 1984-85 unaccounted for.

2. Against land acquired on lease for Rs. 10.86 lakhs, sum of Rs. 2.24 lakhs was being shown under the head "Land (Leasehold)" resulting in under statement of fixed assets and sundry creditors each by Rs. 8.62 lakhs.

3. Interest accrued but not due on loan: Rs. 8.02 lakhs was understated by Rs. 4.01 lakhs due to non-provision of claim of interest by Uttar Pradesh State Industrial Development Corporation Limited (UPSIDC) on premium payable for lease acquired by the Company in October 1976. A contingent liability for Rs. 1.28 lakhs on account of claim made by the UPSIDC for interest on the unpaid amount of interest (Rs. 4.01 lakhs) was also not disclosed in the accounts.

4. The deprecation (Rs. 9.08 lakhs) as well as accumulated loss (Rs. 105.19 lakhs) was understated by Rs. 2.57 lakhs on account of non-provision of depreciation amounting Rs. 2.57 lakhs (including Rs. 1.35 lakhs for previous year) on industrial sheds let out by the Company.

G- U.P. State Sugar Corporation Limited (accounts of the period ended 31st March 1989)

Accumulated loss (Rs. 19170.15) lakhs was understated by Rs. 1756.62 lakhs due to non-provision of accrued liability for future payment of gratuity.

1.3. Statutory corporations - General aspects

1.3.1. There are four Statutory corporations in the State as on 31st March 1991, viz.,

- Uttar Pradesh State Electricity Board;
- Uttar Pradesh State Road Transport Corporation;

- Uttar Pradesh Financial Corporation; and
- Uttar Pradesh State Warehousing Corporation.

1.3.2. The Uttar Pradesh State Electricity Board was constituted on 1st April 1958 under Section 5(1) of the Electricity (Supply) Act, 1948 and Uttar Pradesh State Road Transport Corporation was constituted on 1st June 1972 under Section 33 of the Road Transport Corporations Act, 1950.

Under respective Acts, the audit of these organisations vests solely with the Comptroller and Auditor General of India. The separate Audit Reports, mainly incorporating the comments on annual accounts of each year, are issued separately to the organisations and Government.

The preparation of accounts of the Board for the year 1990-91 is in arrear. The accounts of the Board for the year 1989-90 were received in August 1991 and the separate Audit Report was under finalisation (December 1991). The separate Audit Report on the accounts of the Board for the year 1988-89 was issued to the Government in August 1991 but the same had not been presented to the Legislature so far (December 1991).

The separate Audit Reports on the accounts of the Uttar Pradesh State Road Transport Corporation for the year 1988-89 and 1989-90 had been issued to Government in June 1991 and October 1991, respectively, but the same had not been presented to the State Legislature so far (December 1991). The accounts for the year 1990-91, received in November 1991, were in process of audit (December 1991).

1.3.3. The Uttar Pradesh Financial Corporation was constituted on 1st November 1954 under Section 3(1) of the State Financial Corporations Act, 1951. The Uttar Pradesh State Warehousing Corporation was constituted on 19th March 1958 under Section 18(1) of the Warehousing Corporation Act, 1962.

Under respective Acts, the accounts of these corporations, are audited by the Chartered Accountants appointed by the State Government in consultation with the Comptroller and Auditor General of India and latter may also undertake audit of the accounts of these corporations separately. Separate Audit Reports in respect of these corporations are also issued by the Comptroller and Auditor General of India.

The separate Audit Reports on the accounts of Uttar Pradesh Financial Corporation for the year 1987-88 and 1988-89 were issued to the Government in February 1991. The separate Audit Report for the year 1989-90 was sent to the Government in November 1991 and same had not yet been presented to the State Legislature (December 1991). The draft separate Audit Report for the year 1990-91 had been issued to Corporation in November 1991, the replies had not been received so far (December 1991).

The Audit Report on the accounts of Uttar Pradesh State Warehousing Corporation for the year 1986-87 was issued to the Corporation in May 1991. The accounts for the year 1987-88 were received in November 1991 and Audit Report thereon was under finalisation (December 1991).

1.3.4. The working results of these Statutory corporations for the latest year for which accounts have been prepared are summarised in Annexure IV.

Some salient points on the accounts and physical performance of these corporations are given in paragraphs 1.4. to 1.7.

1.4. Uttar Pradesh State Electricity Board

1.4.1. The capital requirements of the Board are provided in the form of loans from Government, public, banks and other financial institutions. The aggregate long-term loans (including loan from Government) obtained by the Board were Rs. 7327.32 crores at the end of 31st March 1991 and total

loans outstanding on 31st March 1991 were Rs. 6937.49 crores showing an increase of Rs. 841.95 crores compared to Rs. 6095.54 crores outstanding on 31st March 1990. Particulars of loans outstanding as on 31st March 1990 and of 1991 are as follows:

Source	Amounts outstanding as on		Percentage increase
	1990	1991	
	(Rupees in crores)		
1. State Government	4404.65	5126.29	16.38
2. Other sources	1690.89	1811.20	7.12
3. Total	6095.54	6937.49*	13.81

Government has guaranteed the repayment of loans raised by the Board and payment of interest thereon to the extent of Rs. 3007.08 crores. The amount of principal guaranteed and outstanding as on 31st March 1991 was Rs. 1377.09 crores.

1.4.2. The financial position of the Board at the end of each of the three years up to 31st March 1990 is given below:

	1987-88	1988-89	1989-90 (Provisional)
	(Rupees in crores)		
A Liabilities			
Long term loans from:			
(a) Government	3898.75	4076.15	4404.65
(b) Other sources	1195.79	1427.96	1690.89
Reserve and surplus	354.75	321.24	409.76
Current liabilities	748.79	1482.53	2405.18
Total A	6198.08	7303.88	8910.48
B Assets			
Fixed assets	3643.51	4953.13	5431.64
Less- Depreciation	845.72	953.36	1101.04
Less- Consumers contribution	230.15	274.58	336.81
Net fixed assets	2567.64	3725.19	3993.79
Capital work on progress	2010.10	1408.90	1766.52
Current assets including investments	827.62	1498.87	2503.62
Miscellaneous expenditure not written off	38.77	40.17	53.97
Accumulated losses	753.95	634.75	592.58
Total B	6198.08	7307.88	8910.48
C Capital employed*	2646.47	3741.53	4092.23
D Capital invested*	5094.58	5504.14	6095.58

* Figures as per Finance Accounts is Rs. 5089.92 crores, the difference is under reconciliation.

* Capital employed represents net fixed assets plus working capital.

* Capital invested represents long terms loans plus free reserves.

1.4.3. The working results of the Board for the three years up to 1989-90 are summarised below:

Particulars	1987-88	1988-89	1989-90 (Provisional)
	(Rupees in crores)		
1. (a) Revenue Receipts	977.52	1123.51	1338.36
(b) Subsidy from Government	424.70	439.30	512.60
Total	1402.22	1562.81	1850.96
2. Revenue expenditure	820.67	1092.17	1243.52
3. Gross surplus (1-2)	581.55	470.64	607.44
4. Appropriation			
(a) Depreciation	95.20	107.45	147.69
(b) Interest on			
- Government loans	279.81	306.62	329.48
- Other loans and bonds	156.72	211.07	259.55
(c) Write off of intangible assets	1.01	0.81	0.65
Total	532.74	625.95	737.37
5. Net surplus (+)/ Deficit (-) (3-4)	(+) 48.81	(-) 155.31	(-) 129.93
6. Total return on capital employed and capital invested	485.34	362.38	459.10
7. Percentage of return on:			
(a) Capital employed	18.3	9.7	11.2
(b) Capital invested	9.5	6.6	7.5

1.4.4. The following table indicates the operational performance of the Board for the three years up to 1989-90:

	1987-88	1988-89	1989-90 (Provisional)
	(MW)		
(1)	(2)	(3)	(4)
1. Installed Capacity			
(a) Thermal	3438.50	3534.50	3644.00
(b) Hydel	1422.35	1422.35	1432.35
Total	4860.85	4954.35	5076.35
2. Power generated		(In Mkw)	
(i) Thermal	11884.000	13948.500	13484.000
(ii) Hydel	4707.000	5736.600	5083.000
Total	16591.000	18685.100	18567.000
3. Less Auxiliary Consumption	1320.000	1558.600	1557.000
4. Net power generated	15271.000	17126.500	17010.00
5. Power purchased	4516.000	4743.500	7440.000
6. Total power available for sale (4+5)	19787.000	21870.000	24450.000
7. Power sold	14480.000	16085.000	18069.000
8. Transmission and distribution loss	5307.000	5785.000	6381.000
9. Unit generated per KW of installed capacity	3413.0	3770.0	3657.5
		(In number)	

(1)	(2)	(3)	(4)
		(In percentage)	
10. Load factor	43.2	54.3	49.0
11. Percentage of generation to installed capacity	38.96	43.3	41.8
		(Percentage)	
12. Percentage of transmission and distribution losses	26.82	26.5	26.1
		(Number)	
13. Villages/towns electrified at the end of year	75749	78526	80358
14. Pump sets/Wells energised at the end of year	564412	587717	606362
		(MW)	
15. Connected load	7948	8452	9337
		(In lakhs)	
16. Number of consumers	31.56	34.57	38.69
		(Number)	
17. Number of employees	117416	118662	111245
		(Mkwh)	
18. Break-up of sale of energy according to categories of consumers			
(a) Agriculture	5869	6022	7230
(b) Industrial	4776	5280	5740
(c) Commercial	813	1249	964
(d) Domestic	1813	2097	2828
(e) Others	1209	1437	1307
		(Paise)	
19. (a) Revenue per Kwh (excluding subsidy)	66.33	68.43	72.56
(b) Expenditure per Kwh	63.32	74.67	77.03
(c) Profit(+)/Loss(-) per Kwh	(+) 3.01	(-) 6.24	(-) 4.47

1.5. Uttar Pradesh State Road Transport Corporation

1.5.1. As on 31st March 1991, the capital of the Corporation was Rs. 250.04 crores (Rs. 191.48 crores contributed by the State Government and Rs. 58.56 crores by the Central Government) as against Rs. 226.26 crores as on 31st March 1990 (Rs. 167.70 crores contributed by the State Government and Rs. 58.56 crores by the Central Government). Interest was payable on capital contribution at 6.25 per cent. As at the end of March 1991, interest amounting to Rs. 36.59 crores on capital and loans was payable to Central Government (Rs. 7.04 crores) and the State Government (Rs. 29.55 crores).

In addition, the Corporation owed loans amounting to Rs. 4.57 crores to State Government as on 31st March 1991. The

State Government had also given guarantees for repayment of loans raised by the Corporation from other sources and payment of interest thereon. As on 31st March 1991 the amount of such guarantees and loans outstanding there against were Rs. 60.13* crores and Rs. 28.61* crores respectively.

1.5.2. The financial position of the Corporation at the end of each of the three years up to 31st March 1991 is given below:

	1988-89	1989-90	1990-91 (Provisional)
	(Rupees in crores)		
(A) Liabilities			
Capital	201.26	226.26	250.04
Reserves and surplus	2.25	2.28	2.52
Borrowings	86.58	90.10	89.41
Trade dues and other current liabilities	121.07	89.55	91.36
Total- A	411.16	408.19	433.33
(B) Assets			
Gross Block	316.09	359.89	372.27
Less: Depreciation	172.16	205.53	231.74
Net fixed Assets	143.93	154.36	140.53
Capital work-in-progress	7.03	1.91	3.83
Investments	0.80	0.80	0.80
Current Assets, Loans and Advances	117.68	84.66	57.68
Accumulated losses	141.72	166.46	230.49
Total- B	411.16	408.19	433.33
(C) Capital employed*	140.54	151.77	109.39
(D) Capital invested**	220.53	250.06	279.25

The working results of the Corporation for the three years up to 1990-91 are summarised below:

Particulars	1988-89	1989-90	1990-91 (Provisional)
(1)	(2)	(3)	(4)
	(Rupees in crores)		
Total revenue	249.33	279.66	308.83
Total Expenditure:			
(a) Other than interest	250.32	285.01	328.28
(b) Interest	16.58	19.40	20.96
Total	266.90	304.41	349.24

* The figure as per Finance Accounts in respect of total amount guaranteed and total outstanding were Rs. 113.43 crores and Rs. 14.52 crores; the difference of Rs. 53.30 crores and Rs. 14.09 crores were under reconciliation.

* Capital employed represents net fixed assets plus working capital.

** Capital invested represents paid-up capital plus long-term loans plus free reserves.

(1)	(2)	(3)	(4)
Net Profit(+)/Loss(-)	(-) 17.57	(-) 24.75	(-) 40.41
Total return on:			
(a) Capital employed	(-) 0.99	(-) 5.35	(-) 19.45
(b) Capital Invested	(-) 0.99	(-) 5.35	(-) 19.45
Percentage of total return on:			
(a) Capital employed	(-) 0.70	(-) 3.52	(-) 17.78
(b) Capital invested	(-) 0.40	(-) 2.10	(-) 6.96

1.5.3. The table below indicates the operational performance of the Corporation during the three years up to 1990-91:

Particulars	1988-89	1989-90	1990-91 (Provisional)
Average number of vehicles held (effective fleet)	7545	7987	8205
Average number of vehicles on road*	6676	7094	7263
Percentage of utilisation	88	89	89
Kilometers covered (in lakhs)			
- Gross	6226	6706	6320
- Effective	6061	6508	6138
- Dead	165	198	182
Percentage of dead kilometers to gross kilometers	2.65	2.95	2.88
Average kilometers covered per bus per day	248	250	231
Average revenue per kilometers (Paise)	411	426	503
Average expenditure per kilometers (paise)	440	487	569
Profit (+)/Loss (-) per kilometers (Paise)	(-) 29	(-) 61	(-) 66
Total route kilometers (in lakhs)	4.62	4.80	4.73
Number of operating Depots.	106	105	105
Average number of break-downs per lakh kilometers	0.03	0.03	0.03
Average number of accidents per lakh kilometers	0.15	0.23	0.22
Passenger kilometers			
- Scheduled (in lakhs)	326322	350261	330572
- Operated (in lakhs)	208846	321172	224789
Occupancy Ratio (Per cent)	64	66	68

1.6. Uttar Pradesh Financial Corporation

1.6.1. The paid-up capital of the Corporation as on 31st March 1991 was Rs. 80.10 crores (State Government: Rs. 46.75 crores; Industrial Development Bank of India: Rs. 31.35 crores and others: Rs. 2.00 corers), as against Rs. 70.30

* Vehicles include Buses, Taxies and Trucks.

crores as on 31st March 1990 (State Government: Rs. 37.85 crores, Industrial Development Bank of India: Rs. 30.45 crores and others: Rs. 2.00 crores).

1.6.2. Government has guaranteed repayment of share capital of Rs. 9.65 crores under Section 6(1) of the State Financial Corporations Act, 1951 and payment of minimum dividend thereon at the rate of 3.5 per cent. During the year 1990-91 the Corporation's total income was Rs. 66.16 crores and revenue expenditure was Rs. 64.86 crores. Thus, there was a profit of Rs. 1.30 crores before tax and Rs. 0.82 crore after provision of tax.

After making provision of Rs. 0.82 crore for various reserves, no surplus was available for payment of dividend.

Government has also guaranteed repayment of market loans (through bonds and debentures) of Rs. 256.03 crores raised by the Corporation. The entire amount of principal thereagainst was outstanding on 31st March 1991.

1.6.3. The financial position of the Corporation at the end of each of the three years up to 1990-91 is given below:

	1988-89	1989-90	1990-91
	(Rupees in crores)		
(1)	(2)	(3)	(4)
(A) Liabilities			
Paid-up capital	50.46	70.30	80.10
Reserves and surplus	13.63	15.00	15.81
Borrowings:			
(i) Bonds and debentures	170.68	207.85	256.03
(ii) Others*	354.94	401.83	441.95
Other liabilities	11.22	11.89	12.02
Total-A	600.93	706.87	805.91
(B) Assets			
Cash and Bank balance	29.53	22.88	65.90
Investments	0.35	0.32	0.32

* Includes loans in lieu of share capital Rs. 39.05 crores in 1988-89, Rs. 26.80 crores in 1989-90 and Rs. 25.00 crores in 1990-91.

(1)	(2)	(3)	(4)
Loans and Advances**	551.30	654.42	720.13
Net fixed assets	2.42	2.48	3.08
Dividend deficit	..	..	..
Other assets	17.33	26.77	16.48
Total-B	600.93	706.87	805.91
(C) Capital employed&	534.12	642.35	744.44
(D) Capital invested&&	589.71	694.98	793.89

1.6.4. The following table gives details of the working results of the Corporation for the three years up to 1990-91:

Particulars	1988-89	1989-90	1990-91
	(Rupees in crores)		
Income			
(a) Interest on loans and advances	52.68	58.35	64.86
(b) Other income	1.44	1.50	1.30
Total	54.12	59.85	66.16
Expenditure			
(a) Interest on long-term loans	43.35	48.20	56.61
(b) Other expenses	7.77	8.57	8.25
Total	51.12	56.77	64.86
Profit before tax	3.00	3.08	1.30
Provision for tax	1.50	1.71	0.48
Profit after tax	1.50	1.37	0.82
Other appropriation	1.48	1.38	0.82
Amount available for dividend	0.02	..	..
Dividend payable	..	..	..
Total return on:			
(a) Capital employed	46.35	51.28	57.91
(b) Capital invested	46.37	51.28	57.91
	(Per cent)		
Percentage of return on			
(a) Capital employed	8.7	8.0	7.8
(b) Capital invested	7.9	7.4	7.3

The table given below indicates the position regarding receipts and disposal of applications for loans during three years up to 1990-91:

** Excluding bridging loan against capital subsidy to the extent of Rs. 6.61 crores in 1988-89, Rs. 14.31 crores in 1989-90 and Rs. 2.47 crores in 1990-91.

& Capital employed represents the mean of the aggregate of opening and closing balance of paid-up capital, bonds and debentures, reserves borrowings (including refinance) and deposits.

&& Capital invested represents paid-up capital plus long term and plus free reserves at the close of the year.

Particulars	1988-89		1989-90		1990-91	
	Number	Amount	Number	Amount	Number	Amount
				(Rupees in crores)		
Applications pending at the beginning of the year	284	27.76	260	27.37	423	64.86
Application received	2646	244.33	2802	328.95	2391	306.82
Total (1+2)	2930	272.09	3062	356.32	2814	371.68
Application sanctioned	2215	182.15	2050	186.50	1901	199.69
Application cancelled/withdrawn/rejected/reduced	455	62.57	589	105.96	636	139.41
Applications pending at the close of the year	260	27.37	423	64.86	277	32.58
Loans disbursed	2053	142.78	1572	152.77	1323	121.66
Amount outstanding at the close of the year	--	551.30	--	654.43	--	720.13
Amount overdue for recovery at the close of the year:						
(a) Principal	--	44.45	--	40.27	--	53.20
(b) Interest	--	70.48	--	78.68	--	89.59
		-----		-----		-----
		114.93		127.93		142.79
		-----		-----		-----
Amount involved in Recovery Certificate cases		58.67		65.59		87.92
Total		173.80		193.52		210.71
Percentage of default to total loans outstanding	--	31.5	--	29.6	--	29.3

As may be seen from the table given above, out of outstanding loans of Rs. 720.13 crores from loanees as on 31st March 1991, an amount of Rs. 210.71 crores (including interest of Rs. 89.59 crores) was overdue for recovery. The percentage of overdue amount to the total outstanding has varied from 31.5 in 1988-89 to 29.6 in 1989-90 and to 29.3 in 1990-91.

Age-wise analysis of the overdue loans has not been done by the Corporation.

The data of investment in sick and closed units were not available.

The Corporation has made cumulative provision of Rs. 2.95 crores towards doubtful debts up to 31st March 1991. Besides, the Corporation has written off Rs. 2.98 crores as

bad debts during 1988-89 (Rs. 1.22 crores), 1989-90 (Rs. 1.56 crores) and 1990-91 (Rs. 0.20 crore).

1.7. Uttar Pradesh State Warehousing Corporation

1.7.1. The paid-up capital of the Corporation as on 31st March, 1990 was Rs. 6.21 crores (State Government Rs. 3.48 crores and Central Warehousing Corporation Rs. 2.73 crores) and on 31st March, 1991 was Rs. 7.41 crores (State Government Rs. 4.43 crores and Central Warehousing Corporation Rs. 2.98 crores).

1.7.2. The table below gives particulars of guarantees given by Government for repayment of loans raised by the corporation and payment of interest thereon:

Particulars	Year of guarantee	Amounts guaranteed	Amount outstanding as on 31st March 1989		
			Principal	Interest	Total
(Rupees in crores)					
1. Loan from State Bank of India, Lucknow	1976 1981	3.50 8.19	3.98	0.52	4.50
2. Loan from Land Development Bank	1986-87 1987-88 1989-90	1.05 0.85 0.90	1.73	0.18	1.91

1.7.3. The financial position of the Corporation at the end of each of the three years up to 31st March, 1989 is given below:

	1986-87	1987-88	1988-89 (Provisional)
	(Rs. in crores)		
(1)	(2)	(3)	(4)
(A) Liabilities			
Paid-up capital	5.62	5.72	5.97
Reserve and surplus	10.83	13.78	13.75
Borrowings	7.26	6.67	6.46
Trade dues and other current liabilities	6.28	6.85	8.14
Total-A	29.99	33.02	34.32
(B) Assets			
Gross block	22.27	23.56	28.69
Less depreciation	5.86	6.71	7.77

(1)	(2)	(3)	(4)
Net fixed assets	16.41	16.85	20.92
Capital work in progress	0.04	2.53	1.07
Current assets loans & advances	13.44	13.56	12.28
Miscellaneous expenditure	0.10	0.08	0.05
Total-B	29.99	33.02	34.32
(C) Capital employed	23.61	26.09	26.13
(D) Capital invested	23.71	26.17	26.18

1.7.4. The working results of the Corporation for the three years up to 1988-89 are summarised below:

	1986-87	1987-88	1988-89 (Provisional)
	(Rs. in crores)		
Income			
(a) Warehousing charges	9.23	10.80	8.82
(b) Other income	0.25	0.29	0.28
Total	9.48	11.09	9.10
Expenses			
(a) Establishment charges	3.81	4.49	5.15
(b) Interest	0.84	0.77	0.82
(c) Other expenses	3.37	3.58	2.98
Total	8.02	8.84	8.95
Net profit for the year	1.46	2.25	0.15
Add (+) Reduce (-) prior	(-) 0.68	(+) 0.48	(-) 0.20
Period adjustment			
Profit before tax	0.78	2.73	(-) 0.05
Provision for tax	..	..	..
Other appropriations	..	..	..
Amount available for dividend	0.78	2.73	..
Transfer from general reserve	..	..	..
Proposed dividend	0.29	0.29	..
Total return on:			
(a) Capital employed	1.62	3.50	0.77
(b) Capital invested	1.62	3.50	0.77
Rate of return on:			
(a) Capital employed	6.86	13.42	2.95
(b) Capital invested	6.83	13.37	2.94

1.7.5. The physical performance of the Corporation for the three years up to 1990-91 is summarised below:

Particulars	1988-89	1989-90	1990-91
Number of stations covered	164	168	151
Storage capacity created up to the end of the year :-			
	(Tonnes in lakhs)		
(a) Owned-	10.41	10.54	10.66
(b) Hired-	3.32	3.38	3.00
	-----	-----	-----
Total	13.73	13.92	13.66
	-----	-----	-----
Average capacity utilised	9.21	7.92	7.42
Percentage of utilisation	67.08	56.90	54.32
	(Rupees per tonne)		
Average Revenue	93.21	110.95	107.78
Average expenses	78.14	99.37	119.03
Average net earning	15.07	11.58	(-) 11.25

CHAPTER II

REVIEWS RELATING TO GOVERNMENT COMPANIES

SECTION 2A PROCUREMENT AND UTILISATION OF MATERIALS AND
MACHINES IN UTTAR PRADESH RAJKIYA NIRMAN NIGAM
LIMITED

SECTION 2B DEVELOPMENT OF INDUSTRIAL AREAS BY UTTAR
PRADESH STATE INDUSTRIAL DEVELOPMENT
CORPORATION LIMITED

SECTION 2A

PROCUREMENT AND UTILISATION OF MATERIALS AND MACHINES IN UTTAR PRADESH RAJKIYA NIRMAN NIGAM LIMITED

Highlights

Uttar Pradesh Rajkiya Nirman Nigam Limited was incorporated in May 1975 to serve as an agency for speedy execution of works at reasonable rates and replacing private contractors.

Purchase Committees comprising unit head, Subordinate Engineer and a representative of Accounts Branch is vested with full powers to procure materials. However, the prescribed procedure of conducting market survey by visiting quarries, kilns, dumps and depots etc. was not followed with a view to ensuring cost control.

Eighteen units of the Company incurred an extra expenditure of Rs. 99.16 lakhs on purchase of steel from re-rollers and dealers instead of the primary producers - Steel Authority of India Limited and Tata Iron and Steel Company Limited.

An extra expenditure of Rs. 51.63 lakhs was incurred on purchase of bricks, sand, stone grit, electrical, sanitary and other items from dealers/ middlemen as compared with quarry rates/UP PWD rates/rates allowed by other sister units or sister organisations.

Utilisation of higher class bricks (M 150) in place of lower class bricks (M 75) stipulated in work agreements resulted in an extra expenditure of Rs. 30.40 lakhs, which could not be recovered from the clients in the absence of any provision in the agreements.

The Company purchased materials at rates higher than the rates on which contracts were entered into, resulting in an extra expenditure of Rs. 61.72 lakhs which could not be

recovered from the clients in the absence of enabling clause in the contracts.

Structural Centre of the Company at Naini (Allahabad) fabricated steel structures valuing Rs. 51.24 lakhs to Rs. 63.05 lakhs annually as against a targeted turnover of Rs. 120 lakhs per annum during 1985-86 to 1989-90. As a result, 15 units purchased steel structures valuing Rs. 341.61 lakhs from private parties. Had the steel structures been fabricated by the Centre, it could have saved Rs. 61.64 lakhs including Rs. 30.58 lakhs towards sales tax.

According to the provisions of the Working Manual of the Company, units were required to submit consumption statements of materials of the completed works to head office of the Company. Out of 526 works completed by the units up to December 1990, consumption statements in respect of 154 works only had been submitted to the head office. No action was taken against the defaulting units.

As compared to the Central Public Works Department norms for consumption of material, excess materials valuing Rs. 221.41 lakhs were consumed in 52 works executed by the different units for which no action had been taken by the Company to fix responsibility.

Materials valuing Rs. 135.14 lakhs were consumed in excess of sanctioned estimates in 13 works by 11 units without the approval of the clients.

Excess consumption of cement, sand and bricks due to extra thickness of ceiling plaster, higher bulkage in sand and excessive breakage of bricks resulted in a loss of Rs. 17.75 lakhs to the Company.

In the case of works involving supply of material by clients, the relevant contracts stipulated the consumptions norms and consumption, if any, in excess of the norms entailed recovery from the Company at double the normal rates of recovery. In three works executed by the Company during

the period from 1984-85 to 1990-91, the Company incurred a liability of Rs. 52.01 lakhs on account of excess consumptions of materials provided by the clients.

Norms of requirement and utilisation of shuttering material were not fixed by the Company. However, 19 unit procured 0.68 lakh square metres of shuttering material for a shuttered area of 2.48 lakh square metres during 1988-89 to 1990-91 against the requirement of 0.33 lakh square metres, resulting in excess procurement of 0.35 lakh square metres and locking up Company's funds to the extent of Rs. 140.10 lakhs.

Tower cranes, batching plants, transit mixers and truck chasis valuing Rs. 115.94 lakhs remained unutilised since their purchase during February 1988 to January 1990 and the Company had to incur an avoidable expenditure of Rs. 29.40 lakhs on interest paid on loans borrowed for their procurement.

There were surplus/slow moving materials valuing Rs. 90.67 lakhs in 10 units at the end of March 1991.

Cases of shortage of materials valuing Rs. 39.22 lakhs outstanding against sub-engineers were neither investigated to fix responsibility nor was recovery effected.

2A.1. Introduction

The Uttar Pradesh Rajkiya Nirman Nigam Limited was incorporated on 1st May 1975 as a wholly owned Government Company, with a view to:

- (i) serve as an agency for speedy execution of works at reasonable rates and replacing private contractors, and
- (ii) augment the financial resources through loans from Commercial banks, financial institutions, etc.

2A.2. Object

The main objects of the Company are to:

- carry out construction, maintenance and improvement of roads and buildings, barrages, dams and aqueducts, bridges, culverts, etc;
- manufacture, buy, sell, install, work, alter, improve, manipulate or otherwise deal in all kinds of building materials, equipments, tools and machinery connected with the construction of roads and buildings of all kinds; and
- purchase, take on lease or otherwise takeover any roads and buildings owned by the State Government for the purpose of construction, maintenance or management thereof.

2A.3. Organisational set-up

The management of the Company is vested in a Board of Directors consisting of a part time Chairman, a whole time Managing Director and nine other part time directors appointed by the State Government.

In day-to-day administration the Managing Director is assisted by the Secretary, Financial Advisor and two General Managers at Headquarters and eight General Managers with headquarters at Lucknow (4), Allahabad (1), Bareilly (1), Dehradun (1) and New Delhi (1) for supervision of field units headed by Project Managers.

2A.4. Sources and uses of funds

As on 31st March 1991, the Company had paid-up capital of Rs. 100 lakhs subscribed by State Government.

The table below indicates the sources of funds generated and utilisation by the Company during the five years up to 1989-90.

I Sources	1985-86	1986-87	1987-88	1988-89	1989-90 (Provisional)
-----------	---------	---------	---------	---------	--------------------------

(Rupees in lakhs)

(a) Internal

Reserves and surplus	166.77	505.27	136.09	396.83	140.11
Depreciation	44.83	121.23	283.50	161.42	137.48
Provision	295.50	239.50	253.77	296.21	190.45
	-----	-----	-----	-----	-----
Total (a)	507.10	866.00	673.36	854.46	468.04

(b) External

Liabilities	165.28	585.43	571.85	(-) 625.07	689.61
Borrowings	(-) 92.34	(-) 6.05	53.24	(-) 55.73	91.13
	-----	-----	-----	-----	-----
Total (b)	72.94	579.38	625.09	(-) 680.80	780.74
Total I	580.04	1445.38	1298.45	173.66	1248.78

II Utilisation

Fixed Assets	76.91	301.72	189.28	274.78	300.04
Works-in-progress	0.36	37.39	76.26	(-) 114.01	..
Current Assets	502.77	1102.55	1032.91	12.89	948.74
Deferred Revenue	..	3.72	..	..	..
Expenditure	-----	-----	-----	-----	-----
Total II	580.04	1445.38	1298.45	173.66	1248.78

The current assets included Rs. 437.05 lakhs to Rs. 626.19 lakhs invested in term deposit with banks during 1985-86 to 1989-90 at interest of 6 to 10 *per cent* per annum. On the other hand, the Company paid interest of Rs. 7.91 lakhs during 1985-86 to 1989-90 at 18 *per cent* per annum to Hindustan Cables Limited (Rs. 4.40 lakhs) and National Hydro-electric Power Corporation Limited (NHPC) (Rs. 3.51 lakhs) on their mobilisation advances given to the Company for construction of cable factory buildings at Naini (Allahabad) and residential and non-residential buildings at Banbasa (Nainital) respectively. Had the Company used its own funds invested in term deposit instead of taking mobilisation advances, it could have saved at-least Rs. 3.52 lakhs being the difference between the interest paid at 18 *per cent* and the interest earned at 10 *per cent*.

2A.5. Scope of Audit

The working of the Company including material management and inventory control was last reviewed in the Report of the Comptroller and Auditor General of India for the year 1978-79

(Commercial)). This Report had been discussed by the Joint Committee on Public Undertakings and Corporations and its recommendations were presented to the State Legislature in September 1989 through nineteenth Report of the Committee. The present review contains the results of test audit carried out during March to September 1991 in respect of procurement and utilisation of materials and machines relating to the works executed by 40 units out of 90 units (as on 31st March 1991) of the Company for an aggregate value of Rs. 306.89 crores during five years up to 1990-91.

2A.6. Procurement of materials

2A.6.1. Purchase procedure

The Company in April 1984 framed and enforced a Working Manual (Manual) under which the system of inviting competitive tenders and quotations was discarded, and a Purchase Committee in each unit, consisting of the unit head, senior-most accountsman and Resident Engineer/Assistant Resident Engineer/ Sub-Engineer, was vested with full powers without any financial limit to procure materials on the basis of market survey in accordance with the procedure laid down in paragraphs 96 to 120 *ibid*.

The proceedings of the Purchase Committee were required to be recorded by the accounts member of the Committee in the prescribed register in Form No. 21- Purchase Committee Report (PCR) which, *inter alia* provided for quantity of material proposed to be procured, name(s) of the member(s) authorised to conduct market surveys, and names of places, markets, quarries, dumps, etc. to be visited. The Purchase Committee was also required to do a cost control exercise in PCR to see that the cost of the works done with the materials proposed to be purchased provided for at least a margin of 15 *per cent* in case of works to be done on 'cost plus' basis and 18 *per cent* in case of item-rate contracts. Mere submission of written quotations or offers was required to be discarded unless it was certified that the place(s) selected by the

Purchase Committee was visited by the member(s) personally giving date and time of their visit.

The table given below indicates the value of the materials purchased, materials consumed and works done during five years up to 1989-90:

	1985-86	1986-87	1987-88	1988-89 (Provl)	1989-90 (Provl)
	(Rupees in crores)				
Materials purchased	47.52	55.19	51.51	50.90	54.08
Materials Consumed	46.70	55.32	51.48	49.41	52.49
Works done	72.43	88.75	84.60	79.51	85.82

A test check in audit revealed that the system and the procedure laid down in the Manual had not been followed as discussed below:

2A.6.2. Irregular purchases

(a) A Joint Purchase Committee (JPC) for all the units at Lucknow numbering 25 including 6 units for works at Sanjay Gandhi Post Graduate Institute of Medical Sciences, Lucknow (SGPGI) was formed which decided rates of materials on the basis of market survey done by one or two Project Managers and recorded in the minutes of the meeting prepared on plain papers instead of in prescribed form. The value of materials purchased during 1984-85 to 1990-91 by 8 units of Lucknow test checked in audit on the basis of rates approved by JPC amounted to Rs. 61.82 crores approximately. Neither the Financial Advisor nor his representative was associated with the proceedings of JPC. The prescribed procedure of collecting quotations, recording the required details and conducting cost control exercise were also not followed by JPC. Even the constitutions of JPC was against the provisions of the Manual.

(b) Requirements of materials and cost control exercise/analysis of rates were not recorded in PCRs of all the 40 units test checked in audit.

(c) PCRs of Faizabad unit did not contain date of meeting, Accountant's signature and other required details in respect of materials purchased for Rs. 2 crores during 1988-89 to 1990-91. PCRs in respect of materials for Rs. 8.12 lakhs purchased and paid for during June to September 1989 were prepared in February and May 1990.

(d) Unit II, Lucknow purchased during 1988-89 to 1990-91 building materials for Rs. 14.59 lakhs on cash payment basis. Besides, Rs. 8.97 lakhs were advanced during January 1990 to March 1991 to three Sub-engineers for making purchases on cash payment basis. This contravened the provisions of para 653 of the Manual under which payments for more than Rs. 500 were to be made through cheques/drafts only.

(e) Para 98 of the Manual permitted purchases at a time, of cement and steel up to 6 months' requirements and of other materials up to 3 months' requirements. 11 units of the Company purchased in piecemeal building materials (sand, stone grit, bricks, etc.) during rainy season (July to September) in 1987 to 1990 when rates were higher than those prevailing before onset of monsoons, which resulted in an extra expenditure of Rs. 8.14 lakhs.

(f) Building material valuing Rs. 7.07 lakhs were purchased for construction of Pant Institute, Jhusi (Allahabad) during May 1986 to February 1987 without any market survey/quotation.

(g) PCRs did not indicate whether these were examined or reviewed by General Managers, Financial Advisor and Controller of Accounts during their visits/inspections as required under the provisions of paras 241 and 242 of the Manual.

2A.6.3. Procurement of steel

Steel Authority of India Limited (SAIL) and Tata Iron and Steel Company Limited (TISCO) were the primary producers of steel having their stock yards in the State at Allahabad, Agra, Ghaziabad, Kanpur and Lucknow. For procurement of steel from them, quarterly demands of steel were required to be registered with the stock yards by units falling within their respective areas together with requisite earnest money. Quarterly demands were, however, not registered by 20 units test checked in audit, and the stock yards were contacted occasionally for stock delivery of steel with the result that only two units at Lalitpur and Bareilly could procure 85 to 100 per cent of their requirement of steel from SAIL/TISCO while the remaining 18 units could procure nil to 47 per cent of their requirement during 1988-89 to 1990-91. The 18 units procured 1121 tonnes of steel from SAIL/TISCO at Rs. 7105 to Rs. 8445 per tonne and 4154 tonne from re-rollers/dealers at Rs. 9375 to Rs. 10,275 per tonne. Had 18 units registered their quarterly demands of steel with SAIL/TISCO and procured their requirement from them, an extra expenditure of Rs. 99.16 lakhs on purchase of 4154 tonnes of steel from private parties at the price difference of Rs. 1541 to Rs. 2990 per tonne could have been avoided.

2A.6.4. Purchase of bricks

Under para 109 of the Manual bricks were required to be purchased from brick-kiln owners and in case of their refusal, from transport contractors. Name of brick-kiln, particular mark and crushing strength of bricks were required to be mentioned in supply orders. These details were, however, not given in supply orders placed by the 40 units test checked in audit.

A test check further revealed the following points:

(a) Under ISI specification (1971) conventional classification of bricks into first, second, third class, etc. were changed to classification M150, M100, M75 and M50

denoting the compressive strength in Kg per square centimetre. Higher class (M 150) bricks were used in place of lower class (M75) bricks to the extent of 6.08 crore bricks for 5 works executed during 1985-86 to 1990-91. This resulted in an extra expenditure of Rs. 30.40 lakhs (at minimum price difference of Rs. 50 per 1000) on use of bricks of higher class than that stipulated in agreements and no recovery could be made from the clients in the absence of any provisions in the agreements.

(b) Under the terms of agreement of June 1983 between the Company and Bharat Heavy Electrical Limited (BHEL) unit at Jagdishpur (District Sultanpur) for construction of a factory building, BHEL was required to supply bricks at Rs. 335 per 1000. BHEL, however, supplied only 7.99 lakh bricks and the Company purchased 63.32 lakh bricks at Rs. 345 to Rs. 465 per 1000, which resulted in an extra expenditure of Rs. 5.60 lakhs. No action was taken by the Company to recover the extra expenditure from BHEL.

(c) Unit I at Etawah purchased bricks at Rs. 560 per 1000 Nos. prior to July 1989. The rate was increased to Rs. 715 per 1000 bricks in July 1989 and 35.24 lakh bricks were purchased at the increased rate as against the requirement of 12 lakhs mentioned in the PCR of July 1989. These bricks could be consumed up to January 1990 when rate of bricks had gone down to Rs. 660 per 1000 bricks. Had 12 lakh bricks been purchased at the premonsoon rate of Rs. 560 per 1000 bricks and the remaining 23.24 lakh bricks at the post monsoon rate of Rs. 660 per 1000 bricks the Company could have saved Rs. 3.14 lakhs.

2A.6.5. Purchase of sand and stone grit/river shingle

Under paras 110 and 111 of the Manual, member(s) of Purchase Committee were required to invariably visit quarry/quarries near the site of work, river beds or other places where sand/stone grit/river shingle was dug and/or the crushers where stone was crushed and find out the rates for these materials filled in trucks. These materials were

required to be purchased from quarry owners and incase of their refusal, from transport contractors having their own trucks. Name of quarry, quality and fineness modulus of sand and a condition for submission of royalty receipt were required to be incorporated in supply orders. It was, however, noticed that in 40 units test checked, these requirements were not fulfilled, and orders were placed for supply of these materials at work sites on the basis of mere quotations or enquiries from dealers.

Besides, following cases of extra expenditure were also noticed:

(a) The Company's units constructing buildings for Employees State Insurance Corporation (ESI) at Rohini (New Delhi), Department of Biotechnology (DBT) at New Delhi, Uttar Pradesh Sadan at New Delhi and Sales Tax and Judicial Departments (STJ) at Ghaziabad purchased during 1989-90 and 1990-91 13530 cums of stone grit valuing Rs. 30.65 lakhs and 13887 cums of coarse sand valuing Rs. 29.25 lakhs through local dealers instead of directly from the Badarpur (Haryana) quarries. Whereas the Company's another unit constructing buildings for Ghaziabad Development Authority (GDA) at Kaushambi (Ghaziabad) purchased during the same period 6355 cums of stone grit and 4276 cums of coarse sand through local dealers from the same quarries at Rs. 140 and Rs. 135 per cum, respectively. On the basis of the lowest ex-quarry rates of Rs. 140 per cum of stone grit and Rs. 135 per cum of coarse sand paid by the GDA unit, the purchases of stone grit and coarse sand resulted in an extra expenditure of Rs. 9.21 lakhs on purchases of stone grit (Rs. 5.39 lakhs) and coarse sand (Rs. 3.82 lakhs) by ESI, DBT, Uttar Pradesh Sadan and STJ units.

(b) The Purchase Committee of the Cable Factory Unit at Naini (Allahabad) accepted the rate of Rs. 180 and Rs. 215 per cum (including transportations charges) in June 1988 and March 1990, respectively for supply of coarse sand from the source at Dudhi (District Sonbhadra). The unit, however,

purchased during 1988-89 to 1990-91 its requirement of 5317 cums of coarse sand from Chopan quarry at the same rates although the Chopan quarry was nearly 75 Km. nearer to the site. On the basis of minimum transportation charges at 50 paisa per Km. as per Uttar Pradesh Public Works Department Schedule of Rates of transportations charges for 75 Kms. amounted to Rs. 37.50. per cum. Thus, the purchase of 5317 cums of coarse sand from Chopan quarry at the rates offered for Dudhi quarry resulted in excess payment of Rs. 1.99 lakhs.

(c) According to the provisions of the Manual, units are required to conduct cost control exercise with reference to prevailing rates of UP PWD/CPWD and the rates allowed by the other units of the Company or sister organisations in order to examine reasonability of rates allowed for supply of sand and stone grit. It was, however, noticed that Unit II at Etawah, Machine Repair Unit at Allahabad, Cable Factory Unit at Naini (Allahabad) and Unit II at Kanpur purchased during 1988-89 to 1990-91, 2165 cums of fine sand at Rs. 103 to Rs. 110 per cum, 3971 cums of coarse sand at Rs. 145 to Rs. 250 per cum and 12,207 cums of 10-20 mm stone grit at Rs. 260 to Rs. 375 per cum as against the lower rates of Rs. 70 per cum, Rs. 125 to Rs. 175 per cum and Rs. 240 to Rs. 310 per cum respectively, allowed by Unit I at Etawah, UPSBC Unit at Allahabad and Unit III at Kanpur during the same period. This resulted in an extra expenditure of Rs. 5.88 lakhs.

(d) 3561 cums of local sand valuing Rs. 3.15 lakhs was purchased by Unit I, Varanasi for construction of BHEL works at Varanasi at Rs. 72 per cum in 1984-85 (307 cums) and at Rs. 90 per cum in 1985-86 (3254 cums) which were higher than the rates of Rs. 43.25 per cum payable by the client for filling of sand. The rates were even higher than the prevailing rate of UP PWD (Rs. 52.50 per cum) in the district. Thus the purchase of sand at higher rate resulted in loss of Rs. 1.61 lakhs to the Company.

2A.6.6. Procurement of air conditioning plants and allied equipments

Four air conditioning plants of 450 ton capacity each and requisite air handling units were supplied and installed by Utility Engineers, New Delhi during the years 1986-87 to 1990-91 at an aggregate cost of Rs. 222.31 lakhs. In this connection the following points deserve mention:

(a) Unit XII of Lucknow invited (June 1984) sealed quotations for supply and installation of air conditioning plants of 1800 ton capacity for SGPGI to be supplied in two phases *i.e.* 900 ton by March 1985 and 900 ton by December 1985. The lowest rate offered by the firm was Rs. 56.31 lakhs for each of the two phases. Order was placed on the firm for first phase of 900 ton in August 1984 at Rs. 56.31 lakhs to be supplied by March 1985. Subsequently for second phase, orders for 450 ton each were placed on the same firm in April 1985 and January 1989 at the negotiated rates of Rs. 35.15 lakhs and Rs. 38.24 lakhs respectively. Actual supply and installation against the above orders for both the phases were made during 1986-87 to 1990-91.

Thus, placement of orders in piecemeal, for which no reasons were on record, resulted in an extra expenditure of Rs. 17.06 lakhs on procurement of 900 ton for the second phase.

(b) Two number air handling units for Rs. 83.86 lakhs were purchased by SGPGI unit XII in October 1988 (Rs. 75.04 lakhs) and January 1989 (Rs. 8.82 lakhs) from this firm without inviting offers from any other reputed manufacturers/suppliers to avail of the benefit of competitive rates.

(c) Total purchase price of Rs. 222.31 lakhs was inclusive of excise duty ranging from 15.75 to 42 *per cent*. Modified value added tax (MODVAT) system in respect of excise duty became applicable from March 1986 under which the suppliers were entitled to a set off in the excise duty to be paid on finished goods by the excise duty paid by the manufacturer on

raw material. The total purchase price of Rs. 222.31 lakhs of supplies received from this firm was inclusive of excise duty ranging between 15.75 *per cent* to 42 *per cent*. The firm charged full excise duty included in the rates of all supplies as well as additional excise duty of Rs. 8.77 lakhs in March 1987 (Rs. 5.57 lakhs) and July 1987 (Rs. 3.20 lakhs) in respect of the supplies made in the years 1986-87 and 1987-88 against the orders of August 1984 and May 1985. Neither the firm had passed on any credit under MODVAT to the Company nor the Company had claimed the same from the firm.

2A.6.7. Purchase of aluminium false ceiling system for SGPGI

(a) Aluminium false ceiling system was supplied and installed in an area of 41,126 square metres in SGPGI by Lloyd's Insulation (India) Private Limited of New Delhi at an aggregate cost of Rs. 210.81 lakhs during January 1985 to September 1991 at the rates ranging between Rs. 390 and Rs. 570 per square metre. A test check in audit revealed the following points:

(i) On the basis of four tenders received in September 1984, an order was placed in November 1984 on the firm for supply and installation of 8000 square metres each of Luxalon 84R open ceiling and Luxalon 84R close ceiling at Rs. 390 and Rs. 440 per square metre respectively. The rates were subject to trade and cash discount of one *per cent* each. The rates were also firm for the job completed up to December 1985. The rates were, however, revised (January 1986) to Rs. 423.15 and Rs. 488 per square metre on account of imposition of excise duty at 12 *per cent* for the supplies made after December 1985 on the ground that the total working area was not released by the Company to the firm up to December 1985. As claimed by the firm 6354 square metres (value: Rs. 25.60 lakhs) was paid for at the pre-revised rate and 7027 square metres (value: Rs. 31.58 lakhs) at increased rates, whereas the firm was entitled to payment for 9364 square metres at pre-revised rates on the basis of the advance payments made to the firm against despatches of materials/ components made up to

December 1985 and for only 4017 square metres at increased rates. The discount of 2 *per cent* was also not deducted from the bills of the firm. Thus, excess payment of Rs. 1.98 lakhs was made to the firm.

(ii) Three repeat orders were placed during February 1986 to December 1987 on the firm for supply and installation of 9150 square metres each of Luxalon 84R open ceiling and Luxalon 84R close ceiling for Rs. 83.07 lakhs at the revised rates of Rs. 423.15 per square metre and Rs. 488 per square metre respectively. The firm, however, supplied and installed only 331 square metres of open ceiling and 10095 square meters of close ceiling for Rs. 49.84 lakhs during 1988-89 and 1989-90. A copy of excise gate pass of May 1988 submitted by the firm in support of increase in rate of excise duty from 12 *per cent* to 21 *per cent* with effect from 1st April 1988 indicated that the cost of aluminium roll formed panel used for false ceiling had decreased from Rs. 358.83 per square metre in January 1986 to Rs. 278.32 per square meter in April 1988. Still the Company paid for 10426 square metres of false ceiling supplied during 1988-89 and 1989-90 at the rate of Rs. 423.15/ Rs. 488 per square metre decided in January 1986. Thus, placement of repeat orders without ascertaining the prevalent rates, resulted in excess payment of Rs. 8.39 lakhs due to fall in rate by Rs. 80.51 per square metre.

(iii) On the basis of quotations received in March 1989 the Joint Purchase Committee consisting of the Project Mangers of units III, IV, VII and XI (SGPGI Works) at Lucknow and a representative of SGPGI approved in March 1989 the lowest offer of Wood Fun, New Delhi at the rate of Rs. 510 per square metre (subject to discount of 5 *per cent* if panels were required to be painted on external side only) for aluminium false ceiling made of indigenous material of new system including edge profile wherever required. However, instead of procuring the material from the same firm unit VII and XI procured 13840 square metres of material from Lloyd's Insulation (India) Private Limited at Rs. 570 per square metre during September 1989 to November 1990 for which

reasons were not on record. Thus, the purchases from the firm other than approved one resulted in an extra expenditure of Rs. 11.83 lakhs.

(iv) Rs. 160.31 lakhs paid to Lloyd's Insulation (India) Private Limited at Rs. 423.15/ Rs. 488 per square metre (Rs. 81.42 lakhs) and Rs. 570 per square metre (Rs. 78.89 lakhs) during 1985-86 to 1990-91 included excise duty of Rs. 20.42 lakhs. Besides, Rs. 2.67 lakhs were further paid towards additional excise duty. MODVAT system in respect of excise duty was applicable from March 1986 under which the suppliers were entitled to the set-off of the excise duty paid on raw materials against the excise duty charged from the Company. Neither the supplier had passed on any credit under MODVAT by the Company, nor the Company had claimed the same from the supplier.

(b) FGP Limited of New Delhi were given an order in August 1987 for supply and installation of 6300 square metres of false ceiling at Rs. 385 per square metre subject to rebate of Rs. 25 per square metre if spintex was not supplied. The rate was firm up to 30th June 1988 but no supply was made for which no reasons were on record. Without taking any action against the firm for non-execution of the order of August 1987, a fresh order, at a higher rate of Rs. 475 per square metre (subject to rebate of Rs. 25 per square metre), was placed on the firm in August 1988 for supply and installation of 4900 square metres of false ceiling against which only 3401 square metres were supplied and installed for Rs. 15.30 lakhs at Rs. 450 per square metre up to January 1990. The reasons for reducing the quantity from 6300 square metres to 4900 square metres and non-execution of the work in the remaining area of 1499 square metres were not on record. Thus, the award of work at higher rate resulted in extra expenditure of Rs. 3.06 lakhs.

2A.6.8. Purchase of electrical, sanitary and other items

(a) The para 119 of the Manual provided that the commercial section of the Company would circulate to all units in every

quarter a price list based on prevailing rates in Lucknow of the various electrical, sanitary and other items so that the rates approved by purchase committees of units should not exceed the rates given in the price lists by more than 5 per cent. Such price lists were, however, never circulated by the Company due to which no control could be exercised on the rates paid by different units.

(b) A test check of purchases of electrical, sanitary and other items by 6 units for an aggregate value of Rs. 42.19 lakhs during 1985-86 to 1990-91 revealed that the rates allowed by these units were higher by 6 to 54 per cent than the rates allowed for similar items by other units during the same period. The value of these materials at the rates allowed by other units including 5 per cent variation allowed under the provisions of the Manual worked out to Rs. 38.00 lakhs. Thus, the purchases by the six units at higher rates resulted in an extra expenditure of Rs. 4.19 lakhs as per details given below:

Item	Purchases at higher rates			Value at lower rates including 5 per cent variation		
	Unit	Quantity	Value (Rs. in lakhs)	Unit	Value	Extra expenditure (Rs. in lakhs)
Conduit Pipes	Faizabad	33875 metres	5.71	Tehri, Varanasi and Kanpur	4.92	0.79
Water storage tanks	Gorakhpur (Unit I)	1.63 lakh litres	6.52	Head Office of the Company	5.98	0.54
22 MM thick Kota stone	Unit II Kanpur	57566 Square feet	7.48	Lalitpur	6.65	0.83
25 to 37 MM thick Kota Stone	Faizabad	9576 Square feet	1.77	ESI, Okhla (New Delhi)	1.24	0.53
35 MM thick fully panelled Country wood shutters	Unit II Kanpur, PAC Unit, Jhansi and Unchahar	6555 Square Metres	15.13	Unit III Kanpur	14.45	0.68
Teak wood	Unit I Varanasi	24.5 cums	5.58	Unit I Gorakhpur	4.76	0.82
	Total		42.19		38.00	4.19

(c) 3200 running metres of cast iron pipe of different sizes valuing Rs. 12.44 lakhs were purchased during 1989-90 and 1990-91 for construction of cable factory buildings at Naini (Allahabad) from Supra Enterprise, New Delhi instead of from original manufacturers of these iron pipes at Calcutta. The rates of the firm of New Delhi were higher than these of the original manufacturers by Rs. 34 to Rs. 63 per running metre even after allowing margin for cost of transportation by rail from Calcutta to Naini. In this connection it was worth mentioning that the unit at Unchahar (Rae Bareilly) had purchased such pipes directly from the firm of Calcutta in the year 1987-88. Thus, the purchases from the firm of New Delhi resulted in an extra expenditure of Rs. 1.41 lakhs.

(d) 1226 cums of Chir wood was purchased for Rs. 60.07 lakhs during 1985-86 to 1990-91 by the Company's units at Allahabad, Etawah, Faizabad, Lucknow and Varanasi at rates varying from Rs. 3641 to Rs. 4350 (1985-86), Rs. 3832 to Rs. 6869 (1986-87), Rs. 4400 to Rs. 5621 (1987-88), Rs. 5000 to Rs. 5297 (1988-89), Rs. 5250 to Rs. 6003 (1989-90) and Rs. 6050 to Rs. 6853 (1990-91) per cum. Whereas the Company's units at Haldwani and Tehri purchased Chir wood during the these six years at Rs. 2853, Rs. 3378, Rs. 3378, Rs. 4500, Rs. 4644 and Rs. 4800 per cum respectively. As compared with the lowest rates including 10 per cent for cartage in each year, the purchases of Chir wood by the above units at higher rates resulted in extra expenditure of Rs. 10.46 lakhs.

2A.6.9. Loss due to purchases of material at the rates higher than those envisaged in contract prices

In its recommendations on the report of Comptroller and Auditor General of India for the year 1978-79 (commercial), Joint Committee on Public Undertakings and Corporations had stated that before commencement of any construction work the Company should execute with the client an agreement incorporating the terms that increase in cost of construction due to escalation in rates of material and due to change in design was payable by the client. However, The Company undertook construction of works at fixed contract rates

without any provision for price escalation in the cost of major materials. However, materials were purchased at rates higher than those provided in the contracts resulting in extra expenditure which could not be recovered from the clients in the absence of enabling clause in the contract and the Company had to suffer a loss of Rs. 61.72 lakhs in the following three cases alone:

(a) In August 1987, the Company was awarded the works of construction of 13 Navodaya Vidyalayas in the State, by Navodaya Vidyalaya Samiti, New Delhi at 33 to 89 *per cent* above Delhi Schedule of rates (DSR) 1985 plus 10 *per cent* supervision charges. A test check of the records relating to procurement of materials for construction of 6 navodaya Vidyalayas at Jangal Agahi (Gorakhpur), Bahadurpur (Basti), Kirtanpur (Bahraich), Mariahu (Jaunpur), Baruasagar (Jhansi) and Dilwara (Lalitpur), however, revealed that cement, steel, bricks, sand and stone grits were purchased at higher rates than the rates provided in the agreements resulting in a loss of Rs. 46.02 lakhs.

(b) The Company constructed residences at Srinagar (Garhwal) costing Rs. 317.44 lakhs during March 1989 to March 1991 under fixed rate contracts awarded by Uttar Pradesh Irrigation Department in March 1989. Bricks, sand, stone grit and boulders were purchased for the works for Rs. 94.04 lakhs at rates which were higher than the rates on the basis of which contracts were entered into and in the absence of any clause in the contracts the higher cost could not be recovered from the client which resulted a loss of Rs. 14.55 lakhs.

(c) The item-rate contract awarded to the Company in June 1986 for construction of a factory building at Ghaziabad provided for supply and laying 250x250 MM PVC tiles of 3 MM thickness at Rs. 190 per square metre. The Company, however, used 1012 square metres of tiles on this work which were procured at higher rate of Rs. 303.50 per square metre, but in the absence of any clause in the contract the higher cost

could not be recovered from the client which resulted in a loss of Rs. 1.15 lakhs (excluding labour charges and overheads).

2A.6.10. Avoidable payment of Sales Tax

Procurement cost of items like bricks, sand and stone grit involves heavy cost of transportation which ranges from 25 to 67 *per cent* of their cost. If the quarry rates and transportation rates are indicated separately in purchase orders, payment of Sales Tax on transportation charges can be saved as was being done by Varanasi and Kaushambi (Ghaziabad) units of the Company. However, in other ten units test checked in audit composite rates were indicated in purchase orders resulting in avoidable payment of Sales Tax to the extent of Rs. 7.47 lakhs during 1988-89 to 1990-91 on transportation charges.

2A.6.11. Procurement and fabrication of steel structures

(a) The Company had set up in December 1979 a Structural Centre at Naini, (Allahabad) for fabrication, erection, sheeting and painting of steel structures either for direct use on the works undertaken by the Centre or for use by other units of the Company. The production capacity of the Centre was not specified except that it was required to achieve annual turnover of Rs. 120 lakhs with overheads limited to 3 *per cent* thereof. In this connection following points were noticed:

(i) The annual turnover of the Centre during 1985-86 to 1989-90 ranged between Rs. 51.24 lakhs to Rs. 63.05 lakhs with overheads between 7 to 12 *per cent*. The under utilisation of the capacity of the Centre resulted in higher overheads and higher cost of its products. On the other hand, 15 units, instead of getting the steel items fabricated from the Structural Centre of the Company, purchased fabricated steel items valuing Rs. 341.61 lakhs from private parties. The fabrication of these items at the Centre could have contributed an income of at least Rs. 31.06 lakhs,

representing 10 per cent profit paid to supplier as provided in UP PWD Schedule of rates and there would have been a further saving of sales tax of Rs. 30.58 lakhs at 8.8 to 10 per cent paid to suppliers.

(ii) Listed Machinery Unit purchased mild steel props and pipes for Rs. 67.85 lakhs from private parties, and props for Rs. 4.73 lakhs from the Structural Centre during 1988-89 to 1990-91. The Structural Centre was entrusted with fabrication of 1350 props of size 2 to 3.25 metres at Rs. 350.66 each in December 1988 as against the rate of Rs. 352.87 (including sales tax) per prop allowed to private parties. The fabrication of props of size 3 to 4.75 metres was not entrusted to the Centre on the ground that its cost of supply by the Centre amounted to Rs. 475.52 per prop as against the rate of Rs. 447.88 (including sales tax) charged by private parties. Actually, the cost of fabrication amounting Rs. 350.66 and Rs. 457.52 per prop intimated by the Centre in December 1988 included supervision charges of Rs. 21.40 and Rs. 26.54 per prop of size 2 to 3.25 meters and 3 to 4.75 metres, respectively. The supervision charges were the fixed costs of the Structural Centre and therefore the variable costs amounted to Rs. 329.26 and Rs. 430.98 per prop of above sizes. As compared with these variable costs, the purchases of 4338 props (size 2 to 3.25 metres) at Rs. 352.87 each and 1439 props (size 3 to 4.75 metres) at Rs. 447.88 each resulted in an extra expenditure of Rs. 1.27 lakhs.

(iii) Structural Centre, Naini (Allahabad) did not prepare consumption statements since inception indicating weights of the fabricated items, weights of steel consumed and scrap retrieved with the result that actual position of excess/short consumption of steel and shortage of steel/scrap could not be ascertained.

(b) In response to open quotations invited by the Company for supply of steel doors, windows and ventilators for construction of 13 Navodaya Vidyalayas, 11 offers were received in March 1988. As per terms of quotation notice,

approved fabricators were required to submit samples within seven days from the date of issue of letters for submission of samples. However, the Quality Builders, Khurja (Bulandshahar) offering the lowest rate of Rs. 648 per square metre (excluding sales tax) Ex-Khurja for doors, and the Perfect Engineering Works, Lucknow offering the lowest rates of Rs. 400 and Rs. 440 per square metre (including sales tax) F.O.R. destination for windows and ventilators, respectively were asked telegraphically on 28th March 1988 to submit samples by 30th March 1988. The time given for submission of samples was very short and in contravention of terms of quotation notice, with the result that no samples were received up to 2nd April 1988 when the Head Office Purchase Committee approved the higher rates of Sai Fabricators, Meerut-Rs. 740, Rs. 525 and Rs. 418 per square metre (excluding sales tax) Ex-Meerut for doors, windows and ventilators respectively even without obtaining samples which were submitted in June/July 1988. Accordingly, steel doors (8021 square metres), windows (4908 square metres) and ventilators (1600 square metres) were purchased during April 1988 to August 1988 for Rs. 91.81 lakhs from the firm of Meerut and three other firms of Lucknow who had not offered rates in March 1988 for these items. Thus, the purchases of above items at rates higher than the lowest offered rates resulted in an extra expenditure of Rs. 17.45 lakhs.

(c) During September 1984 to August 1986, 3164 square metres Mild Steel Plates valuing Rs. 16.56 lakhs were purchased by SGPGI unit XI Lucknow (2011 square metres at Rs. 545 per square metre) and Gorakhpur unit I (1153 square metres at Rs. 484 per square metre) whereas the Unchahar unit at Rae Bareilly purchased similar steel plates during the same period at Rs. 401 per square metre. Thus, the purchase of steel plates by SGPGI and Gorakhpur units at higher rates resulted in extra expenditure of Rs. 3.85 lakhs.

2A.7. Utilisation of materials

With a view to ensuring proper utilisation of various materials, standard norms for consumption including normal wastage were required to be circulated by the head office of the Company under para 158 of its Manual. Accordingly, material consumption statements for all the works in a unit were required to be prepared by the Unit-Incharge at the end of every financial year as well as at the close of a work. The cases of excess consumption of materials up to 2 per cent, more than 2 per cent but up to 5 per cent and more than 5 per cent were required to be reported to General Manager, Managing Director and Chairman respectively under paragraphs 169 to 171 *ibid*. It was, however, noticed in audit that no norms of consumption of materials were laid down by the Company except circulation of Central Public Works Department (CPWD) norms for cement consumption in July 1977 and units applied Uttar Pradesh Public Works Department (UP PWD) norms as well as CPWD norms. However, in April 1985, the Managing Director issued an order that consumption of materials would be worked out as per CPWD norms unless anything contrary was specified in agreements entered into between the Company and client.

A test check in audit revealed the following points:

2A.7.1. Non-preparation of consumption statements

As per details made available to audit 526 works (value not made available) had been completed up to December 1990 out of which consumption statements in respect of 154 works only had been received while consumption statements in respect of the remaining 372 works, though completed during 1977-78 to 1989-90, had not been received for which no action had been taken by the Company against the defaulting units-in-charge.

2A.7.2. Consumption of materials in excess of standard norms

Consumption statements in respect of 52 works were examined by Audit with reference to CPWD norms as provided in the circulars of July 1977 and April 1985 issued by the Company except for brick work in respect of which UP PWD Schedule (460 bricks per cum) in place of CPWD Schedule (494 bricks per cum) had been adopted by many units. The test check revealed excess consumption of materials worth Rs. 221.41 lakhs as per item-wise break up given below:

Material	Consumption		Excess	Value of material consumed in excess (Rs. in lakhs)
	Required	Actual		
Cement (bags)	625823	684642	58819	42.34
Sand (cum)	141874	176549	34675	47.35
Stone grit (cum)	75537	91580	16043	27.75
Bricks (Nos. in lakhs)	722.67	827.75	105.08	52.36
Steel (tonne)	3695	4337	642	46.27
Other materials	..	..	..	5.34
			Total	221.41

In this connection it may be mentioned that excess consumption of materials ranged up to 73 per cent over and above their requirement according to standard norms but no action was taken by the Company to investigate reasons and fix responsibility for the same. In case of construction of Agricultural University at Faizabad, client accepted (April 1988) the expenditure of Rs. 695 lakhs only for the work done by the Company during 1979-80 to 1987-88 on the basis of value of the material required according to standard norms whereas the expenditure on the basis of actual consumption of material amounted to Rs. 703.21 lakhs. This resulted in a loss of Rs. 8.21 lakhs on account of excess consumption of materials for which neither reasons were investigated nor responsibility fixed.

2A.7.3. Use of materials of higher specifications

The Company undertook construction of Navodaya Vidyalayas at Jangal Agahi (district Gorakhpur), Bahadurpur (district Basti), Kirtanpur (district Bahraich) and Mariahu

(district Jaunpur) awarded by Navodaya Vidyalaya Samiti New Delhi in August 1987 at rates 40 to 61 per cent above Delhi Schedule of Rates (DSR) 1985. These rates had been worked out on the basis of total requirements of one third coarse sand and twothird fine sand, and one half each of 10-22 MM stone grit and 40 MM stone ballast. It was, however, noticed that coarse sand and 10-20 MM stone grit being higher value items were used in place of fine sand and 40 MM stone ballast (lower value items) envisaged in the contract rates for which no reasons were on record. This resulted in incurring of an excess cost of Rs. 8.41 lakhs which was not reimbursed by the client with the result Company had to suffer loss to that extent.

2A.7.4. Application of different norms

(a) Reinforcement cement concrete (RCC) in mix designs

Consumption norms of material in RCC required to achieve particular compressive strength known as mix designs have not been specified in UP PWD or in the CPWD specifications. RCC in mix designs with compressive strength of 150 Kg, 200 Kg, 210 Kg, 250 Kg and 300 Kg per square metre of concrete cube are known as RCC M-150, M-200, M-210, M-250 and M-300, respectively. It was noticed in audit that norms for consumption of cement in RCC work of mix designs were not fixed by the Company (except norms for M 200 by two units at Lucknow and Ghaziabad) and that actual consumption of cement in RCC of mix design by different units was higher than the norms fixed by UPSBC as detailed below:

Mix designs	Consumption of cement bags per cum	
	As per UPSBC norms	As per Company units
RCC M150	6.3	6.4/7.34
RCC M200	7.0	7.60/8.00/8.32
RCC M250	8.5	9.25/12.25
RCC M300	9.0	10.90

As compared with the norms of UPSBC there was excess consumption of 36095 bags of cement valuing Rs. 18.05 lakhs

(worked out at average rate of Rs. 50 per bag) in RCC work in mix designs done during the period 1981-82 to 1990-91 in 11 works test checked in audit.

(b) Random Rubble stone masonry (RR)

A test check of the records relating to construction of 13 works revealed that the norms of consumption of materials for RR done in the mix mortar in the ratio of 1 cement to 6 sand (1:6) as applied by the respective units differed from those provided in CPWD and UP PWD specifications as mentioned below:

Requirement of material per cum of RR 1:6

	Cement (bags)	Sand (cum)	stone (cum)
Norms of CPWD	1.70	0.33	1.16 (Gross)
Norms of UP PWD	1.41	0.30	1.00 (Gross)
Norms applied by units	1.21 to 1.70	0.30 to 0.45	0.80 to 1.16 (after deducting voids at 10 to 50 per cent)

In this connection the following points were further noticed:

(i) Against the norm of 1.41 bags of cement per cum, the norm adopted in respect of the work of Kumaun University and Tourist Reception Centre (TRC) at Nainital was 1.21 bags per cum. The actual consumption was less than this norm (1.21 bags per cum) by 10 to 25 per cent which indicates that either the works carried out were of below specifications or measurements were recorded in excess of the work actually executed.

(ii) 2570 bags of cement costing Rs. 1.29 lakhs were consumed in excess for 72132 cums of RR 1:6 done by 10 units during 1986-87 to 1990-91.

(iii) 7302 cums of sand (including 6250 cums at Tehri) costing Rs. 14.60 lakhs was consumed in excess for 72132 cums of RR 1:6 by 12 units during 1986-87 to 1990-91.

(iv) 1559 cums of stone costing Rs. 1.56 lakhs was consumed in excess for BHEL work at Jhansi (Rs. 0.32 lakh) and DBT work (Rs. 1.24 lakhs) due to deducting void at 20 per cent and 50 per cent respectively as against 10 per cent deducted by other units.

(c) Grit finish

No norms were laid down by the Company for consumption of materials in grit finished work. A test check in audit revealed that consumption of different materials was in excess of the norm provided in CPWD Schedule which resulted in excess consumption of materials valuing Rs. 15.62 lakhs as detailed below:

Name of work	Period of execution	Quantity of grit finish (Square metre)	Consumption of materials		
			Cement	Sand	Grit
			(bags)	(cum)	(cum)
			<u>per square metre of grit finish</u>		
			<u>Total consumption</u>		
(1)	(2)	(3)	(4)	(5)	(6)
Agricultural University Faizabad	1984-85 to 1985-86	2501	<u>0.7715</u>	<u>0.037</u>	<u>0.0125</u>
			1930	75	31
Vikas Bhawan Basti	July 1988 to March 1991	5330	<u>0.7715</u>	<u>0.037</u>	<u>0.0125</u>
			4113	197	67
Engineering College, Lucknow	February 1984 to March 1987	12395	<u>0.242</u>	<u>0.018</u>	<u>0.018</u>
			3000	223	223
	February 1984 to March 1987	3259	<u>0.30</u>	<u>0.165</u>	<u>0.165</u>
			978	578	578
	February 1984 to March 1987	1595	<u>0.637</u>	<u>0.024</u>	<u>0.023</u>
			1016	38	38
Engineering College, Lucknow	April 1990 to March 1991	12772	<u>0.656</u>	<u>0.026</u>	<u>0.026</u>
			8378	332	332
PICUP Work Lucknow	1990-91	6617	<u>0.837</u>	<u>0.0275</u>	<u>0.021</u>
			5538	182	139
	Total	45469	24953	1625	1408
Consumption as per CPWD norms		45469	<u>0.232</u>	<u>0.0274</u>	<u>0.010</u>
			10549	1246	455
Excess consumption			14404	379	953
Rate (Rupees)			80	200	350
Value (Rupees in lakhs)			11.52	0.76	3.34

(d) Laying of Kota stone

Kota stone was laid on the base of cement plaster, the thickness and specifications of which were not fixed by the

Company. As a result, different norms for consumption of cement and sand were adopted by the units as detailed below:

Name of work	Period of execution	Quantity of work		Consumption of materials		
		(Square metre)	Per Square metre	Cement (bags) Total	Sand (cum) Per Square metre	Total
Engineering College, Lucknow	February 1985 to March 1987	4175	0.30	1253	0.32	1348
ESI, Ghaziabad	1982-83 to 1989-90	549	0.112	61	0.074	41
		810	0.114	92	0.031	25
		4965	0.30	1489	0.034	181
Court building, Kanpur	1989-90	4848	0.457	2216	0.048	223
Geology block of Kumaun University, Nainital	September 1986 to December 1988	558	0.280	156	0.30	167
Ward Block I of SGPGI, Lucknow	March 1985 to March 1991	7167	0.26	1863	0.024	172
	Total	23072		7130		2157

The details above indicated that in laying of Kota stone per square metre the consumption of cement and sand varied from 0.112 to 0.457 bag and 0.031 to 0.32 cum respectively. However, taking the norm of 0.15 bag cement and 0.018 cums of sand per square metre of Kota stone laying adopted in case of PICUP buildings constructed by the Company at Lucknow during the years 1987-88 to 1990-91, only 3461 bags of cement and 415 cums of sand were required for 23072 square metres of Kota stone laying work as against 7130 bags cement and 2157 cums sand actually consumed by the Company in 5 works resulting in excess consumption of 3669 bags of cement and 1742 cums of sand valuing Rs. 5.68 lakhs.

(e) Consumption of Dholpur and Kota stones

The Company had not laid down any norms of consumption of Dholpur and Kota stones. A test check of records of units II, III, VII and XI at Lucknow, revealed that actual consumption of Dholpur and Kota stones during 1983-84 to 1990-91 varied respectively from 121 to 202 per cent and 107 to 184 per cent of the work done. As compared with their requirements including wastage as per detailed estimates/CPWD

specification, there were excess consumptions of stones valuing Rs. 11.66 lakhs as detailed below:

(i) SGPGI units (III, VII and XI) of the Company at Lucknow laid 23572 square metres of 20 MM thick Dholpur stones after cutting 40 MM thick stones into two halves for which 25979 square metres of 20 MM thick stones (including 10 per cent wastage) were required as per respective estimates of works. Even after considering 33.5 per cent wastage as provided in CPWD specifications, 31469 square metres of 20 MM thick stones were required whereas 40456 square metres stones were actually consumed resulting in excess consumption of 8987 square metres stones valuing Rs. 6.74 lakhs.

(ii) Against the requirement of 15484 square metres of Kota stones including 15 per cent wastage as provided in the detailed estimate as well as in CPWD specifications 18006 square metres of stones were actually consumed by Units II, VII and XI at Lucknow which resulted in excess consumption of 2522 square metres of Kota stones valuing Rs. 4.92 lakhs.

2A.7.5. Consumption of material in excess of sanctioned estimate

A number of works were undertaken by the Company on 'cost plus' basis without preparing detailed estimates indicating quantities of the works to be executed and obtaining technical sanction thereof. Further, in some of the cases no guidelines were issued by the Company for approval of variations and deviations from the approved quantities as per detailed estimates. A test check in audit revealed consumption of material in excess of what had been provided in the detailed estimate as mentioned below:

(a) The construction of 1160 type I police quarters was executed by the Company at Allahabad (132), Deoria (116), Almora (48), Jhansi (150), Kanpur (200), Lalitpur (116), Pithoragarh (48), Rae Bareilly (150) and Varanasi (200) during January 1987 to March 1990 at the aggregate cost of Rs. 629.35 lakhs as against the sanctioned cost of Rs. 577.06 lakhs. This resulted in excess over the sanctioned cost by

Rs. 52.29 lakhs which included Rs. 47.46 lakhs being the value of the material consumed in excess as per standard estimate for 12 type I police quarters circulated by the Company in December 1986. The variation attributed by units to changes in specifications and scope of the works had neither been approved by the Company nor by the clients with the result the excess expenditure could not be recovered so far (December 1991).

(b) Some of the cases test checked in audit where consumption of materials exceeded 110 per cent of the quantity required as per estimates are given below:

Name of work	period of execution	Item	Required as per estimate	Actual consumption	Excess consumption	Value of materials consumed in excess (Rs. in lakhs)
ESI building at Ghaziabad	1985-86 to 1989-90	Steel (tonne)	384	598	214	12.84
ESI building at Bareilly	1986-87	Steel (tonne)	238	335	97	5.82
		Brick (Number in lakhs)	4.98	6.48	1.50	0.61
Collectorate block at Ghaziabad	1981-82 to 1985-86	Steel (tonne)	470	539	69	3.45
		Cement (bags)	42671	58696	16025	7.21
		Stone grit 20 MM and 40 MM (cum)	4701	6400	1699	2.18
		Coarse sand (cum)	2943	4774	1831	1.83
		Bricks (Number in lakhs)	10.89	24.29	13.40	4.69
Tehri township	1982-83 to 1990-91	RR 1:6 (cum)	16772	24315	7543	32.21
		RCC (cum)	4027	4557	530	3.98
		Steel (tonne)	374	568	194	12.86
					Total	87.68

The excesses were neither approved by the General Manager/Managing Director who had approved the estimates nor by the client concerned with the result the excess expenditure to the tune of Rs. 87.68 lakhs could not be recovered so far (December 1991).

2A.7.6. Excess consumption of materials in ceiling plastering

Works awarded to the Company from time to time on the basis of Delhi Schedule of Rates were required to be executed according to CPWD specifications which, *inter alia*, provided for 6 MM thick plaster in the ratio of one cement and three sand (1:3) on RCC ceiling. The Company, however, provided 12 MM thick plaster in 1:3 ratio on 92775 square metres RCC ceiling in cases of the works of construction of NHPC buildings at Banbasa (Nainital), Thermal Power Project (TPP) buildings at Unchahar (Rae Bareilly), Cable Factory buildings at Naini (Allahabad), BHEL buildings at Jagdishpur (Sultanpur) resulting in avoidable consumption of 6447 bags of cement and 714 cums of sand costing Rs. 5.30 lakhs which was not provided for in the rates allowed by the clients. Thus, Company had to suffer loss to the extent of Rs. 5.30 lakhs.

2A.7.7. Excess consumption of sand with higher bulkage

According to the Company's circular of October 1977 a deduction at 12.5 per cent was required to be made from stack measurements of sand to neutralize impact of bulkage on account of moisture content therein, and the net quantity so arrived at was required to be recorded in accounts of receipt and consumption of sand. A test check of consumption statements relating to construction of a sugar factory building at Chandpur (Bijnor), Ware house building at Parsakhera (Bareilly), Commercial Complex building at Allahabad, BHEL works at Jhansi and Irrigation Works at Srinagar (Garhwal) revealed that 4717 cums of coarse sand and 3011 cums of fine sand costing Rs. 6.53 lakhs were consumed in excess of the standard norms which provide for 12.5 per cent for bulkage on the ground that the sand was containing bulkage of 22.5 to 37.5 per cent whereas deductions had been made at 12.5 per cent only. Reasons for initially accepting sand containing more than 12.5 per cent bulkage without making suitable deductions were neither on record nor were brought to the notice of the management for remedial action.

2A.7.8. Excess consumption of client's materials

The Company was required to consume materials provided by clients according to norms stipulated in respective contracts. The recovery for materials consumed in excess of the norms was to be made at twice the normal recovery rates. A test check in audit revealed that the Company had consumed materials valuing* Rs. 52.01 lakhs provided by clients in excess of norms (including normal wastage) in three works completed during 1984-85 to 1990-91 which resulted in the Company's liability to pay the costs of such material at twice the issue rates besides reasons for excess consumption not being recorded as mentioned below:

Name of work	Value of work done (Rs. in lakhs)	Period of execution	Item	Quantity issued by client and consumed	Quantity to be consumed as per contracted norms	Quantity consumed in excess	Value* of material consumed in excess (Rs. in lakhs)
PICUP building at Lucknow	759.31	1987-88 to 1990-91	Cement (bags)	136339	122422	13917	13.08
NHPC buildings at Banbasa (Nainital)	424.11	1985-86 to 1987-88	Steel (tonne)	1579	1417	162	19.44
			Cement (bags)	100806	91588	9218	9.22
			Steel (tonne)	168	158	10	1.30
Thermal Power Project Unchahar (Rae Bareilly)	1436.01	1984-85 to 1990-91	Cement (bags)	370105	277792	InComplete	
			Steel (tonne)	1282	1207	75	8.97
						Total	52.01

In addition to above, the Company used its own 6060 bags of cement costing Rs. 5.50 lakhs in excess of the bonafide requirements in respect of PICUP work.

Responsibility for the excess consumption of materials had not been fixed by the Company so far (December 1991).

2A.7.9. Excess consumption of bricks due to excessive breakage

The Company had not laid down any norms or guidelines to control breakage of bricks during handling and use of bricks.

* Valued at twice the normal recovery rates.

A test check in audit of the consumption statements relating to 12 works revealed that one unit (construction of type II quarters of ESI in Sector 56 at NOIDA, Ghaziabad) while showing normal consumption of 17.66 lakhs bricks as required at standard norm of 460 bricks per cum of brickwork also indicated recovery of 1.93 lakhs bricks (10.93 per cent) whereas the other 11 units while showing normal consumption of 431.78 lakhs bricks at 460 bricks per cum, also accounted for breakage of 43.49 lakhs bricks valuing Rs. 21.75 lakhs in addition to its normal consumption. The percentage of broken bricks in 11 units varied from 4.32 (GDA multi-storeyed building at Ghaziabad) to 21.81 (double storeyed students hostel of Agricultural University at Faizabad). Even if 5 per cent breakage is considered as normal breakage over and above the breakage out of the normal consumption of bricks at standard norms, there was extra breakage of 21.90 lakhs bricks valuing Rs. 10.95 lakhs, which were converted into 5919 cum of brick ballast resulting in loss of Rs. 5.92 lakhs as the cost of conversion of bricks into brick ballast amounted to Rs. 200 per cum as against purchase price of Rs. 100 per cum of brick ballast.

2A.8. Utilisation of shuttering materials

The Company used steel shuttering materials consisting of mild steel plates, props and pipes as well as wooden shuttering materials consisting of planks, battens, ballies and bamboos. Neither any norm of their requirements was fixed nor were their requirements quantified in the detailed estimates of the work concerned.

In this connection the following points were noticed:

(i) Listed Machinery Unit, Lucknow (LMU), created in December 1986 was entrusted with the works of procurement, maintenance of accounts (including steel shuttering materials already procured by field units), control over their transfers from one unit to another, and realization of rental charges from field units in respect of the shuttering materials utilised by the field units. The unit, however,

maintained accounts of the shuttering materials procured from 1st April 1989 and those already available with the field units as on 31st March 1989 remained unaccounted so far (December 1991). The correct position of the shuttering materials available with each field unit and rental charges due from them were not reflected in the accounts of (LMU)

(ii) On the basis of information received in LMU from all the eight zones in November 1988 and January 1989, there were 32961 props, 86420 square metres of plates and 290786 metres of pipes. Meanwhile additional props and pipes for Rs. 72.58 lakhs were purchased during 1988-89 to 1990-91 by LMU on the grounds that props were required, on an average, at one prop per square metre of plate, and existing pipe had not been declared surplus by field units. It was, however, noticed in audit that Unchahar Unit had declared 3100 square metres of steel shuttering materials surplus in May 1990 but it was not ascertained by LMU. As a result, an avoidable purchase of 2917 props and 3420 metres of pipes valuing Rs. 16.48 lakhs was made during May 1990 to August 1990.

(iii) Depreciation, ownership charge and maintenance cost (at fixed rates) are to be debited to the cost of the respective works on the basis of the shuttering material remaining with concerned unit. Thus, these materials were required to be used throughout the year. On the basis of their use for 20 days at a time i.e. 15 times in a year of 300 working days (considered by the Company for tender works), 0.68 lakh square metres of shuttering materials available with 19 units during 1988-89 to 1990-91 were sufficient to cover a shuttered area of 10.20 lakh square metres against which the area actually shuttered was only 2.48 lakh square metres. This indicated average utilisation of only 24 per cent, with utilisation in individual units varying from 6 per cent to 83 per cent. Even by taking a 50 per cent utilisation only 0.33 lakh square metres of shuttering materials were required for shuttered area of 2.48 lakh square metres. Thus, there were 0.35 lakh square metres of shuttering materials in excess which resulted in locking up of the Company's funds to the

extent of Rs. 140.10 lakhs at an average rate of Rs. 400 per square metre.

(iv) According to CPWD specifications wooden shuttering materials were required to be used 16 times. A test check in audit revealed that wooden shuttering materials in respect of 4 works were used only 5 to 10 times due to which 13259 square metres of wooden shuttering materials were purchased for 109249 square metres of area shuttered as against requirement of 6828 square metres on the basis of 16 time utilisation. This resulted in avoidable expenditure of Rs. 26.15 lakhs on purchase of excess 6431 square metres of shuttering materials as per work-wise details given below:

Name of work/unit	Period of execution	Area of wooden shuttering available (square metre) Cost (Rs. in lakhs)	Area shuttered (square metre) Repetition	Required shuttering material for area shuttered on 16 repetitions (square metre)	Excess shuttering materials Area (Square metre) Value (Rs. in lakhs)
PGI Unit XI, Lucknow	1984-85 to 1990-91	7105 39.31	72810 10	4550	2555 14.14
Agricultural University, Faizabad	1989-90 and 1990-91	926 4.73	7000 8	438	488 2.49
Vikas Bhawan, Basti	1989-90 and 1990-91	526 3.28	4576 9	286	240 1.50
DBT building, New Delhi	1989-90 and 1990-91	4702 11.98	24863 5	1554	3148 8.02
	Total	13259 59.30	109249	6828	6431 26.15

(v) The Company did not fix any norms for consumption of Chir wood as shuttering materials as a result different consumption norms ranging from 0.017 to 0.064 cums of Chir wood per square metre of shuttering were adopted by six units test checked as detailed below:

Name of work/unit	Area of shuttering material used Wooden Steel Total (Square metres)			Chir wood used (cums)	Chir wood used per square metre of shuttering
(1)	(2)	(3)	(4)	(5)	(6)
PGI Unit XIX, Lucknow	248	1361	1609	27	0.017
PGI Unit VII, Lucknow	2801	2229	5030	291	0.058

(1)	(2)	(3)	(4)		
PLCUP building	4133	2000	6133	280	0.046
Unit II, Lucknow					
PGI Unit XI	7978	4000	11978	636	0.053
Vikas Bhawan,	526	231	757	35	0.046
Basti					
Agricultural	926	612	1538	99	0.064
University,					
Faizabad					
Cable Factory	3001	4636	7637	183	0.024
Unit, Allahabad					
Total	19613	15069	34682	1551	0.045

On the basis of the lowest consumption rate of 0.017 cums per square metre, the Chir wood required for 34682 square metres shuttering as above was only 590 cums instead of which 1551 cums was consumed resulting in excess consumption of 961 cums of Chir wood valuing Rs. 48.05 lakhs (at Rs. 5000 per cum).

(vi) The Company suffered loss of Rs. 22.77 lakhs on the work of supply, fixing and removing shuttering on the basis of actual cost incurred by the Company and the amount paid by the clients as stipulated in the following item-rate contracts completed during 1984-85 to 1990-91 as detailed below:

Name of work	Period of execution	Cost of shuttering used	Value of shuttering paid by clients (Rupees in lakhs)	Loss
Cable factory building at Naini, (Allahabad) (main administrative building)	1988-89 to 1990-91	20.39	9.71	10.68
DBT building New Delhi	1989-90 to 1990-91	16.98	10.40	6.58
Main Gate of BHEL building at Varanasi	1984-85 and 1985-86	5.07	1.00	4.07
Irrigation work at Madhi (Srinagar)	1989-90 and 1990-91	9.36	7.92	1.44
Total		51.80	29.03	22.77

Neither reasons for the losses were investigated nor was responsibility fixed for the same.

2A.9. Procurement and utilisation of plant and machinery

2A.9.1. Procedure

The procedure for procurement and utilisation of plant and machinery was laid down by the Company in paragraphs 606 to 634 of the Manual read with paragraph 879 ibid regarding delegation of financial powers. Accordingly, Unit incharge and General Manager were empowered to purchase plant and machinery up to Rs. 10000 and Rs. 50000 in a year respectively. The Managing Director was delegated full powers provided individual costs were less than Rs. 5 lakhs in each case, beyond which the Board of Directors were empowered to sanction purchase of plant and machinery. The plant and machinery of the Company were divided into two parts viz listed machinery (costing above Rs. 25000) and unlisted machinery. Control over the purchase, utilisation and deployment to units in respect of listed machines is exercised by Listed Machinery Unit (LMU) at Lucknow working under the Machinery Officer at Head Office of the Company. The field units in possession of the listed machines were required to pay to LMU ownership charges representing interest and depreciation on monthly basis, and spare parts charges towards cost of repairs by LMU on the basis of actual working hours. The records of LMU, however, did not indicate the actual utilisation of listed machines, as a result the spare parts charges recoverable against each machine were not worked out and compared with the actual expenditure on repairs.

No norms of requirements of plant and machinery were fixed by the Managing Director as required under Para 609 of the Manual.

2A.9.2. Purchase and utilisation of tower cranes, batching plants and transit mixers

With a view to adopting modern techniques in construction process, improving the quality and speeding up building construction work and to secure works abroad, the Board in January 1989 and March 1989 approved purchase of 2

tower cranes and one batching plant for construction of Bapu Bhawan at Lucknow, one batching plant for the work at Dashaswamedh Ghat, Varanasi and 6 transit mixers (with 6 trucks) for works at Lucknow and Varanasi. Accordingly, on the basis of tenders received in March 1989, these equipments were purchased at the negotiated prices aggregating Rs. 156.28 lakhs (including excise duty, sales tax and erection charges) during September 1989 to January 1990 as per firm-wise details given below:

Name of suppliers	Item of equipment	Number	Rate	Total Value (Rs. in lakhs)
Shirke Construction Equipment Poona	Tower crane with jib length of 45 metres and lifting capacity of 1.3 tonne at jib end	1	30.00	30.00
Bhai Sunderdas and Sons New Delhi	Tower crane with jib length of 45 metres and lifting capacity of 1.25 tonne at jib end	1	30.00	30.00
--Do--	Batching plant having 30 cums capacity per hour	2	17.21	34.42
Acme Manufacturing Co. Ltd. Bombay	Transit mixers having 4 cums capacity per hour	6	6.25	37.50
Tata Engineering and Locomotive Co. Limited Jamshedpur	Truck chassis	6	4.06	24.36
Total				156.28

A test check in audit revealed the following points:

(a) Financial advisor or his representative was not associated with negotiations and finalisation of offers which was in contravention of the provisions of the Para 878 of the Manual.

(b) On the basis of negotiations with a firm of Poona in August 1989 for supply of a tower crane with jib length of 45 metres and lifting capacity of 1.3 tonne at jib end at Rs. 30 lakhs (including all taxes and freight) orders were placed in September 1989 on the firm of Poona as well as on a firm of New Delhi for supply of one crane each at Lucknow and New

Delhi respectively on the same price of Rs. 30 lakhs without considering differences in taxes and freights in the two cases. Thus, the supply of crane at New Delhi instead of Lucknow by the New Delhi firm resulted in undue benefit of Rs. 2.76 lakhs comprising of sales tax not paid by the firm and freight charges not incurred by it.

(c) Investment of Rs. 156.28 lakhs on purchase of equipments included Rs. 98 lakhs borrowed by the Company in January 1990 from a bank at interest of 15 *per cent* per annum. However, a tower crane valuing Rs. 30 lakhs was utilised for 458 hours only during January 1990 to February 1991 and one transit mixer valuing Rs. 10.34 lakhs was given to UPSBC on hire in October 1990. Remaining equipments valuing Rs. 115.94 lakhs were still lying unutilised (December 1991) since their purchase in January 1990.

Thus, the Company had to incur an avoidable expenditure of Rs. 29.40 lakhs up to December 1991 on interest paid on loans borrowed for procurement of these equipments.

2A.9.3. Purchase and utilisation of diesel generating sets

(a) The Company purchased 13 diesel generating sets of 40 KVA for Rs. 19.09 lakhs in February 1988 (8 Nos.) and July 1988 (5 Nos.) during construction of 13 Navodaya Vidyalayas in the State although the purchases of generating sets were neither covered under the scope of the work nor approved by the client. The generating sets were, therefore, not taken over by the clients and remained unutilised up to March 1989 (position of utilisation after March 1989 not available) except for 4 generating sets which were utilised for 56 hours to 461 hours during February 1988 to March 1989. Thus, the purchases of the sets proved to be an avoidable financial burden of the Company.

(b) The Company purchased in February 1988 one diesel generating set of 110 KVA for Rs. 2.73 lakhs for use at headquarters office although one diesel generating set of the same capacity was lying surplus at structural centre, Naini

(Allahabad) from July 1986 and was transferred to LMU, Lucknow in May 1991 and was lying idle (December 1991).

Thus, the purchase of one generating set of 110 KVA in February 1988 at a cost of Rs. 2.73 lakhs was injudicious.

2A.9.4. Purchase and utilisation of stone crushers

(a) The Company purchased a stone crusher from Sayaji Iron and Engineering Company Limited, Baroda for Rs. 1.41 lakhs in May 1982, which was installed at the work site of Tehri after a gap of 15 months in August 1983. The details made available to audit indicated that the crusher was used for only 420 days out of 1827 days during August 1983 to July 1988. Reasons of underutilisation and actual quantity of stone crushed during the 420 days were, however, not made available to audit.

Further, the crusher was given on hire to a private party in July 1988 on a rent of Rs. 100 per day with further provision for annual supply of 4000 cums of stone grit of 6 to 20 MM at Rs. 170 per cum, 1000 cums of stone ballast of 40 MM at Rs. 115 per cum and 1000 cums of stone dust at Rs. 165 per cum (with Rs. 25 per cum extra in each case for cartage of the crushed material to the work site). The crusher remained with the party up to February 1990, but it supplied only 3196 cums of crushed stone against due quantity of 9000 cums. The Tehri Unit, however, purchased 2552 cums of 20 MM stone grit and 844 cums of 40 MM stone ballast at Rs. 225 per cum and Rs. 175 per cum as against the rates of Rs. 195 per cum and Rs. 140 per cum payable to the private party, respectively. This resulted in an extra expenditure of Rs. 1.06 lakhs. No reasons for shortfall in supplies by the party were on record.

The crusher was transferred in March 1990 to Srinagar (Garhwal) at the work site of Dairy buildings, where it was lying idle (December 1991). On the other hand, 643 cums of 20 MM stone grit was purchased for Dairy buildings, at Rs. 430 per cum during April 1990 to March 1991. If the crusher had

been used to crush stone boulders available there at Rs. 100 per cum, the total cost of crushed stone grit including cost of crushing operation and maintenance etc. would have amounted to Rs. 230 per cum. Thus, the purchase of 643 cums of stone grit at Rs. 430 per cum resulted in an extra expenditure of Rs. 1.29 lakhs.

(b) The Managing Director approved in April 1989, the purchase of 4 stone crushers for crushing stone boulders available at Pauri, Srinagar (Garhwal), Purola (Uttar Kashi), and Gochar (Chamoli) to get stone grit of 20 MM and 40 MM required for the works undertaken by the Company at these places as stone grit/stone gravel was available at the nearest point of Rishikesh only, and their cartage to the work sites would be very costly. Accordingly, 2 crushers with crushing capacity of 5 cum of 10 to 25 MM grit per hour and 2 crushers with crushing capacity of 7 cum of 20 MM to 40 MM grit per hour were purchased in April 1989 from Sayaji Iron and Engineering Company Limited, Baroda for an aggregate price of Rs. 13.52 lakhs.

The position of actual crushing by the four stone crushers *vis-a-vis* their crushing capacities (based on 8 hours per working day) at Srinagar work site of Company is given below:

	I	II	III	IV
Date of receipt at Srinagar	July 1989	July 1989	July 1989	July 1989
Date of installation	August 1989	January 1990	May 1990	August 1989
Date of transfer to other units	June 1990	March 1991	April 1991	November 1990
Strike period (days)	206	90	4	55
Net working days available	94	265	258	240
Hours available (8 hours per day)	752	2120	2064	1920
Crushing capacity per hour (cum)	5	7	5	7
Total possible crushing (cum)	3760	14840	10320	13440
Actual crushing (cum)		888	394	754
Shortfall (cum)		17712	9926	12686

There was shortfall of 40324 cums as compared with the possible crushing. Without analysing the reasons for shortfall in crushing of stone, the unit purchased 1994 cums of stone grit for the works at Srinagar for Rs. 6.18 lakhs at Rs. 270 to Rs. 322 per cum during the year 1990-91. This resulted in an extra expenditure of Rs. 1.59 lakhs as compared with the cost of crushing at Rs. 230 per cum.

2A.9.5. Non-utilisation of other heavy plants and equipments

A scrutiny of the records of the LMU revealed that as on 31st March 1991, out of total 52 heavy plants and equipments of the Company with aggregate purchase cost of Rs. 183.67 lakhs (depreciated cost: Rs. 14.22 lakhs), 37 plants and equipments comprising generating sets, winch machines, cranes, compressors, dragline, shovels, turbo engine, ladder, well point sets, concrete pumps, wagon drill machines, and batching plants with total original cost of Rs. 168.02 lakhs (depreciated cost of Rs. 9.70 lakhs) were lying idle at Allahabad, Aligarh, Anpara (Sonebhadra), Obra (Sonebhadra), Rasra (Ballia), Kanpur, Varanasi and Tanda (Faizabad) since April 1986. Reasons of their non-utilisation or non-disposal were not on record.

2A.9.6. Underutilisation of concrete mixers

A test check revealed that during 1985-86 to 1990-91 14 units having 71 mixers in all, had utilised these only for 31924 hours against total available 161200 hours at 100 hours per month per mixer on the basis of maintenance charges for minimum 100 hours in a month debited to the cost by the units. The utilisation of the mixers ranged between 8 hours and 963 hours annually as against 1200 hours available in a year. Reasons of not transferring the unutilised mixers at least by the units in possession of more than 2 mixers were not on record.

2A.9.7. Repairs of plant and machinery

Under para 879 (2) of the Manual the Managing Director of the Company was delegated full powers for maintenance and repairs of plant and machinery while General Managers were delegated such financial powers limited to 15 per cent of book value of the machines concerned in one financial year. Unit incharge was delegated powers limited to 15 per cent of book value of the machines concerned and subject to overall ceiling of Rs. 50000 for all the machines and equipments in a unit in a financial year. The book value meant the value of the machine as per books of accounts but the General Manager (Commercial) interpreted it to be the present purchase price' without any approval of the Board of Directors. Accordingly, General Manager (Commercial), approved an estimate for repair of a crane for Rs. 1.25 lakhs in October 1988 as against the limit of Rs. 0.38 lakh being 15 per cent of depreciated cost of Rs. 2.50 lakhs. Subsequently in May 1989, he further sanctioned estimates aggregating to Rs. 12.85 lakhs for repairs of eight machines whose total book value amounted to Rs. 6.19 lakhs. The position of utilisation of the machines after repairs was also not available on record.

2A.9.8. Sale of crane

The Board of Directors approved in January 1989 sale of a Tata crane (purchased during 1978 for Rs. 20.39 lakhs and whose depreciated value was Rs. 2.50 lakhs at the end of March 1988) for Rs. 8.75 lakhs to UPSBC on the ground that its utilisation by the Company was less and had been agreed to by the Managing Director, UPSBC in November 1988. The crane was repaired in May 1989 at a cost of Rs. 2.43 lakhs. Without ascertaining the market sale value, the crane was sold to UPSBC in January 1990 for only Rs. 1.33 lakhs against the agreed sale price of Rs. 8.75 lakhs for which no reasons were on record.

Thus, due to sale of crane below the agreed price, the Company suffered a loss of Rs. 7.42 lakhs besides repair

expenses of Rs. 2.43 lakhs incurred after the sale decision in May 1989.

2A.10. Store accounting and inventory control

The procedures for store accounting and inventory control were prescribed by the Company in paragraphs 370 to 450 of the Manual. A test check in audit, however, revealed the following points:

2A.10.1. Maintenance of store records

(i) A Gate Register (in prescribed form No. 1) to record entries of all incoming and outgoing stores, materials, equipments, machinery etc. in actual chronological order as required in paragraph 392 *ibid* was not maintained by units.

(ii) Voucher number and date, bill number and date, rate and amount against each entry of receipt of materials were required to be given in store ledgers under Accountant's signatures. These details were, however, not given in store ledgers of the 40 units test checked in audit. As such, entries made in store ledgers were not reconciled with the payments made as per financial accounts.

(iii) Issues of materials by Sub-Engineers to Piece Rate Workers (PRWs) were not posted day-to-day in Material-at-site (MAS) ledgers; quantities of issues were derived at the end of a year by deducting closing balances from the total of opening balances and receipts during a year. As such, cases of losses, pilferage etc. could not be excluded.

(iv) Units incharge were required to check once in a year, store ledgers and MAS ledgers and remarks about condition of stores and balances in excess of three months requirements under paragraph 420 *ibid*. These provisions were, however, not complied with in any of the 40 units test checked in audit.

(v) Goods Receipt Notes (GRN) were not issued immediately on receipt of materials. In case of High Court works at Allahabad the delay ranged up to 70 days.

(vi) There is no uniformity among the various units in system of taking measurements of sand and stone grit. Unit II Varanasi, on measurements of stone grit and sand in trucks, added to the measured quantity at 6 *per cent* and 8.5 *per cent* respectively for shrinkage, and then deducted 12.5 *per cent* for bulkage in sand, and also made deductions from supplier's bills at Rs. 20 per truck for saving in stacking on the ground. The High Court Unit at Allahabad had deducted 12.5 *per cent* bulkage from sand measured in trucks without any addition for shrinkage. On the other hand, the Spinning Mill Unit at Jaunpur did not deduct any bulkage from 6338 cums of coarse sand purchased for Rs. 11.28 lakhs in the year 1985-86 and 1986-87 on the ground that sand had been measured in trucks.

2A.10.2. Inter-unit transfers (IUT)

Transfer of materials from one unit to another was required to be intimated to the Controller of Accounts in the head office of the Company, and the respective General Managers giving reasons for material becoming surplus (Para 448 (b) *ibid*). Further, a monthly report in form no. 50 in respect of inter-unit transfers was required to be prepared by the Assistant Resident Engineer/Resident Engineer for raising debit advices (para 450 (b) *ibid*). These provisions were, however, not complied with. As a result, transfers of materials were not reconciled and adjusted, and were shown as inter-unit balances in the accounts every year. Net credit balances under IUT for the year ended on 31st March 1988 amounted to Rs. 149.98 crores.

2A.10.3. Surplus materials

At the end of March 1991, the value of surplus/slow moving materials was Rs. 90.67 lakhs in respect of 10 units which resulted in not only blockade of the Company's funds but also avoidable expenditure on their watch and ward, pilferage or loss and deterioration in quality. A test check in audit revealed that two elevators purchased from a firm of New Delhi for Rs. 5.54 lakhs in July 1986 and November 1987

for Court-building at Allahabad have not yet been installed (December 1991). Moreover, the manufacturer intimated (June 1990) that to install the elevators some of the items of the elevators which had been pilfered/lost would have to be replaced and some others would require reconditioning.

Neither any system was evolved by the Company to monitor and control excessive purchases nor was age-wise analysis of the inventory done periodically or at least at the end of each year for taking deterrent and remedial measures to avoid the chances of materials becoming surplus.

2A.10.4. Physical verification and shortage of materials

Physical verification of materials at the end of each financial year was done by firms of Chartered Accountants appointed by the Company for the purpose. A test check in audit revealed the following cases of shortage of materials:

Unit	Name of person involved	Period	Value of shortage of materials (Rs. in lakhs)
Unit V, Lucknow	Sri S.C. Saluja Store Keeper	1981-82	0.63
Unit at Bulandshahar	Sri Shri Krishna Sub Engineer	1985-86	2.37
Unit at Parichha, (Jhansi)	Sri Shri Krishna Sub Engineer	1985-86	2.77
Unit (I) at Gorakhpur	Not available	1984-85	0.43
New University Unit, Allahabad	Sri Sahabuddin Sub Engineer	1990-91	2.44
New University Unit, Allahabad	Sri Rafiquddin Sub Engineer	1989-90	0.30
SGPGI Unit IV, Lucknow	Sri J.L. Tripathi Sub Engineer	1989-90	13.27
SGPGI Unit IV, Lucknow	Sri N.R. Ali Sub Engineer	1989-90	6.42
SGPGI Unit IV, Lucknow	Sri Pervez Farooq Sub Engineer	1989-90	3.20
PAC Azamgarh	Not identified	1988-89 and 1989-90	7.39
		Total	39.22

Neither investigation for above shortages had been made nor any recovery action had been initiated against the officials concerned.

2A.11. Disposal of scrap materials

The Company had not laid down any procedure or guidelines for disposal of scrap materials. A test check revealed the following points:

(a) Disposal of steel scrap

During 1987-88 to 1990-91, 386.916 tonnes steel scrap was sold for Rs. 18.58 lakhs by 6 units. In this connection it was noticed that the offer (August 1988) of Masuriadeen Ashish Kumar, Kanpur for purchase of 180 tonnes steel scrap at Rs. 4121 per tonne was approved by the Company in March 1989 i.e. after seven months without considering increase in price of steel scrap by about Rs. 1500 per tonne (based on increase in price of steel from Rs. 6900 per tonne in August 1988 to Rs. 9450 per tonne in February/March 1989) and 228.075 tonnes was delivered (March 1989) to the firm by Structural Centre, Allahabad which resulted in loss of Rs. 3.42 lakhs (228.075 tonnes x Rs. 1500) the reasons for which were not on record.

Further, sales tax on steel scrap was chargeable at 8.8 per cent on sale of 32,266 tonnes steel scrap sold for Rs. 14.45 lakhs up to March 1989, and at 10 per cent on sale of 61.650 tonnes scrap for Rs. 4.13 lakhs. But only Structural Centre, Naini (Allahabad) charged sales tax at 4.4 per cent, and other units did not charge any sales tax. This resulted in undercharge of sales tax by Rs. 1.27 lakhs.

(b) Disposal of excavated rocks/boulders

Rocks/boulders were available during excavations for construction of buildings at Delhi but no procedure was laid down by Company for their utilisation/disposal. During audit, it was noticed that 17135 cums of hard rock was available during the course of construction of plant civil work of C.C.I's building (10401 cums) during 1985-86 to 1988-89, and DBT works (6734 cums) in 1989-90 and 1990-91, out of which 2984 cums was utilised in the works but disposal of the

remaining quantity of 14151 cums was not on record. On the other hand, 6842 cums of hard rock was sold by ESI Okhla Unit at Rs. 17.66 per cum (5000 cums) in January 1991 and by Uttar Pradesh Sadan Unit (New Delhi) at Rs. 14.13 per cum (1842 cums) during August 1989 to July 1990. The quantity sold was arrived at after deducting 50 per cent voids from stack measurements of hard rock, for which no basis or authority was available on record.

(c) Disposal of empty cement bags

The Company did not fix any limit for consumption or wastage of empty cement bags on works. A test check of the records of 10 units revealed that out of 12.31 lakh bags of cement used on works, only 6.55 lakh empty bags were received back from work site. After allowing a margin of 20 per cent (2.46 lakhs bags) for use of empty bags on the works for purpose of curing etc., as provided in UP PWD Schedule, there was a short recovery of 3.30 lakh empty bags valuing Rs. 6.60 lakhs (at Rs. 2 per bag). Neither the shortages were investigated nor recovery had been effected from the official concerned so far (December 1991).

2A.12. Other topics of interest

2A.12.1. Execution of works through sub-contractors

Under paragraphs 20 and 21 of the Manual, the Managing Director of the Company could in unavoidable circumstances sanction sub-letting of works to private contractors. The Managing Director was required to record full reasons for doing the same on his letter of approval and place a list of such cases in next meeting of Board of Directors. Even work orders above Rs. 10000 drawn in favour of PRWs (at labour rates) were to be deemed as award of works to sub-contractors for the purpose of reporting to the Board of Directors. It was, however, noticed that all the 40 units test checked in audit issued work orders for more than Rs. 10000 and/or sub-let works to contractors but none of them obtained approval of the Managing Director and, therefore, such cases were not

placed before the Board of Directors. A few such instances are mentioned below:

(a) Construction of overhead tanks

12 overhead tanks of 30 kilolitres to 800 kilolitres capacities were constructed for Rs. 64.76 lakhs through sub-contractors during June 1983 to August 1989 by agreements/work orders ranging between Rs. 1.12 lakhs and Rs. 14.38 lakhs each by 10 units of the Company.

Besides, one overhead tank of 100 kilolitres capacity was also constructed by Unit III, Kanpur in April 1988 through a PRW (labour rate) for Rs. 1.30 lakhs. No analysis of rates was done to examine reasonability of lump sum contract prices working out from Rs. 1.03 to Rs. 3.80 per litre capacity.

In this connection it was noticed that the unit I, Varanasi issued work orders on Mahanta Singh and Sons, Varanasi in September 1986 for construction of two tanks of 50 kilolitres and 250 kilolitres capacity at a cost of Rs. 1.90 lakhs and Rs. 7.25 lakhs, respectively whereas overhead tanks of 135 kilolitres at Azamgarh and of 350 kilolitres at Etawah had been constructed by the respective units of the Company in August 1989 and February 1989 at Rs. 2.96 lakhs (average cost of Rs. 2.19 per litre) and Rs. 4.05 lakhs (average cost of Rs. 1.16 per litre) respectively. Taking into account these average costs, the computed costs of 50 kilolitres and 250 kilolitres overhead tanks worked out to Rs. 1.10 lakhs and Rs. 2.90 lakhs respectively. Thus, the award of the work at Varanasi at higher rates resulted in an extra expenditure of Rs. 5.65 lakhs.

(b) Fixing of fire hydrant system in SGPGI

The work of supply and fixing of galvanised iron (G.I.) pipes of 80 MM to 200 MM alongwith special bends, couplings etc. was awarded in March 1989 by Unit XII (SGPGI) to the

firms of Lucknow and New Delhi through their Lucknow associates at aggregated cost of Rs. 61.25 lakhs.

In this connection it was noticed that the class and make of pipes were neither specified in the notice inviting tenders nor in work orders placed on the firms. Analysis of rates were neither prepared by the unit nor were made available to Audit. On the basis of rates of galvanised pipes of medium class decided by the Joint Purchase Committee, Lucknow in September 1988, and 100 per cent extra for accessories and labour charges, the rates worked out from Rs. 243 to Rs. 543 per metre as against Rs. 470 to Rs. 785 per metre allowed by the unit resulting in an extra expenditure of Rs. 15.36 lakhs as detailed below:

Size of G.I. pipe	Quantity of work (in metres)	Accepted rate	Computed Cost of pipe (Rupees per metre)	rates Total cost	Difference in rates	Extra expenditure (Rs. in lakhs)
80 MM	1000	470	121.50	243	270	2.27
100 MM	7000	525	180.30	361	164	11.48
150 MM	800	785	292.00	584	201	1.61
					Total	15.36

2A.12.2. Excess payments for earthwork

Unit IV (Development), Lucknow was entrusted with construction of roads, drains, culverts, sewerage lines, site development works etc. at SGPGI site. Roads were, however, constructed by Units IV and XI, and earthwork in cutting and earthwork in filling were done by Units III, IV, VII, XI and XII at Lucknow. The quantities of these works executed by the different units were not consolidated by unit IV, and were, thus, not available for comparison with the quantities required to be executed as per detailed estimates and approved designs. A test check of 4.30 lakh cums of earthwork in filling for Rs. 78.77 lakhs done during October 1983 to April 1989 by unit IV (3.47 lakh cums for Rs. 58.41 lakhs), unit VII (0.20 lakh cums for Rs. 5.80 lakhs) and unit XI (0.63 lakhs cums for Rs. 14.56 lakhs) revealed the following points:

(i) According to CPWD specifications, quantity of earth filling was required to be worked out on the basis of ground levels to be recorded at suitable intervals before start of the work, and top levels of filled earth as required according to approved design. This was, however, not done.

(ii) Rs. 27.48 lakhs were paid for 1.49 lakhs cums of earthwork in filling during October 1983 to April 1989 by unit IV (0.81 lakh cums), unit VII (0.18 lakh cums) and unit XI (0.50 lakh cums) at Rs. 15 to Rs. 27.60 per cum without deducting 12.5 per cent envisaged in these rates for settlement of earth as approved by the Joint Purchase Committees. This resulted in excess payment of Rs. 3.43 lakhs.

(iii) Rs. 4.04 lakhs were paid for excavating and shifting 13719 cums of earth by unit IV in July 1985 (11293 cums) and December 1988 (2426 cums) without indicating place of filling in and measurements of filled earth.

(iv) Rs. 3.78 lakhs were paid for 21876 cums of earth purchased from outside on the basis of truck measurements by unit VII in December 1988 (6360 cums) and unit XI during August 1985 to April 1987 (15516 cums) without recording measurement at the place of filling.

2A.12.3. Defective works

The Company had not laid down any procedure to investigate reasons for execution of defective works and fix responsibility for the same with the result that the cost of repairs or removal of defects stood included in the expenditure incurred by the Company for construction works.

During test check of records relating to 8 works in audit it was noticed that Rs. 20.62 lakhs was incurred by the Company during 1985-86 to 1990-91, on removal of defects and repair works which, *inter alia*, included cracks in beams, leakage in roofs, dismantling and relaying of cables and repairing of brick works etc. Neither the reasons for such

defects and repairs causing extra expenditure of Rs. 20.62 lakhs were investigated nor responsibility has been fixed by the Company.

2A.12.4. Loss in contract works

(a) The Company was awarded by Indian Telephone Industries Limited (ITI) during November 1977 to July 1978 item-rate contracts for construction of residential and non-residential buildings at Rae Bareilly for Rs. 71.61 lakhs. An Enquiry Committee, constituted by the Managing Director in April 1988, in its report of February 1989 held that the Company had suffered a loss of Rs. 15.20 lakhs on the work due to excess consumption of building materials (Rs. 5.10 lakhs), and shuttering materials (Rs. 1.67 lakhs), extra expenditure on purchase of materials (Rs. 3.74 lakhs), excessive expenditure on labour (Rs. 2.83 lakhs), and establishment (Rs. 1.86 lakhs). No responsibility in this regard had, however, been fixed by the Management so far (December 1991).

(b) The Company executed works valuing Rs. 332.70 lakhs during April 1988 to March 1991 under item-rate contracts awarded by Hindustan Cables Limited (a Government of India undertaking) for construction of Cable Factory buildings at Naini (Allahabad). A test check revealed that the value of 3072 cumss of RCC and 3683 cums of road work at contract rates payable by the client amounted to only Rs. 43.84 lakhs as against the actual cost of execution amounting to Rs. 54.36 lakhs. The Unit Management stated that it was due to increase in the rates of materials which was not envisaged at the time of quoting the rates in the tender.

Thus, due to non-provision for price escalation in the agreement the Company had to suffer a loss of Rs. 10.52 lakhs.

2A.12.5. Outstanding dues against clients

Rs. 1490.50 lakhs were outstanding against sundry debtors comprising Rs. 490.39 lakhs outstanding for the

period up to 8 months and Rs. 1000.11 lakhs outstanding for more than 6 months as on 31st March 1990. Further, analysis of old cases had not been done by the Company with a view to making efforts for expeditious recoveries. The position of a few cases noticed during test check is given below:

(i) Rs. 68.90 lakhs shown outstanding against National Hydroelectric Power Corporation Limited (NHPC) included Rs. 45.90 lakhs relating to residential and non-residential buildings at Banbasa (Nainital) constructed during May 1985 and June 1987, and Rs. 23.00 lakhs being the bank guarantee amounts forfeited by NHPC. It was, however, noticed that NHPC had not released the dues on the grounds of non-acceptance of the work (including claims for price escalation) for Rs. 32.22 lakhs and recoveries of Rs. 36.68 lakhs due towards penal cost of cement and steel consumed in excess (Rs. 5.45 lakhs), rent of NHPC quarters occupied by the Company's staff (Rs. 3.57 lakhs), labour compensation (Rs. 1.90 lakhs), and penalty for defects in works etc. (Rs. 25.76 lakhs).

(ii) Rs. 109.70 lakhs outstanding against Cement Corporation of India, New Delhi (CCI) in respect of a civil work at Okhla (New Delhi) during February 1985 to April 1989 included Rs. 75.27 lakhs being an arbitration award in favour of the Company, Rs. 30.04 lakhs being the value of the works (including extra items) not accepted by CCI and Rs. 4.39 lakhs on account of unauthorised deductions by CCI (details not made available).

(iii) Rs. 108.66 lakhs outstanding against Uttar Pradesh State Sugar Corporation Limited (UPSSC), Lucknow relating to sugar factory buildings at Ghatampur (Kanpur) constructed during June 1985 to December 1987 included Rs. 80.84 lakhs towards price escalation which was not accepted by UPSSC on the ground that the work was completed in December 1987 as against the due date of June 1986, and the claims of price escalation related to the delayed period of completion and Rs. 3.59 lakhs deducted by UPSSC on account of incomplete/substandard works. The remaining amount of Rs.

24.23 lakhs were not released on the ground of disputes on rates for extra items of work, and penalty for delayed completion of the work.

(iv) Rs. 52.48 lakhs were outstanding against Lucknow Development Authority (LDA) in respect of the construction of multi-storeyed residential complex at Dalibagh, Lucknow during 1986-87 and 1987-88. Reasons of non-acceptance of the aforesaid amount were not on record.

No effective steps had been taken by the Company for expeditious realisation of the outstanding dues and for fixing responsibility in respect of the claims not accepted by clients. Moreover with the passage of time the chances of recovery of these old dues will diminish.

The above matters were reported to the Company and Government in November 1991; replies had not been received (December 1991).

SECTION 2B

REVIEW ON DEVELOPMENT OF INDUSTRIAL AREAS BY UTTAR PRADESH STATE INDUSTRIAL DEVELOPMENT CORPORATION LIMITED

Highlights

Uttar Pradesh State Industrial Development Corporation Limited was incorporated in March 1961 to promote industrial development of the State. The Company took up the development of industrial areas including infrastructure facilities with a view to making available developed plots to entrepreneurs at economical rates. Up to March 1991, the Company had developed 116 industrial areas in 45 districts of the State.

The Company under its own scheme acquired 27977 acres of land up to March 1991, out of which 24899 acres of land could be developed and the balance 3078 acres of land valuing Rs. 504 lakhs was yet to be developed.

A sum of Rs. 62.72 lakhs was recoverable from the district authorities, Sultanpur and Kanpur being provisional compensation paid in excess for acquisition of land. Besides, Rs. 47.52 lakhs had also not been refunded by district authorities Moradabad, although the land acquisition proceedings stood quashed.

The Company incurred an extra expenditure of Rs. 16.43 lakhs on electrification of industrial areas due to award of contract at higher rates.

The Company had spent Rs. 15.77 lakhs during 1990-91 and 1991-92 in providing facility for water supply in a developed industrial area of Allahabad without considering the feasibility for recovery of cost from the existing allottees. The Company had also not revised the rate of premium to be charged from future allottees to recover the cost.

Out of 14422 plots (19908 acres) developed, 3904 plots (1886 acres) remained unallotted till March 1991.

Allotment of 151 plots (48.72 acres) in Panki industrial area at Kanpur valuing Rs. 492.97 lakhs remained suspended since May 1989 without reasons on record.

48 plots (83.37 acres) in Mathura industrial area valuing Rs. 40.39 lakhs were under unauthorised occupation of a religious institution since 1981-82. Besides, 32 plots (15.32 acres) allotted to entrepreneurs were also in unauthorised possession of the same institution, as a result Rs. 17.17 lakhs remained unrealised from entrepreneurs.

The Company incurred an expenditure of Rs. 28.19 lakhs during 1987-88 to 1988-89 on subdivision of developed plots into smaller size plots in industrial areas of Agra and Bareilly without corresponding increase in the rates of premium so as to effect recovery of expenditure so incurred.

Against the No Industry District (NID) scheme 1983 of the Central Government scheduled to be completed in December 1988, the Company had not so far undertaken the development of 69.06 acres of land in three centres resulting in locking up of Government subsidy of Rs. 81.61 lakhs on the purchase of land.

Under the industrial housing scheme of the Company, allotment of housing plots developed during 1985-86 to 1988-89 was very poor, ranging up to 12.2 per cent. As a result, plots valuing Rs. 251.20 lakhs remained unallotted. Besides, of the 325 dwelling units constructed in 1989-90 in four NIDs, 280 units valuing Rs. 248.59 lakhs also remained unallotted (May 1991).

Out of 85 shops constructed in 1979-80 in an industrial area of Mathura district, only 32 shops could be allotted and 53 shops valuing Rs. 20.21 lakhs had remained unallotted.

The Company had not taken adequate action for enforcing recovery of outstanding dues of Rs. 686.72 lakhs as on 31st March 1990 by issue of recovery certificates and cancellation of plots of defaulters.

2B.1. Introduction

The Uttar Pradesh State Industrial Development Corporation Limited (UPSIDC) was incorporated on 29th March 1961 as a wholly owned Government Company with the main object of promoting and advancing the industrial development of the State.

2B.2. Activities

The Company since inception has been mainly performing the following activities:

(i) Development of industrial areas with infrastructure facilities so as to provide developed industrial plots for setting up of industries.

(ii) Identification and promotion of large and medium scale projects in joint/assisted sector.

(iii) Extension of financial assistance to companies by way of underwriting their public issues and through direct participation in equity.

(iv) Preparation of techno-economic feasibility reports for entrepreneurs for their projects in industrial areas of the Company.

(v) Execution of construction work for public and semi public organisations.

2B.3. Organisational set-up

The Management of the Company is vested in a Board of Directors headed by Commissioner and Secretary Industries Department, who is the ex-officio Chairman, one full time Managing Director and 12 part time Directors appointed by the State Government. The Managing Director is the Chief Executive of the Company and is assisted in day-to-day administration by two General Managers, one looking after financing of the schemes and joint sector projects and the

other dealing with industrial areas including administration and supervision of 6 regional offices and 12 divisional offices headed by Regional Managers and Executive Engineers, respectively.

2B.4. Scope of Audit

Mention was made on the working of the scheme for development of industrial areas in paragraph 2.08 (Section II) of the Report of the Comptroller and Auditor General of India for the year 1979-80 (Commercial). The present review conducted during the period January 1991 to June 1991 covers development of industrial areas, allotment of industrial plots in industrial areas to entrepreneurs and recovery of dues (premium of land and interest) during the five years up to 1990-91.

2B.5. Sources and uses of fund

The table below indicates the resources mobilised and utilisation of funds by the Company during four years up to 1989-90. Accounts for the year 1990-91 have not been finalised so far (December 1991).

	1986-87	1987-88	1988-89	1989-90
	(Rupees in lakhs)			
I Sources				
(a) Share Capital	50.00	..	..	..
(b) Borrowings	712.18	114.27	408.01	394.69
(c) Internal reserve and surplus	111.31	110.77	115.00	154.58
(d) Depreciation	17.81	21.26	26.87	28.83
(e) Current liabilities and provisions	304.98	593.50	1144.27	3379.18
Total I	1196.28	839.80	1694.15	3957.28
II Utilisation				
(a) Gross block including work-in-progress	81.33	88.22	102.98	298.94
(b) Current assets, loans and advances				
- Development of industrial area (net)	800.49	665.14	222.73	2399.94
- Other current assets	314.54	83.74	1368.74	1258.70
(c) Miscellaneous expenses	(-) 0.08	2.70	(-) 0.30	(-) 0.30
Total II	1196.28	839.80	1694.15	3957.28

The percentage of expenditure on development of industrial areas to resources mobilised during each of the four years was 67 *per cent*, 82 *per cent*, 14 *per cent* and 69 *per cent* in 1986-87, 1987-88, 1988-89 and 1989-90 respectively. Further there was substantial increase in current assets amounting to Rs. 1591.47 lakhs and Rs. 2658.64 lakhs during the year 1988-89 and 1989-90, respectively, which was mainly on account of increase in liabilities of the Company towards advance of premium and registration money obtained from prospective allottees for allotment of plots.

2B.6. Development of Industrial areas

2B.6.1. Working Procedure

The Company started in 1961-62 a scheme for development of industrial areas at locations having potential for industrial growth with a view to making available developed plots to entrepreneurs at economical rates and preventing haphazard growth of industries in the State. Development work of the industrial area included provision of basic infrastructure facilities like roads, drains, culverts, overhead water storage tanks, powerlines, etc. In July 1974 the Company also started constructing sheds in industrial areas for sale to entrepreneurs for setting-up of industrial units.

In 1975-76, the Company further extended the provisions of facilities in industrial areas to include construction of buildings for field hostels, shops, common facility centre police outposts, banks, post offices, industrial housing, housing plots, etc.

The allotment of developed plots to entrepreneurs is made on 90 years lease on first come first serve basis. In cases which are fixed for priority category by the Company first come first serve basis is not applicable. The premium on plots are worked out during development stage taking into consideration estimated direct and indirect costs, including interest during construction period. The allottees are

required to pay 10 *per cent* of the premium at the time of allotment of plots and balance 90 *per cent* in 5 to 8 equal annual instalments commencing after two years of allotment alongwith interest at the rate of 18 *per cent per annum* with rebate for timely payment of instalments which varied from 5 to 8 *per cent* depending upon location. Besides, the allottees are required to pay annual lease rent at Rs. 100 per acre during first thirty years, Rs. 150 per acre during next thirty years and Rs. 200 per acre thereafter. Whereas industrial sheds are sold on hire purchase basis, industrial housing plots are leased out for a period of 90 years. Other buildings like field hostel, shops and common facility centres are let out on rental basis.

From 1984-85 the Company undertook development of industrial areas in No Industry Districts (NID) of the State under the scheme of Central Assistance discussed in paragraph 7 *infra*.

2B.6.2. Land acquisition

2B.6.2.1. On identifying the district/ area and determining the requirement for development of a industrial area, the Company submits its proposal to the Government through the Collector of the district for acquisition of required area of land under Land Acquisition Act, 1894 (Act) preferably for acquisition of land belonging to Gram Samaj. The area selected and offered by the Collector is examined for its suitability for the purpose and formal approval is thereafter conveyed to the Collector to start acquisition proceedings. The Company is required to make payment of provisional compensation before publication of acquisition notice by the Collector and before taking possession of the land so as to avoid delay in declaration of award by the Special Land Acquisition Officers under Section 17 of the Act. In cases where amount of final award exceeds the provisional amount, payment of balance amount is to be made by the Company alongwith interest. The Act provides for payment of

additional compensation and interest over and above amount of award as follows:

- (i) Additional compensation under section 231(A) of the Act from the date of issue of Section 4 notice to the date of taking possession or declaration of award whichever is earlier 12 per cent per annum
- (ii) Interest under section 34 of the Act from the date of possession to date of payment of compensation for delay up to
 1 year 9 per cent per annum
 above one year 15 per cent per annum

Table below gives the region-wise break up of the total land acquired and the number of industrial areas developed by the Company up to March 1991:

Regions	Number of industrial area developed	Land acquired up to March 1991 (in acres)
Agra	11	2962
Bareilly	20	5103
Gorakhpur	5	763
Ghaziabad	21	8359
Kanpur	22	7208
Lucknow	37	7859
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Total	116	32,254
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2B.6.2.2. Non-execution of conveyance deed

Of the 32254 acres of land acquired by the Company up to March, 1991 conveyance deed for transfer of land by the Government to the Company had not been executed in respect of 16298 acres of land so far (March 1991), which included 5750 acres of land in 20 industrial areas where execution of deed was awaited for over five years for which reasons were not on records. The expenditure on development of 20 such industrial areas was Rs. 16.62 crores.

2B.6.2.3. Non-refund of excess compensation

Provisional compensation paid to district authorities is accounted for as cost of land in the books of the Company. In cases where amount of final award is lower than the provisional compensation paid, adjustment for reduction in cost is carried out only on receipt of the refund of balance amount. The Company had not periodically worked out the amounts of excess compensation recoverable from district authorities in the absence of which the extent of the amounts recoverable from district authorities could not be determined in audit. However, during test check in audit following cases were noticed:

(a) During the years 1985-86 and 1986-87 the Company on demand by district authorities, Sultanpur made payment of provisional compensation aggregating Rs. 189.38 lakhs for 1064 acres of land acquired for 4 industrial areas in the district. The final awards aggregating Rs. 125.58 lakhs were declared during the period 1985-86 and 1988-89. Against Rs. 189.38 lakhs paid by the Company, the district authority submitted vouchers for Rs. 132.30 lakhs (including acquisition and publicity expenses of Rs. 6.77 lakhs) and refunded only Rs. 25 lakhs in March 1988 to the Company. The balance of excess amount of Rs. 32.08 lakhs had not been refunded so far (December 1991) by the district authorities inspite of lapse of over two years from the declaration of final award.

(b) The Company made payment of Rs. 100.54 lakhs as provisional compensation to district authorities, Kanpur Dehat during 1985-86 for acquisition of 422 acres of land in the district. As per final award declared during November 1986 to June 1989, the amount of compensation aggregated to Rs. 69.90 lakhs and therefore Rs. 30.64 lakhs was refundable to the Company which has not been refunded so far (December 1991).

2B.6.2.4. Deposit against quashed acquisition proceedings

In November 1984, the Company submitted to Government through district authorities, Moradabad a proposal for acquisition of 182.91 acres of land in three villages of the district. Notice for acquisition under section 4 and 6 of the Act, was published in Gazette in October, 1985 and March 1988 respectively. In May 1988, the district authorities intimated provisional compensation (including solatium and other charges) of Rs. 74.91 lakhs at Rs. 0.41 lakh per acre. The Company represented against the high rate of compensation to the district authorities who instead further enhanced the provisional compensation to Rs. 87.80 lakhs in May 1988 and furnished certain sale deeds in support thereof. The Company, accordingly, remitted Rs. 42.52 lakhs in August 1988 as 80 *per cent* of the provisional compensation (Rs. 53.15 lakhs) and Rs. 5 lakhs in April 1990 towards additional compensation for 151.32 acres land in two villages but did not seek cancellation for acquisition of land in the third village, where acquisition of 31.59 acres of land for Rs. 34.65 lakhs was considered too exorbitant. The proposal for cancellation of acquisition in third village was submitted to the Government through district authorities in February 1990 which was approved by Government in March 1990 just short of expiry of the period of award. Thereafter, the possession of land in two villages (151 acres) was acquired by Special Land Acquisition Officer (SLAO) in March 1990 after disbursement of 80 *per cent* compensation to land owners. The final award of compensation was to be declared by 19th April, 1990, but a day earlier on 18th April 1990 the SLAO demanded an additional amount of compensations of Rs. 795.29 lakhs. The Company could not deposit the amount due to paucity of time and exorbitant increase in compensation as a result final award could not be made.

Thus, due to non-declaration of final award of compensation within the stipulated period, the entire acquisition and transfer of 151 acres land of the two villages became null and void although payment of

compensation had been released to land owners. The Company in April 1991 approached Revenue Department of Government for refund of Rs. 47.52 lakhs deposited with district authorities, Moradabad. The amount had not been refunded so far (December 1991).

2B.6.3. Development of land

2B.6.3.1. After acquisition of land, detailed cost estimates for development of the area are prepared by the Company. The table below indicates the progress of development of industrial area vis-a-vis land acquired during each of the last five years up to 1990-91:

Year	<u>Land</u>		<u>Land Developed</u>	
	Acquired during the year (in acres)	Cost (Rs. in lakhs)	Area (in acres)	Cost (Rs. in lakhs)
1986-87	4961	1058.20	2554	752.18
1987-88	2302	601.81	2390	674.17
1988-89	4017	474.46	1157	567.18
1989-90	5106	2365.62	1566	1540.77
1990-91	2566	Not available	1501	Not available

Heavy expenditure on acquisition as well as on development of land during 1989-90 was mainly on account of development of industrial areas under the NID scheme discussed separately in paragraph 7 infra.

The table below indicates position of land acquired, developed and allotted as at the end of March 1991 (excluding NID scheme):

	(Area in acres)
Land acquired	27977
Land developed	24899
Land undeveloped	3078
Land available for allotment after development (excluding 4991 acre of area under common facilities)	19908

In this connection it was noticed in audit that proper assessment of demand from prospective entrepreneurs was not made as a result of which the land acquired had remained undeveloped for considerable time. Cases test checked in audit are discussed below:

(i) Land was acquired under Land Acquisition Act, for development of industrial areas and possession was taken even before declaration of final award on the ground of urgency after payment of provisional compensation yet 3078.00 acres of land acquired between 1961-62 to 1990-91 valuing Rs. 504.00 lakhs had remained undeveloped (June 1991). Out of this, 2762 acres valuing Rs. 351 lakhs had been acquired up to 1988-89 *i.e.* more than two years ago.

(ii) Out of 201 acres of land acquired by the Company during 1966-67 in Gorakhpur district, only 51 acres land could be developed by the Company as balance 150 acres land was in the possession of Gorakhpur Development Authority (GDA) since its acquisition. Therefore, the Company in 1989-90 transferred the ownership of land to GDA but payment of compensation already made by the Company to Government amounting to Rs. 6 lakhs remained unrecovered from GDA till December 1991.

(iii) During 1971-72 to 1976-77, the Company acquired a vast tract of 1847 acres valuing Rs. 7.92 lakhs in Sandila (Hardoi district) as having considerable potential for industrial development. However, till March 1987 the Company had developed only 385 acres and balance 1462 acres still remained undeveloped as only 63 units against 165 units to whom plots were allotted had set up industries in the area.

(iv) In 1976-77 the Company acquired 99 acres of land at a cost of Rs. 3.36 lakhs for development of industrial area Akrapur Chacrampur in Unnao district (site III) without assessing the prospective demand and progress in setting up of units on the allotted plots in other two sites in the district. In spite of lapse of over 15 years, the Company could not take up the development of the area due to lack of

demand as only 220 out of 448 allottees had set up their units up to March 1991 on the other two adjoining sites. Although the Company allotted 49 acres of undeveloped land to four units (including 2 joint sector units of the Company) during 1986-87, all the units were closed (June 1991).

(v) The Company acquired 43.98 acres of land in Bhadohi (Varanasi district) for Rs. 21.44 lakhs in 1988-89 for which Company had not so far prepared any estimate for its development. The entire land remained undeveloped and unallotted. The basis on which requirement of land in Bhadohi was assessed was also not on record.

(vi) 1091 acres out of the 3078 acres of undeveloped land with the Company was in such areas/districts where full subsidy towards cost of land was admissible from the State and Central Government (in equal proportion) under a scheme for industrial growth of backward districts. The table below indicates the details of land acquired out of subsidy but which remained undeveloped so far (December 1991).

Name of area/district	Undeveloped land (in acres)	Year of acquisition	Value of Land (Rs. in lakhs)
Jagdishpur (Sultanpur)	124	1976-77 to 1984-85	4.97
Gauriganj (Sultanpur)	99	1985-86	11.70
Deoria	109	1986-87	54.45
Farrukhabad	273	1988-89	25.23
Manpuri	220	1988-89	41.80
Etah	66	1988-89	21.04
Mau (Azamgarh)	100	1988-89	105.00
Mathura	100	1989-90	59.74
	----		-----
Total	1091		323.93
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Thus, the subsidy of Rs. 323.93 lakhs provided by the Central and State Government for meeting cost of land required for development of industrial areas to promote industrial growth of backward districts remained locked up without any development. Reasons for not taking up the development were not forthcoming from records.

(vii) Under the policy of the Government to establish at least one industrial area in each district of the State, the Company had established so far industrial areas in only 45 out of the 62 districts in the State. In 1987 the Company decided to establish an industrial area in Farrukhabad district in State. Accordingly a proposal was sent to district authorities in October 1987 for acquisition of 500 acres of land preferably belonging to Gram Samaj on Fatehgarh-Bewar highway and Executive Engineer Civil of the Company was directed to select the site in co-ordination with district authorities. In November 1987, the Executive Engineer in his report while furnishing details about location of site offered by district authorities, observed that there were no industries near the proposed site and the area was prone to criminal activities which might detract prospective entrepreneurs from setting up industries in that area. The site was also unsuitable in the absence of any river/nala for discharge of effluents. The Company, however, proceeded with the acquisition of land at the said site and acquired 267 acres of land at a cost of Rs. 24.43 lakhs during November 1988 to March 1990 but development of the area acquired could not be taken up for which payment of Rs. 24.23 lakhs had been made.

2B.6.3.2. Execution of works

During test check of records of Electrical, Water supply and Civil divisions of the Company at Allahabad, Ghaziabad and Kanpur the following irregularities in execution of works were noticed:

(i) Avoidable extra expenditure on electrification of Industrial Areas

Up to 1987-88, Electrical Division of the Company awarded composite contracts for supply and erection of steel tubular poles for laying of power lines in industrial areas without assessing the reasonability of rates and analysis of cost of poles and labour charges for erection. During the years 1988-89 and 1989-90 the division, besides awarding

composite contracts for supply and erection of poles, placed three orders for supply of poles of various sizes which after receipt from the suppliers were issued to contractors against separate erection contracts executed with them. It was noticed in audit that the cost of poles erected against departmental supply of poles during the years 1988-89 to 1990-91 were much lower (ranging from Rs. 229 to Rs. 1376 per pole) than the cost incurred by the division during the same period against 16 composite contracts, the extent of extra expenditure incurred being Rs. 13.32 lakhs. Even the composite rates allowed against seven contracts executed during 1986-87 to 1987-88 exceeded the cost incurred during 1988-89 to 1990-91 in case of erection of pole with departmental supply of pole which had also resulted in extra expenditure of Rs. 3.11 lakhs. *check estimate / final* *analyzed* *light - full*

Thus, due to award of composite contracts at higher rates the Company had to incur an extra expenditure of Rs. 16.43 lakhs.

(ii) Construction of an overhead tank

On the basis of tenders invited by Water supply and Sewage division of the Company, contract for construction of 800 Kilolitres capacity overhead tank in industrial area Sumerpur (Hamirpur district) was awarded to the sole tenderer Ram Gopal Agarwal of Kanpur at a lump sum rate of Rs. 10.70 lakhs based on normal soil bearing capacity at 10 tonne per square metre. The rates were variable based on actual bearing capacity of the soil but no extra payment was admissible for any foundation protection work arising out of site conditions. The work scheduled to be completed by June 1990, was completed during extended period of contract in November 1990.

In this connection, it was noticed in audit that the division made extra payment of Rs. 0.56 lakh to the contractor over and above the lump sum rate for excavation in black cotton soil and filling of coarse sand in foundation to

secure water tightness and to avoid seepage of water in foundation. These works were foundation protection works and, therefore, in terms of the contract no additional payment was admissible.

(iii) Provision for additional water supply facility

Industrial area Naini (Allahabad) was developed more than 15 years back without water supply facility which the Company started making available only later on. Out of 366 acres of land developed up to March 1990 the Company had allotted 268 acres of land to entrepreneurs. The General Manager of the Company sanctioned in May 1990 an estimate for Rs. 14.01 lakhs for extending water supply facility. The feasibility for recovery of the additional cost on this account from the allottees was, however, not examined. The work, for providing water supply in the area, scheduled for completion in March 1991 had been completed in October 1991 at a cost of Rs. 15.77 lakhs. The Company had also not revised the rate of premium of land to be charged from future allottees to recover the cost.

(iv) Extra expenditure in construction of drains and culverts.

(a) In November 1987, the Executive Engineer of Ghaziabad division awarded the work of construction of drains (Rs. 2.97 lakhs) and culverts (Rs. 0.72 lakh) along road numbers 7 to 10 in industrial area Surajpur to Ajay Kumar of Ghaziabad for Rs. 3.69 lakhs. Subsequent by in January 1988, the work for construction of drains was deleted from the scope of contractor for which reasons were not on record. The work relating to construction of drains was awarded in October 1989 to another Pal and Company of Ghaziabad for Rs. 3.70 lakhs which was higher than the rates of Ghaziabad contractor. The work was completed by the firm in July 1990. Thus, due to deletion of drain work from the scope of contractor and subsequent award of work at higher rate, the Company had to incur an extra expenditure of Rs. 0.73 lakh.

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73

(b) Measurement for different items of works, relating to construction of culverts against contract executed in November 1987 did not indicate the type of culvert against measurements recorded in Measurement books. As a result, neither the total number of various types of culverts actually constructed nor actual consumption of materials with reference to estimates for different types of culverts could be determined in audit. A comparison of quantities for earth work, RCC and brick work as measured and paid by the division, with the quantities as per norms provided in the estimate for different types of culverts indicated excess measurement and consequential excess payment of Rs. 0.42 lakh to the contractor.

(v) Irregularities in construction of roads

An estimate for development of Kasna site II under phase I Ghaziabad was sanctioned in January 1988. In construction of roads in the area the following points were noticed in audit:

(a) In June 1989, the Ghaziabad division of the Company awarded contract for supply of stone grit and consolidation of the same up to top coat to a M/s Vijai Co. Construction Private Limited, Muzaffarnagar for construction of road numbers 1,4,5,12 and 14. The laying of premix and seal coat over top coat was awarded in January 1990 to Jai Durga Construction, Meerut. It was, however, noticed in audit that area of finally metalled surface on which premix and seal coat was laid by the firm of Meerut was 19856 square metres only including supply of stone grit as against which payment to the firm of Muzaffarnagar for consolidation up to top coat including supply of stone grit was made for 29827 square metres resulting in excess payment of Rs. 0.78 lakh on supply and consolidation.

(b) In construction of roads numbers 1,9 and 17 awarded in February 1988 to Singhal Construction, Meerut, the division

incurred extra expenditure of Rs. 0.52 lakh on account of following:

(i) Deletion of item of laying premix carpet and seal coat, payable at Rs. 12.19 and Rs. 4.37 per square metres, respectively, under the agreement and subsequent award of the work in October 1989 to J.K. Jain of Ghaziabad at a rate of Rs. 14 and Rs. 3.80 per square metres, respectively, resulted in extra expenditure of Rs. 0.29 lakh on 23196 square metres area of premix and seal coat laid. Reasons for deletion of item from the scope of the contract initially awarded was not on record.

(ii) Excess payment of Rs. 0.23 lakh for collection of grit and its consolidation on the basis of stack measurements instead of detailed measurement of area of consolidation and volume of concrete laid thereon (based on thickness of concrete laid) was made to the firm of Meerut.

2B.6.4. Allotment of industrial plots

2B.6.4.1. After development of land has been completed by civil divisions, the land is available with the Regional Managers for allotment to entrepreneurs. According to the Company's policy, plots up to 5 acres are allotted by Regional Level Committee consisting of Regional Manager of the Company, officer of the Uttar Pradesh Financial Corporation and General Manager of District Industry Centre. Plots above 5 acres are allotted by Managing Director of the Company. The premium of plots is recoverable in 5 to 8 annual equal instalments after 2 years of allotment alongwith interest at 18 per cent per annum with rebate varying from 5 to 8 per cent for timely payment of instalments depending upon the location of area. If the payments are not made within stipulated date mentioned in the allotment letter, the allotment stands automatically cancelled and the earnest money deposited could be forfeited. However, in practice the cancellation of allotment is made only in cases of continuous default by the allottees after serving prior notice for

payment of overdues. In view of the increasing overdues of premium and interest and also in view of the considerable difficulty in realisation of dues from defaulting allottees the Company decided in August 1990 to hand over the possession of plots to allottees only on payment of full amount of premium and interest, if any, thereon. The table below indicates region wise position of developed land available for allotment and actual allotment thereagainst up to March 1991:

Name of the Region	Developed land available for allotment	Land allotted	Land under dispute	Balance land remaining unallotted	Percentage of unallotted land to total land
(Area of land in acres)					
Agra	2584	1235	170	1179	45.6
Bareilly	4786	4375	201	210	4.4
Gorakhpur	251	186	22	43	17.1
Ghaziabad	5235	4906	183	146	2.8
Kanpur	3141	2887	139	115	3.7
Lucknow	3911	3637	81	193	4.9
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Total	19908	17226	796	1886	9.5
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Besides unallotted plots, there were also instances where cancellation of allotment of plots in the event of failure of allottee to set up units within three years of allotment was not done. Some instances noticed in audit are discussed below:

2B.6.4.2. Unallotted plots

(i) Out of 354 plots involving developed land of 134.30 acres, developed at Panki Industrial Area (site III) during 1986-87 to 1988-89, 151 plots (48.72 acres of land) were lying unallotted till March 1991, as allotment of plots in the area, otherwise attracting heavy demand, was suspended by the Company in May 1989 without reasons on record. The sale value of these unallotted plots, at prevailing market rate of Rs. 250 per square metre was Rs. 492.97 lakhs.

(ii) In Panki Industrial Area (site IV) 52 plots (19.36 acres) were developed during 1986-87 to 1988-89 but only 4 plots (0.44 acres) were allotted during 1986-87 to 1989-90. Although large number of applications remained pending for allotment of plots, the Company decided to provide industrial sheds over these developed plots and allot the same thereafter. The construction of sheds over developed plots was started in October 1988 and was under progress (June 1991) though required to be completed in one year. As a result of construction of sheds on 48 plots covering 18.92 acres area of developed plots no allotment could be made. Rs. 191.42 lakhs realisable as land premium by allotment of plots remained unrealised from the entrepreneurs who had applied for allotment.

✓ (iii) The possession of two plots (7.87 acres of land acquired in 1973-74 by the district authorities of Mathura, could not be handed over to the Company as the same was in possession of Baba Jai Gurudev Dharm Pracharak Sangh, a religious institution. The institution further took unauthorised possession of 46 plots (75.5 acres of developed land) of the Company during 1980-82 and constructed boundary wall around the area. Thus, 48 plots (83.37 acres of land) valuing Rs. 40.39 lakhs (worked out at premium rate fixed by the Company during 1980) was under possession of the religious institution. Further in 1979-80 the religious institution took possession of 32 plots (15.32 acres of land) allotted to entrepreneurs who were unable to establish their units which had resulted in non-realisation of premium of land amounting to Rs. 17.17 lakhs from the entrepreneurs.

In spite of pursuance by the Company with district authorities, Mathura possession of land could not be taken from the religious institution so far (December 1991) resulting in non-realisation of premium to the Company aggregating Rs. 57.56 lakhs.

2B.6.4.3. Uncancelled allotments

The table below indicates age-wise analysis of allotments which have remained uncancelled, noticed during a test check in audit in respect of three industrial area.

	Naini	Panki	Unnao	Total
For over 15 years	1	1	2	4
above 10 years				
up to 15 years	8	1	8	17
above 5 years				
up to 10 years	9	26	42	77
above 3 years				
up to 5 years	9	36	21	66
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Total	27	64	73	164
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Of the 164 allottees, 118 had neither established their industrial units (June 1991) nor had paid dues amounting to Rs. 39.01 lakhs to the Company towards premium and interest as detailed below:

Industrial Area	No of allottees in default in setting up units and payment of dues Nos.	Outstanding dues (Rupees in lakhs)		
		Premium	Interest	Total
Naini	21	2.60	5.54	8.14
Panki	47	2.82	5.20	8.02
Unnao	50	9.85	13.00	22.85
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	118	15.27	23.74	39.01
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In these cases, the Company had only issued regular demand notices to the allottees. However, the Company had not taken any effective action to recover the dues by issue of recovery certificates through the Collectors as per provisions of the agreements for which reasons were not on record.

2B.6.4.4. Non-recovery of additional expenditure

Premium on land allotted in industrial areas was fixed by the Company on the basis of assessed expenses as per

estimates for development of area. It was, however, noticed in audit that Agra and Bareilly divisions of the Company incurred additional expenditure of Rs. 28.19 lakhs during 1987-88 and 1988-89 on subdivision of developed plots into smaller sizes in Sikundara 'C' and Parsakhera industrial area, due to bigger demand for smaller size plots. The rate of premium already fixed by the Company for these plots was, however, not revised so as to effect recovery of expenditure incurred by the Company. As a result of non-revision of rates of premium in these two industrial areas, additional expenditure of Rs. 28.19 lakhs incurred up to 1988-89 remained unrecovered from the allottees (December 1991).

2B.6.4.5. Non-forfeiture of advance deposit

The Company agreed in October, 1984 to the request of Lohia Machines Limited, Kanpur for allotment of 25 acres of land for their 24 ancillaries in industrial area Panki site IV. The firm which was required to submit application for the ancillaries alongwith certificate from the Director of Industries (DI) could submit 18 applications in January 1986 without ancillaries certificate from the DI. The project reports submitted alongwith the applications also did not justify the requirements of area applied for. Meanwhile, the firm deposited Rs. 5 lakhs and furnished bank guarantee for Rs. 8.16 lakhs in April 1986 valid for one year towards earnest money for reserving the plots. Although ancillaries certificates and deficiencies in project reports remained unfurnished/unclarified till April 1987, no action was taken by the Company to get validity of the bank guarantee extended beyond April 1987. As a result the bank guarantee of Rs. 8.16 lakhs expired in April 1987. As the allotment of plots to ancillaries of the firm could not be made due to non-completion of formalities, reservation of plots in favour of firm was cancelled by Company in April 1989 and Rs. 5 lakhs deposited towards earnest money was forfeited. Against the earnest money of Rs. 13.16 lakhs deposited by the firm, Rs. 5 lakhs available in cash could only be forfeited as the bank

guarantee of Rs. 8.16 lakhs towards earnest money had already expired.

2B.7. Development Scheme in No Industry Districts (NID)

2B.7.1. In April 1983 Government of India introduced a scheme for development of identified growth centre in each NID for which central subsidy was available for one third of the total cost of infrastructure incurred in respect of maximum of 2 centres in each district and Rs. 2 crores per district. The scheme was valid up to December 1988. Detailed guidelines for implementation of the scheme, issued in June 1984 envisaged the State Government to prepare feasibility reports indicating industries having potential for establishment in the area, detailed cost estimates and means of financing and obtaining the approval of the Central Government and Industrial Development Bank of India (IDBI). In deciding growth centre priorities were to be given for centres already identified by National Committee on Development of Backward Areas. Out of the 90 NID's and 41 special regions in the country having no medium and large scale industrial units, 11 districts and 4 special regions in the State were covered under the scheme. The infrastructure qualifying for central assistance under the scheme, included approach roads, industrial water supply, social infrastructure like housing, schools, hospitals and common facilities like power station, drainage, industrial housing, etc.

Under the scheme, selection of growth centres was to be made by a State Level Committee and the Company was to act as nodal agency on behalf of State Government for establishing the growth centres. The State Level Committee could identify and select growth centres in January 1987 after a lapse of about two years which was approved by the Central Government between August and September 1987. Of the 10 approved growth centres, Company took up development of industrial areas in 8 growth centres while the development in the remaining 2 growth centres in special regions approved by the

Government in September 1987 was still to commence (December 1991).

2B.7.2. Resource mobilisation

As per the scheme the project cost of each growth centre up to Rs. 6 crores was to be met out by Central subsidy (Rs. 2 crores), State Government (Rs. 2 crores) and balance from loans from IDBI. Whereas Central share was to be released in four quarterly instalments depending upon the progress of expenditure and release of fund by State Government. The loan from IDBI was to be released only when the Central and State Government had contributed their full share. In case the project cost exceeded Rs. 6 crores, the share of State Government was to be raised to Rs. 4 crores, and that of IDBI loans to balance cost up to the limit of Rs. 5 crores. Accordingly total project cost of Rs. 55.32 crores relating to 8 growth centres taken up for development by the Company was to be met out of Central subsidy of Rs. 14.61 crores, State assistance (Rs. 23.50 crores and IDBI loans of Rs. 17.21 crores. Although the development was scheduled to be completed by December 1988, the actual assistance released up to March 1991 aggregated Rs. 25.85 crores contributed by Central Government (Rs. 6 crores) and by State Government (Rs. 19.85 crores) against the expenditure of Rs. 45.57 crores. However, IDBI had not given any loans against its share as the Central and State Governments had not yet released their full share so far (March 1991).

2B.7.3. Implementation of NID scheme

Development of industrial areas under the NID scheme was taken up by the Company in 1984-85 which was still incomplete even after more than two years of its scheduled completion in December 1988. The table below indicates physical and financial progress of each area as on 31st March 1991.

Name of the Area (District)	Project Cost	Actual expenditure	Percentage of physical progress			
			Road and drains	Electrical works	Water supply	Common facility

(Rupees in lakhs)						
1. Jainpur (Kanpur Dehat)	845	548	92	85	72	73
2. Malwan (Fatehpur)	804	588	87	94	62	88
3. Sathoria (Jaunpur)	606	436	Completed	Completed	75	90
4. Tikaria (Sultanpur)	1150	323	Completed	36	Completed	Completed
5. Bargarh (Banda)	600	517	98	60	73	82
6. Sumerpur (Hamirpur)	640	472	88	52	88	48
7. Orai (Jalaun)	623	656	Completed	Completed	88	86
8. Jasodharpur (Pauri Garhwal)	264	121	Completed	68	47	24
Total	5532	3661				

The Company had also acquired 28.85 acres of land during 1987-88 in Chamoli district at a cost of Rs. 54.45 lakhs from the subsidy provided by the Governments under the scheme but the growth centre/area remained undeveloped. Besides, 25 acres of land valuing Rs. 25 lakhs acquired in Banda during 1989-90 and 15.21 acres land valuing Rs. 2.16 lakhs in Kanpur (Dehat) acquired through subsidy from Governments had remained undeveloped so far (March 1991). Thus, the Company had not so far undertaken the development of 69.06 acres of land in these centres resulting in locking up of Government subsidy of Rs. 81.61 lakhs in purchase of land.

2B.7.4. Irregularities in Construction

Excess consumption of stone grit

Allahabad division awarded in March 1989, a contract for construction of roads, drains and culverts in growth centre areas Bargarh to a firm of Allahabad for Rs. 47.03 lakhs. The work was started by the contractor in March 1989. During progress of the work Chief Project Engineer of the Company sanctioned laying of additional third layer of inter coat in 4450 metre roads passing through black cotton soil for which additional payment was to be made. However, measurements for work done by the contractor did not indicate the number of layers of inter coat laid by contractor. On the basis of

information furnished to headquarter by the division regarding crust thickness ranging between 31.5 cm and 39 cm, the quantity of stone grit of 45-63 mm size that would have been required on road of 4450 metre length worked out to 5097 cubic metre as against which supply of 5938 cubic metre grit at Rs. 96.65 per cubic metre and consolidation thereof at Rs. 31 per cubic metre for additional third coat was paid to the contractor. The value of excess supplies and consolidation of 841 cubic metre grits paid to contractor was Rs. 1.07 lakhs.

28.7.5. Progress of allotment

The scheme of concessional assistance and incentives to entrepreneurs setting up their units in NID included central investment subsidy of 25 per cent of capital cost of project besides concessional rate of interest to be charged by financial institutions for term loans and under writing of shares/debentures. The concessions under the scheme, allowed with the main objective of accelerating the pace of industrialisation in these areas, were to remain in force up to December 1989 extended from time to time up to December 1990. However, on an average only 63 per cent of developed area could be allotted so far (March 1991) as would be seen from the area wise position indicated below:

Name of industrial area	Developed land made available for allotment	Land allotted	Land not available for allotment due to dispute	Land remaining unallotted	Percentage of land allotted to land developed	Premium received (Rupees in lakhs)
Tikaria (Sultanpur)	802	706	1	95	88.0	3.89
Bargarh (Banda)	603	499	-	104	82.8	21.97
Jainpur (Kanpur Dehat)	248	180	59	9	72.6	27.93
Orai (Jalaun)	346	166	68	112	48.0	37.89
Satharia (Jaunpur)	350	150	12	188	42.9	11.60
Sumerpur (Hamirpur)	320	120	-	200	37.5	15.30
Malwan (Fatehpur)	301	88	94	119	29.2	21.83
Jasodharpur (Pauri Garhwal)	82	6	-	76	7.3	NIL
	----	----	----	----	----	----
Total	3052	1915	234	903	62.8	139.91
	----	----	----	----	----	----

In this connection it may be mentioned that plots remained unallotted even though the rates of premium for NID ranged between Rs. 3 to Rs. 15 per square metre against Rs. 20 to Rs. 25 per square metre charged in other backward areas of the State. Moreover, while allotment was more than 72 per cent in districts like Kanpur Dehat, Sultanpur and Banda, more industrially backward districts like Pauri Garhwal, Fatehpur and Hamirpur had few takers and percentage of allotment of the plots was very poor.

In this connection following facts deserve mention:

(i) In spite of highest percentage of allotment in Tikaria, the amount of premium received was the lowest (except in Jasodharpur where it was nil) as the units were not being set up by entrepreneurs after allotment of plots resulting in non-payment of premium of land. The Company had not initiated any action for cancellation and reallocation so far (December 1991). Although out of the total expenditure of Rs. 282.80 lakhs incurred on acquisition and development of land at Tikaria, Rs. 231.90 lakhs was met out of subsidy from the Government the objective of the subsidy had not yet been achieved.

(ii) In Jasodharpur the Company incurred an expenditure of Rs. 83.08 lakhs on acquisition and development of land of which Rs. 57.13 lakhs was met out of Government subsidy. Of 82 acres of land developed only 6 acres could be allotted against which none of the entrepreneurs had set up their units or paid any instalment of premium.

(iii) Proportionate amount of subsidy remaining locked up on unallotted plots due to poor demand from entrepreneurs for allotment of plots in these industrial areas amounted to Rs. 459.56 lakhs at the end of 1989-90 as detailed below:

(110)

Name of industrial area	Subsidy utilised	Cost of subsidy per acre of land developed (Rupees in lakhs)	Land unallotted	Value of subsidy on unallotted land
Jainpur	195.88	0.79	68	7.4
Malwan	245.62	0.82	213	97.58
Satharia	177.12	0.51	200	95.88
Tikaria	231.90	0.29	96	27.55
Bargarh	93.43	0.15	104	15.60
Orai	162.34	0.47	180	52.64
Sumerpur	175.36	0.55	200	110.00
Jasodhar pur	57.13	0.70	76	53.20
	-----		----	-----
Total	1338.78		1137	459.56
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The amount of subsidy on unallotted plots would further increase if the allotment of those plots in which industrial units had not been set up even after 3 years of their allotment, were cancelled.

(iv) As on 31st March 1991 apart from two applications for allotment of plots in Jainpur no applications for allotment of plots was pending in Bargarh, Orai and Sumerpur. This would indicate a lack of demand from entrepreneurs and a call upon the Company for greater efforts to attract entrepreneurs for successful utilisation of land and money invested.

The Company had not analysed reasons for poor response from entrepreneurs so as to take suitable remedial action.

2B.8. Development of common facilities

2B.8.1. Housing plots

In 1975-76, the Company started the housing scheme under which Company developed plots for construction of dwelling units and also taken up construction of dwelling units for sale to industrial workers and entrepreneurs who have set-up their units in industrial areas including NIDS viz. Jainpur, Malwan, Sumerpur and Orai.

In this connection following points were noticed:

(i) The Company had not maintained any record showing sitewise and yearwise details regarding land acquired, number of housing plots developed/dwelling units constructed, cost of developed housing plots and dwelling units constructed and progress of allotment in each year. In the absence of such details no control over the progress in allotment of plots/dwelling units was exercised by the head office of the Company. Thus, fulfillment of the objectives of housing scheme remained unreviewed by the Company.

(ii) The table below indicates position of land developed and allotment thereagainst up to March 1991 as noticed in audit in respect of one industrial area and four NIDs.

Industrial Area	Plots developed		Plots allotted		Plots unallotted		Percentage of allotment to plots developed	Year of development
	Nos	Area in acres	Nos	Area in acres	Nos	Area in acres		
Jainpur	924	38.21	25	0.62	899	37.59	2.7	1987-88
Malwan	1014	39.12	NIL	NIL	1014	39.12	NIL	1986-87
Sumerpur	656	26.37	9	0.23	647	26.14	1.4	1985-86
Orai	603	24.97	4	0.20	522	24.77	0.7	1985-86
Jagdishpur	1520	56.00	185	5.00	1395	41.00	12.2	1988-89

It would be seen from the above that even after a lapse of over four years in four NIDs most of the plots have remained unallotted. The value of plots in these four NIDs and in Jagdishpur industrial area remaining unallotted aggregated Rs. 251.20 lakhs (worked out on the basis of premium fixed by the Company). The Company had not analysed the reasons for poor response to the scheme by taking remedial action to avoid blocking of funds.

(iii) In 1988-89, the Company developed 1520 plots involving 56 acres of land at Jagdishpur (Sultanpur district) industrial area under its industrial housing scheme for allotment of plots to entrepreneurs and employees and workers of the industrial units of the area and started registration of applicants. The registration of plots, originally scheduled to close in December 1988 remains open so far (March 1991) due to less number of applications received.

Till March 1991 only 223 applications were received which included applications received from general public also. It was noticed in audit that out of the 217 plots allotted by the Regional Manager Lucknow till March 1991, 42 plots were allotted to general public who had no connection with the industrial units in the area. Of the 42 such allottees 25 allottees had not paid any instalments and of Rs. 6.91 lakhs was outstanding against them.

In this connection it is worth mentioning that response against earlier schemes for providing limited number of constructed houses in 3 industrial areas (Sandila, Unnao and Sikandrabad) during the period from 1977 to 1988 and against scheme for providing plots in each of four NIDs during the year 1985 had evoked very poor response ranging from no response to 3 per cent. Nonetheless, Company went ahead in taking up development of 1520 plots during 1987-88 and incurred Rs. 76.27 lakhs on development at one site in Jagdishpur alone, against which 185 plots valuing Rs. 21.45 lakhs could be sold so far (June 1991).

(iv) The Company during 1989-90 constructed 325 dwelling units of categories I, II, III, and IV for allotment to entrepreneurs as well as to workers of industrial units in industrial areas of four NIDs at different rates of premium fixed for each category in different industrial area. The Company had allotted only 45 dwelling units till May 1991 as detailed below:

Industrial area	Dwelling constructed	Units allotted	Balance unallotted
Jainpur	105	27	78
Orai	105	9	96
Sumerpur	75	9	66
Malwan	40	..	40
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Total	325	45	280
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The basis on which construction of such large number of units was taken up was not on records. As a result 280 units of different categories valuing Rs. 248.59 lakhs at selling

price remained unsold. Reasons for poor demand of these dwelling units have not been analysed so far (June 1991) by the Company.

2B.8.2. Unallotted shops

The Company had constructed 85 shops during 1979-80 in industrial area Mathura for allotment on rental basis. It was noticed in audit that only 32 shops out of the 85 shops could so far be rented out even after a lapse of over 10 years and 53 shops still remained unallotted (March 1991). Due to non-allotment of 53 shops Company's investment to the tune of Rs. 20.21 lakhs remained locked up.

2B.9. Outstanding dues

2B.9.1. As per terms and conditions of allotment laid down by the Company, the allottees of industrial plots are required to pay yearly instalments of premium and interest thereon on due dates. In the event of failure of allottees to make payment within 30 days of its becoming due, the Company has right to re-enter the premises and determine the lease after deduction of 20 per cent of total premium. The Company is also empowered to effect recovery of dues through the district revenue authorities under the Uttar Pradesh Public Money's (Recovery of Dues) Act.

The Company had not periodically worked out the amount of premium and interest overdue from allottees as the Company had accounted for interest on cash basis up to 1987-88. As per accounts for the year 1989-90 the overdue amount of premium (including interest) at the close of year amounted to Rs. 686.72 lakhs. The Company had not taken adequate action for enforcing recovery of outstanding dues of Rs. 686.72 lakhs as on 31st March 1990 by issue of recovery certificates and cancellation of plots of defaulters.

2B.9.2. While reviewing the position of overdues in respect of 15 industrial areas in Orai, Unnao, Panki, Naini, Hamirpur, Kanpur Dehat, Fatehpur, Banda and Jhansi, where

dues aggregating Rs. 229.77 lakhs were overdue as on 31st March 1991, following points were noticed in audit:

(i) The Company has neither terminated the lease and re-entered the premises nor has issued recovery certificates to District Collectors for effecting recovery in respect of following areas even though the overdues against allottees exceeded Rs. 1 lakh and yearly instalment of premium and interest remained unpaid for over three years. Summarised position of such cases is given below:

Name of industrial area	Total amount over due (Rupees in lakhs)	No. of Allottees in default for more than Rs. 1 lakh for over three years
Unnao site I	46.78	16
Unnao site II	57.85	3
Sumerpur (Hamirpur)	70.66	1
Rania (Kanpur Dehat)	32.41	1
Bijoli (Jhansi)	6.50	1
	-----	--
Total	214.20	22
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(ii) The Company had issued recovery certificates to the respective Collectors in limited cases. Even in those cases where the overdue amount was much more and default was also for over two years, no action was taken as would be evident from the details of 3 industrial areas of Kanpur region as given below:

Name of industrial area	Recovery certificate issued		Amount in default for over two years	
	No. of cases	Amount	No. of cases	Amount
			(Rupees in lakhs)	
Naini (Allahabad)	3	1.38	15	9.30
Panki site I	1	1.01	9	11.59
Panki Site II	7	7.14	16	17.19

During the period from January 1985 to March 1991, neither recovery certificates were issued for effecting recovery of overdues nor were lease agreements cancelled by

the Company, resulting in increase in overdues. Few instances of lapses in follow up of recovery are discussed below:

(i) In case of 4 units of Jainpur Industrial area (Kanpur Dehat) where plots were allotted during December 1985 to December 1987, the allottees did not pay 2 to 3 instalments of premium and interest thereon. The Company had not taken any action to recover the overdues of premium and interest aggregating Rs. 2.78 lakhs except issue of regular demand notice.

(ii) An entrepreneur was allotted a plot in 1981 in Unnao site I. The allottee, however, paid only one instalment but did not pay any premium and interest thereafter. The Company issued three notices to cancel the plot during October 1984 and November 1990, but the entrepreneurs did not pay the overdues amount of unit neither paid the overdues amount of premium (Rs. 1.34 lakhs) and interest (Rs. 1.56 lakhs). The Company had neither cancelled the allotment nor issue recovery certificates for effecting recovery of overdues of Rs. 2.90 lakhs.

2B.9.3. In respect of Ghaziabad region comprising 10 industrial areas, the amount of premium and interest due from allottees as on 31st March 1991 was Rs. 171.31 lakhs and Rs. 124.76 lakhs, respectively, which included overdue amount of premium (including interest) amounting to Rs. 151.92 lakhs against 115 such defaulters who were in default for three or more annual instalments. During review of the outstanding dues against such chronic defaulters following points were noticed in Audit:

(a) The region has not taken action for recovery of dues by issue of recovery certificates to the district authorities and has been pursuing recovery through issue of regular demand notice only. As against overdue amount of Rs. 151.92 lakhs (115 cases) recovery certificates in 6 cases involving dues of Rs. 7.43 lakhs, only had been issued up to March 1991.

(b) Against 12 allottees in default in Industrial Area Loni (Ghaziabad) for payment of dues of Rs. 21.96 lakhs (premium Rs. 7.09 lakhs and interest Rs. 14.87 lakhs) for over five years, no action for recovery was initiated except in one case involving dues of Rs. 1.79 lakhs where recovery certificate could so far be issued (March 1991).

The above matters were reported to Government in September 1991; reply had not been received (December 1991).

CHAPTER 111

REVIEW RELATING TO STATUTORY CORPORATIONS

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SECTION 3A

POWER DEPARTMENT

UTTAR PRADESH STATE ELECTRICITY BOARD

KANPUR ELECTRICITY SUPPLY ADMINISTRATION

Highlights

The Kanpur Electricity Supply Administration (KESA) engaged in generation and distribution of power within the municipal limits of Kanpur city was taken over by the Uttar Pradesh State Electricity Board, in April 1959. Subsequently, the Board added two more units of 15 MW each between 1960 and 1962 raising the capacity to 75 MW which was, however, derated to 65 MW from 1964-65 due to ageing of plant.

The percentage of capacity utilization of the power house declined from 11.44 in 1986-87 to 1.68 in 1990-91. The loss of generation due to lower capacity utilization was 1083 million units valuing Rs. 104.53 crores.

The auxiliary consumption during 1986-87 to 1990-91 ranged between 12.83 to 37.84 *per cent*. Compared to the minimum of 12.83 *per cent* achieved during 1987-88, the excess consumption was 4.99 Mkw h valuing Rs. 50.30 lakhs.

The consumption of coal per Kwh was constantly on the increase during 1986-87 to 1990-91. Taking 1.30 Kg coal per Kwh consumed in 1987-88, the excess consumption of coal aggregated 19848 MT valuing Rs. 393.70 lakhs.

Deployment of manpower in excess of the norm of 7 person per MW resulted in an avoidable expenditure of Rs. 983.38 lakhs on establishment during five years up to 1990-91. Despite the deployment of surplus manpower, the Management paid overtime of Rs. 195.57 lakhs.

The Board had retired the power house in March 1991. The services of surplus staff have not been utilised elsewhere,

resulting in a nugatory expenditure of Rs. 3.20 crores on their pay and allowances up to December 1991.

Though the closure of the power house was imminent, 350 coolies were appointed during 1989-90 resulting in an additional expenditure of Rs. 132.22 lakhs up to December 1991.

Distribution losses, after excluding sale to one consumer through an extra-high voltage line, ranged between 32.4 and 49 per cent during 1986-87 to 1990-91 as against 11 per cent recommended by Central Electricity Authority. The excess distribution losses deprived the Board of an additional revenue of Rs. 11636.65 lakhs during the period.

The consumption of electricity per KW of connected load declined from 2597 units during 1986-87 to 2309 units in 1987-88, 2453 units in 1988-89, 2423 units in 1989-90 and 2422 units in 1990-91. Had the consumption per KW been maintained at the level of 1986-87, Board could have earned an additional revenue of Rs. 3394.08 lakhs. Board has not analysed the reasons for decline in consumption to determine the extent to which it could possibly be due to theft and leakage of energy, under recording of consumptions by meters and under billing of consumers having defective, stopped, jammed and burnt meters.

The revenue arrears of Rs. 2791.98 lakhs at the end of March 1987 increased to Rs. 4384.53 lakhs at the end of March 1991. The number of defaulting consumers at the end of March 1991 were 38 under large and heavy power category, 3416 under small and medium category and 1.62 lakhs under light and fan category against whom dues of Rs. 744.35 lakhs, Rs. 248.74 lakhs and Rs. 3391.44 lakhs, respectively, were outstanding. The KESA, however, could issue 1380 recovery certificates valuing Rs. 214.16 lakhs only during the five years up to 1990-91.

Computer billing in KESA was introduced from October 1980 in respect of small and medium and light and fan

consumers. As against reported arrears of Rs. 248.74 lakhs and Rs. 3391.44 lakhs at the end of March 1991, the arrears depicted in the corresponding computer report were Rs. 1068.35 lakhs and Rs. 5207.19 lakhs, respectively, indicating short exhibition of arrears of Rs. 819.61 lakhs and Rs. 1815.75 lakhs, respectively. Similarly in the case of large and heavy power consumers, the Management reported arrears of Rs. 744.35 lakhs as against Rs. 2048.69 lakhs as per ledger.

The following were other major points noticed during test check:

- Electricity dues at the revised rates from 15 large and heavy power consumers amounted to Rs. 149.40 lakhs.
- The billing of street light consumers at old rates resulted in short realisation of Rs. 16.43 lakhs.
- Additional security from 189 large and heavy power consumers amounting to Rs. 309.81 lakhs had not been recovered.
- Though 17 consumers were reported to have indulged in theft of energy, their assessments were not revised resulting in under charge of Rs. 17.92 lakhs.
- Non-pricing of stores at applicable issue rates resulted in short charge of Rs. 37.11 lakhs and Rs. 16.33 lakhs to capital and maintenance works, respectively.
- The Board incurred a loss of Rs. 34.10 lakhs in 11 deposit works due to short provision of establishment and contingency charges in the cost estimates.
- Non-realisation of house rent from occupants of Board's residences at revised rates amounted to Rs. 11.79 lakhs.

3A.1. Introduction

Kanpur Electricity Supply Administration (KESA) with an installed capacity of 45 MW was taken over by the Uttar

Pradesh State Electricity Board (Board) in April 1959. Subsequently, Board added two more units of 15 MW each in 1960 and 1962, raising the capacity to 75 MW which was, however, derated to 65 MW in 1964-65 due to ageing of plant. The activities of KESA, besides generation of electricity at its power house, extends also to maintenance of distribution system, to meet the growing load demand, billing and collection of revenue on sale of power within the municipal limits of Kanpur city.

3A.2. Organisational set-up

The Management of KESA is vested in the General Manager who is assisted by six Superintending Engineers, two for maintenance of distribution work including consumer connection and one each for stores, commercial, power house and general administration assisted by a Deputy Chief Accounts Officer who besides rendering financial advice, is responsible for upkeep and maintenance of accounts and related records.

3A.3. Scope of Audit

This review on the working of KESA conducted during April to July 1991 covers operation of power house, billing and collection of revenue, inventory Management and maintenance of account records. In addition, performance of distribution transformers was also test checked covering a period of five years up to 1990-91.

3A.4. Generation

In September 1947, the Government took over the coal-based River side power house (RPH) having an installed capacity of 45 MW (Three units of 15 MW each) which had been commissioned in 1937, 1942 and 1945 respectively. Subsequently two more units of 15 MW each were added during 1960-61 and 1961-62 raising the total installed capacity to 75 MW which, due to ageing plant was derated to 65 MW since 1964-65. Despite ageing of plant, coupled with non-

availability of desired quality of coal, the uneconomical generation at power house was continued up to March 1991 when it was retired. The economics as examined in audit revealed that the plant should have been retired long ago to save the Board from avoidable losses as discussed below:

3A.4.1. Capacity utilisation

At derated capacity of 65 MW, the maximum generating capacity of the plant at 6.6 KV was 569.4 Mkw per annum. The table below, however, indicates the actual generation, auxiliary consumption, percentage of capacity utilisation for five years up to March 1991:

Particulars	1986-87	1987-88	1988-89	1989-90	1990-91
Total units Generated (Mkw)	65.16	76.47	53.17	34.42	9.54
Auxiliary consumption (Mkw)	9.17	9.81	7.77	7.50	3.61
Power available for sale (Mkw)	55.99	66.66	45.40	31.92	5.93
Percentage of capacity utilisation	11.44	13.39	9.34	6.92	1.68
Percentage of Auxiliary consumption to units generated	14.07	12.83	14.61	19.03	37.84

The above table reveals that percentage of capacity utilisation declined from 11.44 in 1986-87 to mere 1.68 in 1990-91. The power house was unable to achieve even the average capacity utilisation of 40.7, 45.9, 53.0, 47.9 and 47.9 *per cent* of other thermal power stations of Board during the five years from 1986-87 to 1990-91 respectively. The net loss of generation excluding transmission and distribution (T and D) losses due to lower utilisation of capacity worked out to 1083 million units (Mkw) whose realisable value amounted to Rs. 10453.45 lakhs.

The auxiliary consumption which was 14.07 *per cent* of the unit generated in 1986-87 shot up to 19.03 *per cent* in 1989-90 and reached a height of 37.84 *per cent* in 1990-91. As compared to the minimum of 12.83 *per cent* auxiliary consumption achieved by power house in 1987-88, the excess

consumption was 4.99 MkwH valuing Rs. 50.30 lakhs during the four years ended 1990-91.

3A.4.2. Coal consumption

Consumption norms for coal per unit of energy generated had not been fixed. The table below indicates the consumption of coal per unit generated, variation in consumption and extent of excess consumption of coal during the five years up to 1990-91.

Year	Coal consumption (Kg/Kwh)	Excess coal consumption from base year 1987-88 (Kg/Kwh)	Units generated (MkwH)	Excess coal consumed from base year (In M.T)
(1)	(2)	(3)	(4)	(5)
1986-87	1.41	0.11	65.16	7168
1987-88	1.30	..	76.47	NIL
1988-89	1.61	0.31	53.17	16483
1989-90	1.68	0.38	39.42	14980
1990-91	3.38	2.08	9.54	19843

From the above table it may be seen that the consumption of coal per Kg/Kwh was constantly on increase during 1986-87 to 1990-91. Taking 1.30 Kg coal per Kwh consumed in 1987-88, the excess consumption of coal aggregated 19843 MT valuing Rs. 393.70 lakhs.

3A.4.3. Coal claims

The power house had been getting its requirement of coal from collieries through railway wagons. A test check of records revealed that 9284 coal wagons valuing Rs. 1024.93 lakhs up to March 1990 had been missing as per year wise details given below.

Year	No. of missing wagons	Short receipt of coal (M.T.)	Value of shortages (Rs. in lakh)
Up to 1984-85	6863	N.A	319.86
1985-86	729	45682	179.44
1986-87	747	46900	194.14
1987-88	296	17924	87.42
1988-89	428	24827	148.72
1989-90	221	12700	95.35

A further shortage of 38 wagons valuing Rs. 13.49 lakhs took place between April and June 1990. Though the railway authorities in the meeting held with KESA on 31st January 1991 accepted the above shortages valuing Rs. 1038.42 lakhs but its adjustment and eventual credit to KESA was still awaited.

3A.4.4. Cost of generation

The table below gives the cost of energy generated taking into account the expenditure incurred on fuel establishment and operation and maintenance of power house for the five years from 1986-87 to 1990-91:

Year	Fuel cost	Maintenance cost	Establishment cost	Total cost	Units generated and available for sale (Mkwh)	Cost per unit Rs./ (Kwh)	Board's pooled cost of generation per unit (Re./ Kwh)	Average sales realisation (Re./ Kwh)
(Rupees in lakh)								
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1986-87	497.01	30.05	239.34	766.40	55.99	1.37	0.85	0.82
1987-88	601.56	24.05	263.59	889.20	66.66	1.34	0.96	0.86
1988-89	668.95	42.88	284.74	996.57	45.40	2.20	1.03	0.93
1989-90	502.04	45.83	334.15	882.02	31.92	2.76	1.04	0.94
1990-91	264.95	22.00	404.07	691.02	5.93	11.65	N.A	1.18

In this connection the following observations are made:

(i) The cost of generation per Kwh available for sale exceeded the Board's average pooled cost of generation during each of the five years up to 1990-91. It is significant to mention that cost of generation (at RPH) during the years 1988-89 to 1990-91 increased more than 100 per cent primarily because the establishment cost continued to increase tremendously.

(ii) As cost per unit generated exceeded sales realisation in all the five years up to 1990-91, power station incurred losses amounting to Rs. 2406.31 lakhs during these years. in

fact, the revenue earned per unit was not adequate to absorb even the cost of fuel per unit.

3A.4.5. Excess manpower

For operation and maintenance of power house the technical committee on power appointed by the State Government in its report (December 1972) recommended that personnel factor should be around 4 per MW of installed capacity. Even the project estimate of 32 MW sets (1963) and 110 MW sets (1970) of Panki Thermal Power Station, Kanpur envisaged the manpower requirement as 7.1 per MW and 2.3 MW respectively. As against above, the manpower in power house ranged between 18.14 and 21.29 per MW during five years up to 1990-91. Considering the norm of 7 persons per MW the expenditure incurred on surplus man power amounted to Rs. 983.38 lakhs during five years up to 1990-91.

In this connection the following points also deserve mention:

(i) The Management, despite surplus manpower also paid overtime of Rs. 195.57 lakhs during five years up to 1990-91 and the overtime paid to the workers exceeded maximum ceiling limit of 75 hours provided in the Factories Act, 1948.

(ii) Though generation had totally been stopped and power house was retired by the Board from March 1991, the services of the surplus staff have not been utilised else where, resulting in nugatory expenditure of Rs. 3.20 crores on their pay and allowances from April to December 1991.

(iii) Though the closure of Power house was imminently in the offing, 350 coolies were appointed during 1989-90 resulting in additional expenditure of Rs. 132.22 lakhs up to December 1991.

3A.5. Billing and collection of revenue

The computerised billing in respect of small and medium power as well as light and fan consumers was introduced by

the Board from October 1980. The billing of large and heavy power, however, continues manually. The collection of revenue is made through 12 NCR machines located in various parts of Kanpur.

The results of test check pertaining to billing and collection of revenue in respect of major categories of consumers have been summarised in succeeding paragraphs.

3A.5.1. Growth of load

The table below indicates the year wise/category wise growth in number of consumers, average connected load and consumption per KW of the connected load during the last five years up to 1990-91.

Category	Year	Number of consumers	Connected load (KW)	Units sold (Mkwh)	Consumption per KW of connected load (Kwh)
(1)	(2)	(3)	(4)	(5)	(6)
Domestic	1986-87	137643	117487	201.5	1716
	1987-88	144311	125615	200.7	1598
	1988-89	148413	131261	205.1	1563
	1989-90	159003	140860	261.5	1856
	1990-91	178950	161701	288.2	1782
Commercial	1986-87	25878	37962	66.6	1754
	1987-88	27130	39802	56.1	1409
	1988-89	27853	42519	89.4	2103
	1989-90	30777	46617	66.9	1435
	1990-91	33025	53240	74.5	1399
Industrial (Small and Medium)	1986-87	5167	88766	70.8	798
	1987-88	5285	90064	72.0	799
	1988-89	5543	93909	74.5	793
	1989-90	5921	101004	74.2	735
	1990-91	6330	112638	90.9	807
Industrial (Large and heavy)	1986-87	165	183128	764.6	4175
	1987-88	162	182636	670.8	3673
	1988-89	163	174900	703.8	4024
	1989-90	498	194863	762.5	3913
	1990-91	167	176336	748.7	4246
Public lighting	1986-87	5	1628	8.1	4975
	1987-88	5	1628	7.9	4853
	1988-89	4	2260	8.3	3673
	1989-90	4	2704	11.6	4290
	1990-91	4	2875	18.4	6400

(1)	(2)	(3)	(4)	(5)	(6)
Irrigation and Agriculture	1986-87	..	..	..	..
	1987-88	..	..	..	..
	1988-89	8	41	N.A	..
	1989-90	12	59	N.A	..
	1990-91	17	77	0.1	1299
Water Works and Sewage Pumps	1986-87	30	6230	18.5	2970
	1987-88	30	6432	21.5	3343
	1988-89	30	6458	25.9	4011
	1989-90	41	8124	21.1	2597
	1990-91	31	7404	24.1	3255
Grand Total	1986-87	168888	435201	1130.1	2597
	1987-88	176823	446177	1030.1	2309
	1988-89	182014	451348	1107.0	2453
	1989-90	196256	494234	1197.7	2423
	1990-91	218024	514271	1245.5	2422

An appraisal of the above figures in audit revealed the following:

(i) Despite increase in number of consumers and their connected load the consumption per KW of connected load compared to base year 1986-87 decreased resulting in loss of revenue of Rs. 3394.08 lakhs during 1987-88 to 1990-91 as per details given below.

Sl. No.	Year	Percentage of fall as compared to 1986-87	Rate of revenue realisation Rs/Kwh	Loss of revenue (Rs. in lakh)
(1)	(2)	(3)	(4)	(5)
1.	1987-88	11.09	0.86	1077.82
2.	1988-89	5.55	0.93	571.38
3.	1989-90	6.70	0.94	754.31
4.	1990-91	6.74	1.18	990.57

(ii) Interestingly, the consumption per KW of connected load in respect of small and medium power consumers ranged between 735 units and 807 units in the five years, whereas in respect of other categories of consumers it ranged between 1299 units and 6400 units during the same period.

The consumption of electricity per KW of connected load declined from 2597 units during 1986-87 to 2309 units in 1987-88, 2453 units in 1988-89, 2423 units in 1989-90 and

2422 units in 1990-91. Had the consumption per KW been maintained at the level of 1986-87, Board could have earned an additional revenue of Rs. 3394.08 lakhs. Board has not analysed the reasons for decline in consumption to determine the extent to which it could possibly be due to theft and leakage of energy, under recording of consumptions by meters and under billing of consumers having defective, stopped, jammed and burnt meters.

3A.5.2. Assessment and realisation

The table below indicates the position of assessment and realisation under various categories of consumers for each of the five years up to March 1991.

Years	(Figures in lakh of Rupees)							
	Large and Heavy		Small and medium		Light and fan		Total	
	Assess- ment	Realisa- tion	Assess- ment	Realisa- tion	Assess- ment	Realisa- tion	Assess- ment	Realisa- tion
1986-87	9644.41	9228.10	687.93	610.36	1126.99	922.83	11459.33	10761.29
1987-88	9235.01	8893.29	760.19	748.14	1259.68	1023.24	11254.88	10664.67
1988-89	10820.43	10347.60	821.59	794.95	1399.35	1034.39	13041.37	12176.94
1989-90	12645.99	11291.27	1018.14	865.32	1641.61	1258.39	15305.74	13414.98
1990-91	14108.71	14685.43	1113.06	1299.60	1838.59	1282.29	17060.36	17267.32

The above table indicates the following:

(i) The assessment of energy charges during 1987-88 decreased by 1.78 *per cent* as compared to 1986-87 which was due to higher distribution losses of 23.82 *per cent* in 1987-88 compared to 16.44 *per cent* in 1986-87. Though the assessment increased during the years 1988-89, 1989-90 and 1990-91 by 15.87, 35.99 and 51.58 *per cent*, respectively, as compared to 1987-88 it was mainly attributable to revision of tariff in respect of all categories of consumers *w.e.f.* 17th October 1989 and 1st August 1990. The exact impact on assessment due to increase in tariff could not be worked out in absence of necessary details.

(ii) The actual realisation of revenue always fell short of assessment except in 1990-91 which contributed to growth of revenue arrears.

(iii) Under small and medium power though assessment as compared to 1986-87 were higher by 10.5, 19.4, 48.0 and 61.8 *per cent* during 1987-88 to 1990-91 respectively, the revenue realisation in the corresponding years did not increase in that proportion. In case of light and fan consumers, the assessment during 1987-88 to 1990-91 were higher by 11.8, 24.2, 45.8 and 63.1 *per cent* respectively as compared to 1986-87, but the corresponding revenue realisation in the same years increased by only 10.9, 12.1, 26.4 and 39.0 *per cent*, respectively.

3A.5.3. Revenue arrears

The table below indicates the category wise break up of revenue arrears including electricity duty during the last five years up to 1990-91.

Arrears in lakh of rupees

Category	1986-87	1987-88	1988-89	1989-90	1990-91
(1)	(2)	(3)	(4)	(5)	(6)
1. Domestic and Commercial	1860.52	2096.96	2461.92	2845.14	3391.44
2. Small and Medium power	243.77	255.82	282.46	435.28	248.74
3. Large and heavy power	687.69	780.92	862.15	1680.83	744.35
Total	2791.98	3133.70	3606.53	4961.25	4384.53

An analysis in audit disclosed the following points:

(i) Bulk of arrears pertained to domestic and commercial power consumers which ranged between 56.3 and 76.2 *per cent* of the total arrears during the five years up to 1990-91. In fact, there was continuous increase in arrears under this category rising from 12.7 *per cent* to 82.3 *per cent* during 1987-88 to 1990-91 as compared to arrears of 1986-87.

(ii) Percentage of arrears against large and heavy power consumers to total arrears increased from 7.7 and 20.2 in 1988-89 to 16.7 and 23.7 in 1989-90. The increase in arrears during 1989-90 was mainly due to assessment on revised tariff from October 1989 whereas realisation was stopped by Board on

protest from consumers. In April 1990, the rates were finally revised at a lower side and adjustments were accordingly done resulting in decline in arrears during 1990-91.

3A.5.4. Issue of recovery certificates

Unpaid electricity dues are recoverable as arrears of land revenue under the Uttar Pradesh Public Money (Recovery of Dues) Act, 1972. The Act, provides issue of demand notice under Section 3 to defaulting consumers for the payment of dues within 30 days, failing which recovery certificate (RC) under Section 5 of the Act, is issued to the District authorities for recovery of the dues as arrears of land revenue.

The table below indicates the position of recovery certificates (RCs) issued, recovery made, RCs returned and RCs pending during last five years up to 1990-91.

Year	Opening balance		RCs issued		Recovery Made		RCs returned		Balance		RCs
	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
(Rupees in lakhs)											
1986-87	623	91.86	302	26.20	32	0.95	..	..	893	117.11	
1987-88	893	117.11	236	21.98	35	1.03	90	0.58	1004	137.48	
1988-89	1004	137.48	160	15.83	33	4.52	242	4.83	889	143.96	
1989-90	889	143.96	344	119.66	45	1.45	3	0.12	1185	262.05	
1990-91	1185	262.05	338	30.49	46	0.97	98	7.66	1379	283.91	

The revenue arrears of Rs. 2791.98 lakhs at the end of March 1987 increased to Rs. 4384.53 lakhs at the end of March 1991. The number of defaulting consumers at the end of March 1991 were 38 under large and heavy category, 3416 under small and medium and 1.62 lakhs under light and fan category against whom dues of Rs. 744.35 lakhs, Rs. 248.74 lakhs and Rs. 3391.44 lakhs, respectively, were outstanding. The KESA, however, could issue 1380 recovery certificates valuing Rs. 214.16 lakhs only during five years up to 1990-91.

3A.5.5. Differences in arrears

In KESA, computerised billing in respect of small and medium power and light and fan consumers was introduced from October 1980. Master data in respect of each consumer alongwith up to date arrears was prepared and fed to computers. It was noticed that KESA reported to Board arrears of Rs. 248.74 lakhs and Rs. 3391.44 lakhs as at the end of March 1991 in respect of small and medium power and light and fan consumers, whereas, the arrears depicted in Computer Report No. 23 (Control Report on arrears) were Rs. 1068.35 lakhs and Rs. 5207.19 lakhs, respectively. This resulted in short exhibition/accountal of arrears by Rs. 819.61 lakhs and Rs. 1815.75 lakhs, respectively, at the end of March 1991. In reply the Management stated in July 1991 that the differences may be due to the reason that the figures of realisation were not taken from computer report, which was not acceptable as huge differences in the figures of arrears between two reports being prepared by the same Management, had not been investigated.

Similarly the arrears at the end of March 1991 intimated to the Board by KESA under large and heavy power category was Rs. 744.35 lakhs. However, ledger balances relating to arrears exceeding Rs. one lakh and above alone was Rs. 2048.69 lakhs. The difference of Rs. 1304.34 lakhs in two sets of figures, has not been reconciled. Thus reporting of arrears was not factually correct.

3A.5.6. Large and heavy power consumers**3A.5.6.1. Consumption pattern**

The consumers having contracted load above 75 KW (100 H.P.) for induction furnace, rolling and re-rolling mills, etc. are categorised under large and heavy power consumers. There were 167 large and heavy power consumers having contracted load of 176336 KW at the end of March 1991. Indian Explosive Limited (IEL) is the biggest consumer with a contracted load of 81000 KVA/68850 KW released through 132 KV

transmission line and contributes 64.61 per cent of the total revenue of KESA. The consumption pattern of large and heavy power consumers including and excluding IEL during last five years up to 1990-91 is given in the table below.

Year	Number of large and heavy consumers	Connected Load (KW)			Units sold (Mkwh)			Consumption per KW/day including IEL (Kwh)	Consumption per KW/day excluding IEL (Kwh)
		IEL	large and heavy excluding IEL	Total	IEL	large and heavy excluding IEL	Total		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1986-87	165	68850	114278	183128	443.3	321.3	764.59	11.44	7.70
1987-88	162	68850	113786	182636	372.9	297.9	670.81	10.06	7.17
1988-89	163	68850	106050	174900	421.8	282.0	703.82	11.03	7.29
1989-90	498	68850	126013	194863	459.7	302.8	762.46	10.72	6.58
1990-91	167	68850	107486	176336	483.7	265.0	748.65	11.63	6.75

Thus after excluding the consumption of IEL the loss of revenue due to low consumption during last four years compared to consumption of 1986-87 was Rs. 1121.44 lakhs.

3A.5.6.2. Defaulting consumers

Though arrears at the end of March 1991 against 38 consumers amounted to Rs. 2048.69 lakhs, however, the table below gives details of arrears exceeding Rs. five lakhs outstanding against individual consumers.

Sl. No.	Name of Consumer	Installation No.	Outstanding dues (Rs. in lakhs)	Position	Reasons
(1)	(2)	(3)	(4)	(5)	(6)
1.	Steel Enterprises	25/2993	40.76	Disconnected	R.C. for 39.19 lakhs and remaining amount stayed by Court in Arbitration
2.	Kanpur Steel Works	16/755	29.22	Disconnected	
3.	Sadi Ram Ganga Prasad	1/8220	15.14	Connected	Court Case
4.	Kanpur Cold Storage	3/2165	17.11	Connected	Court case
5.	Kalyanpur Cold Storage	3/2269	11.37	connected	Court case
6.	Dau Dayal Kapoor	5/2807	5.46	Disconnected	Court Case

(1)	(2)	(3)	(4)	(5)	(6)
7.	J.K. Rayon	1/4508	13.71	Disconnected	Referred to CE (c) Board in November 1986, reminder in June 1987, decision awaited
8.	J.K. Cotton Mills	5/417	13.85	Connected	Stayed by High Court
9.	Swadeshi Cotton Mills	5/418	362.00	Connected	Claim lodged before claim commissioner Delhi on 16-2-1987
10.	Singh Engineering Works	25/3879	22.91	Disconnected	Stayed by Court
11.	Gayatri Devi Jalan	21/3267	9.94	Connected	Arbitration
12.	Bhola Ram Agarwal	1/9787	5.24	Connected	Court Case
13.	L.R. Cotton Mills	5/2290	19.24	Connected	Prior to taken over by NTC
14.	Artheston Mills	5/411	21.40	Connected	Prior to taken over by NTC
15.	Jal Sansthan		1093.44	Connected	--
16.	ACME Investment	16/2063	8.44	Connected	Stayed by Court paying at old tariff
17.	Lohia Machines (Scooter)	16/2088	12.85	Connected	Stayed by Court paying at old tariff
18.	Lohia Machines (Scooter)	16/2088 (A)	10.11	Connected	Stayed by Court paying at old tariff
19.	Upper India Polymer	16/2138	16.93	Connected	Stayed by Court paying at old tariff
20.	Prakati Synthetics	65/10483	17.83	Connected	Stayed by Court paying at old tariff
21.	Elgin Mill No. I	3/625	8.14	Connected	Stayed by Court paying at old tariff
22.	Kanpur Textiles	5/412	8.39	Connected	Stayed by Court paying at old tariff
23.	Elgin Mill No. II	5/334	8.83	Connected	Stayed by Court paying at old tariff
24.	Railways	..	96.58	--	---
25.	Nagar Mahapalika	SLI	144.97	--	---

A further scrutiny of relevant records made available to audit revealed the following:

(i) Swadeshi Cotton Mill was nationalised through Central Government ordinance published in the Gazette of India in April 1986. For clearing liabilities of the Company, Ministry of Textiles appointed in June 1986 a commissioner of payments under Section 18 of the ordinance and any claim was to be preferred before the commissioner. The first claim for Rs. 338.41 lakhs was preferred in April 1986 by KESA which was revised to Rs. 362.02 lakhs in February 1987. KESA, had also not preferred late payment surcharge bill amounting to Rs. 111.68 lakhs.

(ii) Vide an agreement dated 7th February 1981 the contracted load of J.K. Rayon Factory, Jajmau was increased from 3000 KVA to 5500 KVA for initial period of 5 years. The management intimated closure of factory to KESA on 18th May 1983 stating that they would not require power above 500 KVA after 18th May 1983. The consumer had, however, drawn more power than 500 KVA during the following 3 months.

Month	Demand recorded (KVA)
5/83	2483
6/83	1763.33
7/83	1767

Bills for the months of May 1983 to July 1983 issued by KESA were not paid by the consumer, the supply was disconnected on 11th August 1983 and agreement was terminated on 7th July 1984. The final bill for Rs. 31.76 lakhs for the period from May 1983 to January 1984 (including period of six months after disconnection in terms of para 17(ii) of condition of supply) was raised of which consumer paid Rs. 18.05 lakhs only as full and final payment during June to August 1985 when notice under Section 5 through District authorities was issued to him. For balance amount of Rs. 13.71 lakhs, consumer obtained stay from the High Court, which was ultimately dismissed on 14th January 1988, but the dues have not been recovered so far (July 1991).

(iii) The outstanding dues against Public Water Works and Sewage pumping amounting to Rs. 539.23 lakhs in 1986-87 increased to Rs. 1246.37 lakhs in 1990-91 registering an increase of over 131 per cent mainly because of inclusion of late payment surcharge of Rs. 630.76 lakhs.

(iv) The Board revised the rate schedule applicable to all consumers of State w.e.f. 1st February 1986.

The tariff was again revised by the Board w.e.f. 17th October 1989. It was noticed in audit that consumers listed at serial number 1, 2, and 3 of the table given below continued to make payments at rates applicable prior to February 1986 while those at serial number 4 to 15 are making payments at rates applicable prior to 17th October 1989; as a result arrears against all of them continued to mount. Three of these consumers had obtained stay orders in October 1986 and the remaining 12 in November/December 1990. The table below indicates the position of arrears against individual consumers as at the end of March 1991.

Sl. No.	Name of consumers	Installation Number	Connected load (KVA)	Period of arrear	Amount of arrear (Rs. in lakhs)
(1)	(2)	(3)	(4)	(5)	(6)
1.	Kanpur Cold Storage	3/2165	200	2/86 to 3/91	17.11
2.	Kalyanpur Cold Storage	3/2269	250	2/86 to 3/91	11.37
3.	Sadi Ram Ganga Prasad	1/8220	1382	12/86 to 11/89	15.14
4.	Lohia Machines	16/1279	719	10/89 to 3/91	4.58
5.	ACME Investment	16/2023	1000	10/89 to 3/91	8.44
6.	Lohia Machines (Scooter)	16/2088	2000	10/89 to 3/91	12.85
7.	Lohia Machines (Scooter)	16/2088(A)	3350	10/89 to 3/91	10.11
8.	Upper India polymer	16/2138	2500	10/89 to 3/91	16.93
9.	Prakati Synthetics	65/10423	2000	10/89 to 3/91	17.83
10.	Kanpur Synthetics	65/10173	500	10/89 to 3/91	4.45
11.	Elgin Mill No. I	3/625	3300	10/89 to 3/91	8.14
12.	Cownpore Textiles	5/412	2200	10/89 to 3/91	8.39
13.	Elgin Mill No. II	5/334	3855	10/89 to 3/91	8.83
14.	Anurag Synthetics	16/2637	750	10/89 to 3/91	1.62
15.	Kanpur Plastics packs	16/750	1048	10/89 to 3/91	3.61
Total			25054		149.40

In this connection it may be mentioned that while all other large and heavy power consumers of KESA are paying electricity charges at revised rates only 15 consumers have obtained stay which has not yet been got vacated by KESA.

(v) The Board revised its tariff for heavy power consumers applicable from 12th October 1974, in which minimum consumption guarantee clause was introduced, against which Steel Enterprises, Kanpur (Installation No. 25/2993 having contracted load of 1805 KVA) obtained stay order from the Calcutta High Court. The supply was finally disconnected after decision of the High Court in 1984 dismissing three of the five suits filed by the consumer in favour of Board involving arrears of Rs. 39.19 lakhs. In April 1984, RC under Section 5, was issued to District authorities for realisation of Rs. 39.19 lakhs as arrears of land revenue. No recovery despite lapse of more than five years has been effected from the consumers.

(vi) Kanpur Steel Works having contracted load of 1000 KVA (Installation No. 16/755) obtained a stay order in 1975. Electricity dues during the years 1975 to 1983 accumulated to Rs. 29.22 lakhs. The line of the consumer was disconnected in September 1983. On a suit filed by the consumer the Court ordered in 1985 to refer the matter to arbitration for settlement of dues. Accordingly Board appointed an arbitrator in 1985 whose appointment was not accepted by the consumer. Instead the consumer demanded appointment of two arbitrators one by Board and second by himself, which was, however, turned down by Board in 1988. The consumer has again filed a suit in 1988 in the court, decision was still awaited.

(vii) Artheston Mills (Installation No. 5/411) with a contracted load of 1350 KVA and L.R. Cotton Mills (Installation No. 5/2290) with contracted load of 2600 KVA were nationalised and taken over by National Textile Corporation (NTC) in 1980 against whom dues prior to their take over aggregated Rs. 20.40 lakhs and Rs. 19.24 lakhs respectively. No claim could be lodged by KESA because

commissioner of payment had not been appointed so far (July 1991) by Ministry of Textiles, Government of India. However, it was noticed that both the connections are still running and have not been disconnected despite non-payment of dues.

(viii) Smt. Gayatri Devi Jalan (Installation No. 21/3267 having contracted load of 300 KVA) had filed a suit in 1985 for reconnection of supply, which was disconnected on 22nd May 1984 due to non-payment of dues of Rs. 4.53 lakhs. The court in May 1985 directed the consumer to deposit half of the amount (Rs. 2.26 lakhs) in instalments and furnish security for the balance amount for getting the supply reconnected. The supply of consumer was, however, reconnected in August 1985 after deposit of Rs. one lakh only but as the consumer failed to deposit subsequent instalments, the supply was again disconnected in February 1986.

The consumer again moved the court in February 1986 for reconnection of supply. The court passed an order in March 1986 that the consumer was to be reconnected after making payments of dues which amounted to Rs. 9.94 lakhs up to February 1986. The consumer did not pay the dues and in a meeting in January 1988 it was decided that an arbitrator be appointed for settlement of dues. Though the consumer was reconnected in March 1988 no arbitrator has so far been appointed.

(ix) Singh Engineering Works, Panki (Installation No. 25/3879 having contracted load of 5000 KVA) discontinued payment of dues from May 1988 onwards and as a result supply was disconnected in August 1988. Recovery certificate under Section 5 for Rs. 22.91 lakhs up to April 1989, was issued in January 1990, but no recovery could be effected because factory had already been disposed of. In reply it was stated that revenue authorities could not take action because consumer had obtained stay order (month/year not indicated) against recovery.

(x) Nagar Mahapalika, Kanpur had not been paying their electricity dues regularly for its several connections consequently arrears of Rs. 144.97 lakhs had accumulated up to June 1991.

In reply the Management stated that due to recovery of Rs. 20.56 lakhs, the outstanding dues ending June 1991 against street light amounted to Rs. 81.61 lakhs only. On being pointed out in audit that despite late payment by consumer, rebate admissible for timely payment was allowed to them during 1989-90 and 1990-91, the Management agreed to raise bills for Rs. 4.77 lakhs and Rs. 5.19 lakhs respectively in July 1991; recovery was, however, awaited for the balance outstanding dues (June 1991).

(xi) Malpractice/theft of power by Meghdoot Hotel

Owing to low consumption, the metering system of Meghdoot Hotel having contracted load of 426 KVA, was checked in July 1983 and the meter was found defective and was replaced. Despite replacement, the meter recorded low consumption and as such the meter was again checked in May 1987 during which it was found that potential circuit 'Y' phase of meter was loose and tampering in metering system was suspected. After tightening of potential circuit, the energy consumption shot up by 2.55 times from the previous recording.

For assessment and charging for the entire period a committee appointed by General manager also held the view that possibility of malpractice could not be ruled out in the above case.

Board's order (1984)* provides assessment for six months at thrice the tariff rate in case of theft/malpractice by a consumer. Management, however, had not assessed the dues resulting in an under charge of revenue of Rs. 15.15 lakhs (July 1991).

* para 22 (b) of conditions of supply..

(xii) Indian Explosive Limited

In February 1986 an agreement was entered into for supply of 50,000 KVA load to Indian Explosive Limited, Kanpur for their fertilizer factory, which was enhanced to 75000 KVA in March 1981 at the request of the consumer. The load was further enhanced to 81000 KVA in November 1985. For running own generation plant of 12 MW, the consumer executed an agreement in October 1983 on the condition that he would pay every month supplementary charges at the rate of 10 per cent of the minimum consumption guarantee per KVA on 14118 KVA (12000 KW) which was subject to revision from time to time. When tariff was revised from October 1989 the Management did not revise supplementary charges from Rs. 93180 p.m. to Rs. 134121 p.m. at the revised rates of Rs. 9.5 per KVA on 14118 KVA. This resulted in under charge of Rs. 8.19 lakhs during the period from November 1989 to June 1991. The Management stated that revised tariff had no provision for minimum consumption guarantee and as such supplementary charges were not revised. The reply is not tenable as para 5 of new tariff clearly indicates that 75 per cent of the contracted demand or actual demand in a month which ever is higher, is required to be billed as minimum consumption.

3A.5.6.3. Street light billing

Following irregularities were noticed in the billing of street light consumers.

(i) The Board revised rates of Electricity Duty (ED) in January 1987, which was leviable on street light consumers. A test check of records revealed that four street light consumers of KESA continued to be charged ED at old rates, which resulted in short billing of Rs. 16.43 lakhs during January 1987 to March 1991. On being pointed out, revised bills were issued by the Management in June 1991, actual realisation was awaited (August 1991).

(ii) The Board in January 1987 revised rates of security deposit realisable at the rate of Rs. 300/= per KW from

street light consumers. Rs. 8.63 lakhs recoverable from four street light consumers having connected load of 2875 KW was neither recovered nor bills issued by the Management. A scrutiny of records also revealed that no security had ever been realised from above consumers. On being pointed out, the Management stated that bills have been raised without furnishing the details thereof. The realisation was, however, awaited (August 1991).

3A.5.6.4. Additional security from large and heavy power consumers

The Board in January 1987 revised the rates of security deposits, *inter alia*, stipulating that supply to the consumers shall be disconnected without notice in the event of non-payment of additional security. The stay order obtained in June 1987 by some consumers against the above order was vacated by the Supreme Court of India in May 1988 and Board reissued the above orders.

The additional security of Rs. 309.81 lakhs from 189 large and heavy power consumers having aggregate connected load of 217959 KVA had, however, not been realised so far (July 1991).

3A.5.7. Small, medium and light and fan consumers

3A.5.7.1. Consumption pattern

Consumers having contracted load up to 75 KW (100 BHP) for Industrial, Agro-Industrial, Public water works, Sewage pumping, Power loom etc. fall under the category of small and medium power consumers whereas the consumers having connected load for domestic Light and Fan and non-domestic Light and Fan including that for commercial purposes come under the category of Light and Fan consumers. The energy consumption of such consumers per day per KW of connected load for five years up to 1990-91 is given below.

Year	Number of consumers	Connected load (KW)	units sold (Mkwh)	Consumption per KW per day (Kwh)	Percentage increase of load compared to 1986-87
(1)	(2)	(3)	(4)	(5)	(6)
A- Small and medium power:					
1986-87	5167	88766	70.81	2.19	..
1987-88	5285	90064	71.99	2.19	1.5
1988-89	5543	93909	74.48	2.17	5.6
1989-90	5921	101004	74.24	2.01	13.8
1990-91	6330	112638	90.85	2.21	26.9
B- Light and Fan (Domestic)					
1986-87	137643	117487	201.5	4.70	..
1987-88	144311	125615	200.7	4.38	6.92
1988-89	148413	131261	205.1	4.28	11.72
1989-90	159003	140860	261.5	5.08	19.89
1990-91	178950	161701	288.2	9.88	37.63
C- Light and Fan (Commercial)					
1986-87	25878	37962	66.6	4.81	..
1987-88	27130	39802	56.1	3.86	4.85
1988-89	27853	42519	89.4	5.76	12.00
1989-90	30777	46617	66.9	3.93	22.80
1990-91	33025	53240	74.5	3.83	40.25

An analysis in audit revealed the following facts:

(A) Small and medium power

(i) Small and medium power consumers run small and medium industries with the help of electric motors of various capacities. On the basis of 18 hours supply per day and 0.5 power factor the energy consumption of these consumers works out to 9 units per day per KW of connected load. As against above the consumption per day per KW ranged between 2.01 to 2.21 units indicating theft/pilferage of energy on a large scale. The quantitative shortfall in consumption during five years up to 1990-91 worked out to 1215.48 Mkwh whose realisable value was Rs. 11628.22 lakhs.

(ii) During the same period, energy consumption per day per KW in case of light and fan consumers was more than twice than that of industrial consumers indicating a more extensive theft of power by this category of consumers.

(iii) Compared to average daily consumption of 5.08 and 9.88 units per KW of connected load during 1989-90 and 1990-91 by

domestic light and fan consumers, the corresponding consumption by commercial Light and Fan consumers was only 3.93 and 3.83 units respectively indicating large scale theft of energy by commercial consumers.

3A.5.8. Provisional assessment

Board is required to bill for actual energy consumed by the consumer which is ascertained from the meter installed for the purpose. A test check of the summary of the computer report disclosed that consumers were being billed on provisionally assessed units due to defective meters or non-availability of meter readings in time. Monthly units billed for each of the four years ending March 1991 on the basis of actual consumption recorded by the meters and units billed provisionally were as under.

Particulars	Small and Medium power					Light and Fan consumers		
	3/88	3/89	3/90	3/91	3/88	3/89	3/90	3/91
	(Units in lakhs)							
(a) Total units billed	58.24	65.35	46.82	63.87	298.71	447.97	324.16	211.71
(b) Metered units billed	48.03	52.68	35.85	54.95	193.63	324.75	209.02	173.44
(c) Units billed provisionally	10.21	12.67	10.97	8.92	105.08	123.22	115.14	38.27
(d) percentage of units billed provisionally to total units billed	17.53	19.33	23.43	13.97	35.39	27.51	35.52	18.08

It was also noticed that orders for regulating and testing of meters as directed by the State Government in July 1963, under Rule 5 of the Indian Electricity Rules, 1956 read with Board's order (September 1963) was not followed by Test and Meter Section, as such under billing resulting in short realisation of revenue could not be ruled out.

3A.5.9. Withdrawal of assessment

The table below shows the units and amount of assessment withdrawn during the last four years up to 1990-91 in respect of small and medium power and Light and Fan consumers.

Year	Small and medium power		Light and Fan	
	Units withdrawn (Mkwh)	Amount withdrawn (Rs. in lakhs)	Units withdrawn (Mkwh)	Amount withdrawn (Rs. in lakhs)
1987-88	N.A	112.45	N.A	316.21
1988-89	3.2	143.91	4.4	212.66
1989-90	1.4	65.20	11.6	422.55
1990-91	1.8	492.71	71.7	7533.78

The above table reveals that heavy assessment was being withdrawn every year by Management. The percentage of amount withdrawn to total amount billed in respect of small and medium power worked out to 14.8, 17.5, 6.4 and 44.0 and in respect of Light and Fan consumers it worked out to 25.1, 15.2, 25.7 and 42.3 during the four years up to 1990-91 and indicates the quantum of inaccuracy in the billing of consumers.

3A.5.10. Theft/pilferage of energy

In case of theft of energy, where there is evidence that consumer has dishonestly abstracted, consumed, used or wasted energy Board's order of 1984 provides assessment of energy at penal rate calculated on the basis of LFHD (Load x Factor x Hours x Days) formula.

During test check by Audit of the billing of individual small and medium power consumers four cases were noticed where theft of energy had been made by consumers, but Management had not assessed their energy consumption at penal rate which resulted in undercharge of Rs. 6.55 lakhs.

Assistant Engineer (Small Power) on 5th July 1991 checked sites of 44 small and medium power consumers and reported that detailed checking should be done in all above cases for suspected theft of energy. Test scrutiny in audit of above cases revealed that meters of 13 consumers revealed a very low consumption compared to their connected load, which indicates suspected theft of energy and short charge of Rs. 11.37 lakhs.

No action has been taken by the Board against the consumers so far (December 1991).

3A.5.11. Ledgerisation of new connections

The orders of the Board issued in July 1970 provided ledgerisation of new connection within one month of its release and issue of bills immediately after receipt of meter readings. It was noticed in audit that new connections reported to commercial wing had not been promptly ledgerised as would be evident from the table below.

SL. Particulars No.		1988-89		1989-90		1990-91	
		Small & Medium	Light & Fan	Small & Medium	Light & Fan	Small & Medium	Light & Fan
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1.	New connections pending ledgerisation at beginning of the year	NA	NA	41	4339	7	5237
2.	New connections released during the year	NA	11669	347	11225	449	8577
3.	Total new connections during the year	NA	11669	388	15564	456	13814
4.	Ledgerisation during the year	NA	7330	381	10327	453	19176
5.	New connections pending for ledgerisation at close of year	NA	4339	7	5237	3	(-) 5362

Thus, due to delay in ledgerising the consumers, Board was deprived of timely realisation of revenue.

3A.6. Distribution

The infeed of power for distribution net work in Kanpur comes from 200KV/33KV and 132KV/33KV sub-stations Panki, Azad Nagar, Krishnanagar and from its own 6.6KV Power House (sub-station till the end of 1990-91). The total step down transformation capacity installed at above sub-stations was 770 MVA from where the power is fed to nine 33KV/11KV and seven 33KV/6.6KV sub-stations through outgoing feeders.

As at the end of March 1991, 36 transformers with aggregate capacity of 360 MVA were installed at the sub-stations. The energy from 11KV and 6.6KV is further stepped down through distribution transformers to 440 volts whose transformation capacity aggregated 289.58 MVA through 724 transformers.

3A.6.1. Damages of installed transformers

The Board laid down in May 1982, that the damage to transformers should not exceed two per cent of the transformers installed in any year.

An analysis, however, revealed that the damage ranged between 16.7 per cent to 21.9 per cent during the three years up to 1990-91 as shown in the table below:

Particulars	1988-89	1989-90	1990-91
1. No. of installed transformers at the begining of year	548	612	663
2. No. of installed transformers at the end of year	612	663	724
3. Average number of installed transformers during the year	580	637.5	693.5
4. No. of transformers damaged during the year	97	116	152
5. Percentage of transformers damaged to average number of transformers installed	16.7	18.2	21.9

The above table reflects that while the percentage of yearly addition of new transformers was 11.7 per cent in 1988-89, 8.3 per cent in 1989-90 and 9.2 per cent in 1990-91 over the previous year, the damage rate registered continuous increase which during these years was 16.7 per cent, 18.2 per cent and 21.9 per cent. Lack of monitoring was attributable to non-maintenance of history card for each transformer in the absence of which reasons for premature damage against prescribed life of 25 years could not be known. As analysed by Audit the maximum number of damaged transformers were purchased from Mirzapur Electrical Industries, Mirzapur. Management attributed the excessive damage rate mainly to paucity of funds and added that a committee consisting of concerned Superintending Engineers had been constituted in

July 1991 to investigate reasons of damage of transformers, their report, was, however, awaited.

3A.6.2. Accountal of transformers

(A) Damaged transformers

A test check of records, revealed that the history cards/stock account of damaged transformers were not being maintained. Thus all such transformers remained out of stock accounts. A physical count done at the instance of Audit on 1st June 1991 revealed that 108 transformers of various capacities (86 repairable, 22 irreparable) have not been accounted for.

(B) Repair of transformers

The economic limit for repair of transformers of various capacities was fixed by Board in January, 1988 which included cost of material used in repair, transformer oil, excise duty and transportation charges but excluded sales tax. A test check, nowever, revealed that 21 transformers were got repaired in excess of economic limit by Rs. 1.95 lakhs excluding transportation charges as transportation was done by departmental vehicles.

3A.6.3. Power transformers

As at the end of March 1991, thirty six power transformers of various capacities stood installed at sixteen 33 KV Sub-stations of KESA.

The table below indicates the damaged power transformers lying at various sub-stations:

Serial number	Make	Capacity (MVA)	Value (Rs. in lakh)	Date of Commissioning/Damage	
1.	G.E.C.	10	8.50	November 1989	February 1990
2.	Voltas	10	12.50	September 1988	June 1990
3.	H.E.L.	8	5.00	February 1990	February 1990
4.	G.E.C.	5	6.00	June 1988	July 1990

From the table it may be seen that power transformers were damaged within two years as against the prescribed life of 35 years. These transformers are still lying, and Board has not taken any action to get them repaired so far (December 1991).

3A.7. Distribution losses

In April 1967, CEA recommended that overall system losses should not be above 15 per cent with extra high voltage transmission of about 4 per cent and sub-transmission and distribution losses of 11 per cent and efforts should be made to restrict system losses to less than 10 per cent.

The table below indicates the yearwise units received, units sold, units lost in distribution and its percentage and excess distribution loss together with its value over and above the base year (1985-86) for the 5 years up to 1990-91.

Sl. No.	Particulars	1985-86 Base year	1986-87	1987-88	1988-89	1989-90	1990-91
1.	Units received (In MkwH)	1230.00	1362.85	1352.23	1432.99	1549.44	1618.10
2.	Units sold (In MkwH)	1106.00	1130.00	1030.12	1107.00	1197.75	1245.46
3.	Units lost in distribution (In MkwH)	124.00	222.65	322.11	325.99	351.69	372.64
4.	Percentage of distribution loss	10.08	16.46	23.82	22.75	22.69	23.02
5.	Excess distribution loss over base year 1985-86 (In MkwH)		73.86	173.38	168.36	181.24	194.65
6.	Value of excess loss at average sales realisation (Rs in lakhs)		605.65	1491.07	1565.75	1703.66	2296.87

The distribution losses which were only 10.08 per cent in 1985-86 more than doubled to about 23 per cent in 1990-91. This loss would further increase if the energy sold to one consumer viz., Indian Explosive Limited (IEL) through 132KV EHV transmission line is excluded as would be evident from the table below:

Year	Total units sold (Mkwh)	Units sold to M/s IEL (Mkwh)	Balance units available (2-3) (Mkwh)	Units lost in distribution	Realistic percentage of losses
(1)	(2)	(3)	(4)	(5)	(6)
1985-86 (Base year)	1106.00	438.33	667.67	124.00	18.57
1986-87	1130.00	443.30	686.70	222.65	32.42
1987-88	1030.12	372.92	657.20	322.11	49.01
1988-89	1107.00	421.83	685.17	325.99	47.58
1989-90	1197.75	459.69	738.06	351.69	47.65
1990-91	1245.46	483.71	761.75	372.64	48.92

Thus, transmission and distribution losses, after excluding sale to one consumer through extra-high voltage line, ranged between 32.4 per cent and 49 per cent as against 11 per cent recommended by Central Electricity Authority. The excess distribution and transmission losses deprived the Board of an additional revenue of Rs. 11636.65 lakhs during the above period.

The massive theft of power led the Board to launch "Voluntary Disclosure Scheme" during September 1989 to November 1989, which revealed that in 1705 cases of voluntary disclosure 519 cases of disclosures were from small and medium power consumers who disclosed theft of power to the extent of 11.59 MW (direct and excess load being 1.84 MW and 9.75 MW respectively) and 556 cases related to light and fan category. As per scheme amount realisable from 519 consumers from October 1989 to June 1990 worked out to Rs. 20.36 lakhs (December 1991).

3A.8. Inventory control

The requirement of materials for maintenance of power house and for construction and maintenance of lines and sub-stations is met mainly from its own stores which are procured by Management on the basis of periodical requirement. The table below indicates opening balance, receipts, issues and closing balance of both capital as well as operation and maintenance stores for the last four years up to 1990-91.

	1987-88			1988-89			1989-90			1990-91		
Particulars	Capital store	O&M store	Total	Capital store	O&M store	Total	Capital store	O&M store	Total	Capital store	O&M store	Total
1. Opening balance	NA	NA	(-)15.54	(-)24.64	38.57	13.93	(-)224.45	273.02	(-)51.43	0.75	117.22	117.97
2. Receipt and purchase			1680.19	215.64	255.17	470.81	726.04	44.85	770.89	520.47	214.60	735.01
3. Total			1664.65	191.00	393.74	484.74	501.59	317.87	719.46	521.22	331.82	853.04
4. Issue and transfer			1650.72	415.45	120.72	537.17	500.84	100.65	601.49	377.85	204.83	582.68
5. Closing balance			13.93	(-)224.45	273.02	(-)51.43	0.75	217.22	117.97	143.37	126.99	270.36

The following accounting and valuing discrepancies were noticed:

(i) The account of receipts of stores during 1988-89 was far less compared to issues during the year and as a result, the value of closing stock of stores and spares reflected a minus figure of Rs. 51.43 lakhs which only illustrates accounting irregularities that existed at the end of March (Final) 1989.

(ii) The value of stock does not include scrap and unserviceable material.

3A.9. Short charge to works

The Planning Wing of KESA circulates each year the approved stock issue rates of each item meant for valuation of works and for framing of estimates under deposit works.

A test check of pricing register, however, revealed that due to incorrect application of issue rate in pricing, the value of both capital and M & R works remained under exhibited by Rs. 37.11 lakhs and Rs. 16.33 lakhs respectively as per head wise and year wise details given below:

Head of expenditure	1989-90	Under valuation (Rupees in lakhs)		
		1990-91	1991-92	Total
(1)	(2)	(3)	(4)	(5)
A. Capital work-in-progress expenditure				
(a) under ground cable	7.35	22.77	..	30.10
(b) Over head lines	0.73	3.61	..	4.33
(c) Service connections	0.85	0.03	..	0.86
(d) Switch gear	0.26	1.48	..	1.73
(e) Tools and Tackles	0.03	..	..	0.03
Total	9.22	27.89	..	37.11
B. Repairs and maintenance expenditure				
(a) Transmission plant, Transformer rating 11 KV	..	0.25	..	0.25
(b) Over head lines on reinforced concrete	..	1.79	0.29	2.08
(c) Service connections	..	0.15	..	0.15
(d) Other transformers	..	5.52	8.33	13.85
Total	..	7.71	8.62	16.33

It was stated by the Board that necessary correction in the accounts will be carried out after investigation, the result of which was awaited.

3A.10. Accounts

(a) Non maintenance of records

Accounts receivable

Advance payments are made to suppliers and adjustments thereof carried out as and when materials were received in accordance with terms and conditions of the order. A test check of such advance payments and adjustments of advance revealed that the register showing supplier-wise details of advances recoverable had not been maintained, in the absence of which the party wise recovery to be effected as at the end of March 1991 could not be vouched for in audit as per details given below:

	Opening Balance (Rupees in lakhs)	Paid during the year	Total	Adjusted Closing during Balance the year
1. Advances to suppliers of capital stores	340.58	3.38	343.96	3.63 340.33
2. Advances to suppliers of operation and maintenance stores	174.39	467.14	641.53	399.29 242.24
			Total	582.57

Although register of 'Miscellaneous Advance' though not maintained on prescribed form, had been opened from April 1987 onwards, the details of party wise advances recoverable prior to April 1987 was not available with Management.

(b) Revenue cash book and reconciliation

Orders for maintenance of two revenue cash books, one for computer and another for manual billing, their daily closing and balancing, reconciliation of withdrawals, remittances, realisations with summary of consumer ledgers etc. were not followed as required, due to which discrepancies on account of incorrect entries in cash books, consumer ledgers and in the bank pass book remained undetected and unreconciled. In this connection the following points deserve mention:

(i) Reconciliation of withdrawals from banks with bank statements had not been carried out for more than 10 years.

(ii) Reconciliation of revenue remittances with that of bank statements had not been carried out since May 1988.

(iii) The position of various reconciliations viz. revenue remitted by bank to main receipt account of the Board with that of acknowledgements afforded by Board, revenue realised from consumers with credits afforded by computer separately for small and medium and light and fan consumers, ledger summary in case of large and heavy consumers being billed manually with that of realisations as per cash book,

assessment proposed for computer billing with that actual assessment done by computer, interunit transfer of funds with their acceptances etc. could not be test checked as Management failed to furnish the same.

(iv) As prescribed by Board in November 1970, a register of dishonoured cheques was required to be maintained to watch recoveries/adjustments from the consumers whose cheques were dishonoured. The register maintained for the purpose, however, did not indicate subsequent realisations against dishonoured cheques and such realisations against dishonoured cheques of Rs. 4.68 lakhs in 1987-88, Rs. 13.00 lakhs in 1988-89, Rs. 1.85 lakhs in 1989-90 and Rs. 32.84 lakhs in 1990-91 could not be ascertained in audit.

(c) Non-adjustment of imprests

According to Board's instructions (October 1976) if advance had been taken against passed vouchers, account thereof should be rendered within a week's time and no temporary advance should be given to any officer/official unless previous advance, if any, had been cleared.

A test check of March 1991 (Final) Account of KESA revealed the following position in regard to temporary imprests/advances:

	Rupees in lakhs
(a) Temporary imprests/advances opened during 1990-91	40.01
(b) Temporary imprests/advances adjusted during 1990-91	43.24
(c) Net balances unadjusted	(-) 3.23
(d) Add opening balance lying unadjusted	10.61
(e) Total unadjusted balance ending March 1991	7.38

As against total outstanding of Rs. 7.38 lakhs, the General Manager KESA, on 25th June 1991, circulated a list of temporary advances lying unadjusted as on 31st March 1991 aggregating to Rs. 5.70 lakhs only. An analysis of this list indicated the following position of yearwise outstanding:

Year	Amount (Rs. in lakhs)	No. of advances involved
1987-88	0.28	12
1988-89	0.59	37
1989-90	2.00	50
1990-91	2.83	80
	----	---
Total	5.70	179
	---	---

Details for the balance Rs. 1.68 lakhs were not available with the Management. However, the circulated list indicated that 8 officials had advances of more than Rs. 20,000 outstanding against them for more than 6 months as given below:

Sl. No.	Name	Designation	Amount (Rs. in lakhs)	No. of advances	Period involved
1.	Sri C.L. Sahu	S.K (E.H.)	1.00	4	12/89
2.	Sri S.B. Trivedi	P.A (NI)	0.81	34	4/87-3/91
3.	Sri S.C. Pathak	J.E (Bulk)	0.55	11	5/90-2/91
4.	Sri N.K. Verma	J.E	0.48	8	1/90-3/90
5.	Sri P.P.S. Tomar	J.E (Hqr)	0.35	9	11/88-8/90
6.	Sri R.K. Mishra	A.E (I) L&F	0.34	5	10/90-3/91
7.	Sri Hafiq Ahmad	----	0.28	8	8/89-11/90
8.	Sri A.K. Tiwari	J.E (D-32)	0.23	4	11/90-4/91

3A.11. Construction of lines and sub-stations

A test check of records relating to construction of lines and sub-stations revealed the following:

(i) The Rural Electrification and Secondary System Planning Organisation of the Board revised in March 1987, the cost schedule applicable to construction of 11KV/LT lines and sub-stations which inter alia envisaged provision and recovery of 35.5 per cent overhead charge (3 per cent contingency, 1.5 per cent T&P, and 31 per cent establishment charges) on such works. A test check in audit of estimates for deposit works for giving supply to bulk consumers, however, revealed that Management has provided and received only 18 per cent (15 per cent overhead and 3 per cent contingency charges) on account of above charges, resulting in short charge of Rs. 34.10 lakhs from various consumers as per details given below:

Sl. Name of No. consumers	Amount realisable	Amount realised	Amount short- realised
	(Rupees in lakhs)		
1. Som Dutt Builders	2.97	1.50	1.47
2. Mall Properties	1.54	0.67	0.87
3. Padam Apartment	1.20	0.60	0.60
4. J.K. Builders	1.00	0.51	0.49
5. Kalpana Mercantiles	1.34	0.67	0.67
6. I.E.L. residential flats	0.84	0.42	0.42
7. Gopal Builders	0.82	0.40	0.42
8. Classic apartment	0.64	0.31	0.33
9. Air Force Chakeri	33.25	16.82	16.43
10. Steel Authority of India	12.36	6.25	6.11
11. Gujani	14.00	7.71	6.29
Total	69.96	35.86	34.10

On being pointed out in audit, the Management has started providing 35.5 *per cent* towards overhead charges in all estimates from 1991-92 onwards but no action has yet been taken to recover the amount short charged pointed out in audit.

(ii) Instances also came to notice of Audit where in though the construction of lines for giving supply to consumers were completed in subsequent years than the year of sanction and deposit by the consumer but the rates applicable for the year of completion of work were not levied and realised from consumers resulting in short charge of Rs. 1.77 lakhs as per details given below:

Sl. Name of No. consumer	Year of completion	Consumer's share at the rates of completion Year	Deposit by consumer	Short charge
		(Rupees	in	lakhs)
1. Som Dutt Builders	1989-90	9.65	8.50	1.15
2. Classic Apartment	...	1.98	1.76	0.22
3. Gopal Builders	1989-90	2.63	2.23	0.40
Total		14.26	12.49	1.77

3A.12. Other topics of interest

3A.12.1. Recoverable house rent

The Board from time to time fixed the standard rent recoverable from the allottees of its residences. Though the Board revised the rent in November 1984 and December 1988

applicable respectively from August 1982 and April 1987, but neither the Management refixed the rent nor recovered the same from occupants of Board's residences. The Board again revised the rent in May 1989 applicable from July 1988 on the basis of which revised rents were fixed in August 1990. The recoverable amount on the basis of this order is given below.

(i) A sum of Rs. 11.45 lakhs ending March 1991 is recoverable from 16 officers who had not vacated Board's residences despite transfers.

(ii) A sum of Rs. 0.34 lakh was recoverable from 23 serving officers on account of revised rent for varying periods.

No recovery of rent at revised rates of Rs. 25 and Rs. 60 per month from 504 and 96 occupants of Type I and Type II quarters respectively of the workers colony has been effected from July 1988 onwards.

The Management stated in July 1991 that the matter has been referred to Board for necessary action.

3A.12.2. Extra expenditure

After obtaining approval from Chief Engineer (Generation & Distribution) in August 1988 and undertaking tendering process, the total work relating to dismantling of dilapidated 55 to 60 roof slabs of KESA worker's quarters and relaying RCC slabs thereon, was awarded to two contractors* at a cost of Rs. 2.06 lakhs each. The work agreement executed with contractors stipulated departmental supply of cement and completion of work by May 1989.

The contractors, after carrying out the work in 19 quarters at a cost of Rs. 1.90 lakhs, intimated the Management in June 1989 that they were unable to carry out further work due to non-supply of cement by the department. Accordingly, the Superintending Engineer (Distribution I) terminated the agreement in June 1989.

* Sri Naresh Chandra and Sri Riazuddin

The remaining work of Rs. 2.22 lakhs, after retendering in December 1989, was awarded to one of the earlier contractor* at a cost of Rs. 4.17 lakhs in February 1990. Thus, due to non-supply of cement intime and in retendering, Board had to incur an additional expenditure of Rs. 1.95 lakhs.

In reply the Management stated that the Board had allocated insufficient funds to KESA which was main reason for not buying the cement.

The above matters were reported to the Board/Government (October 1991); their replies had not been received (December 1991).

* Sri Naresh Chandra

SECTION 3B

PARICHHA THERMAL POWER STATION

Highlights

Parichha Thermal Power Station of the Uttar Pradesh State Electricity Board with an installed capacity of 220 MW, comprising two units of 110 MW each, commenced commercial operation since April 1985 (Unit I) and December 1985 (Unit II).

Though the work of erection, testing and commissioning of boilers and turbo-generator sets was executed by BHEL on turn-key basis, an extra expenditure of Rs. 30.66 lakhs incurred on the repairs of turbine damaged during trial run had not been recovered from BHEL.

During the period from July 1984 to February 1985, consumption of 4702 kilolitres of furnace and light diesel oil by Unit I, as compared to 443 kilolitres by Unit II during the same period, was considered excessive by the Board. A claim of Rs. 157.04 lakhs on BHEL for excess consumption of 4259 kiloliters of oil was yet to be settled.

Thirty six nucleonic bunker level indicators, received in May/June 1983 at a cost of Rs. 8.16 lakhs, were not installed. Although the working life of 5.2 years of the radioactive material used in these indicators had already expired and storage of unwanted radio-active material was not safe from radiation safety point of view, the indicators had not been disposed of so far.

Two weighbridges installed at a cost of Rs. 13.55 lakhs for weighing of coal did not function at all due to inherent design defects of wagon tipplers and consequently Board's funds to that extent had remained locked up since 1984-85.

The supplier of 'Ash and coal mill reject handling plant' offered in August 1986 to operate and maintain the

plant and also to train the staff of the Board at Rs. 0.85 lakh per month. However, while placing the order, the Board failed to include a clause regarding training of its staff, resulting in continuous award of operation of the plant to the supplier and consequential avoidable expenditure of Rs. 56.76 lakhs up to November 1991.

During 1986-87 to 1990-91, the plant outages ranged between 32.2 and 68.8 *per cent* and the actual generation ranged only between 71.9 and 87.3 *per cent* of the possible generation. The plant load factor achieved in the Project during 1989-90 and 1989-90 was substantially lower than the average plant load factor of Northern Region Thermal Power Stations. Had the Project achieved the average plant load factor of Northern Region, the Project could have generated 231.280 million units more, thereby realising an additional revenue of Rs. 1628.03 lakhs.

The actual time taken by the project for annual maintenance and major overhauling during 1986-87 to 1990-91 was 18866 hours against the 7392 hours recommended by the Technical Committee on power appointed by the State Government, resulting in an estimated loss of generation of 1252.14 MkwH of energy valuing Rs. 87.70 crores.

In spite of installation of sky climber power scaffolding system in December 1987 at a cost of Rs. 19.51 lakhs, which was supposed to reduce the down-time per shutdown by 10 to 12 days, there was no improvement in the downtime during 1988-89 to 1990-91.

The auxiliary consumption was much above the norms prescribed in the project report. During 1986-87 to 1990-91, 114.721 MkwH energy was consumed in excess, depriving the Board of an estimated revenue of Rs. 797.30 lakhs.

During 1986-87 to 1990-91, 657717 tonnes of coal valuing Rs. 4272.27 lakhs and 43476 kilolitres of oil valuing Rs. 1456.08 lakhs had been consumed in excess of the norms prescribed in the project report.

Procurement of stores and spares without ascertaining requirement and without obtaining non-availability certificates from Central Stores resulted in increase of inventory from Rs. 485.56 lakhs as on 31st March 1987 to Rs. 648.56 lakhs as on 31st March 1991.

3B.1. Introduction

With a view to meet the increasing demand of power in the State, a project report for setting up of two thermal power units of 110 MW each at Parichha (Jhansi) at an estimated cost of Rs. 83.72 crores was approved by the Planning Commission in October 1977.

The two units scheduled to be commissioned in June 1981 and December 1981 were commissioned in April 1984 and February 1985 respectively. However, the units could be taken on commercial load only from April 1985 and December 1985, respectively.

3B.2. Scope of Audit

A review on the execution of civil works for the project had appeared in the Report of the Comptroller and Auditor General of India for the year ended 31st March 1987 but the same had not been discussed by Joint Committee on Public Undertakings and Corporations so far (December 1991). Installation of various equipments and the operational performance of the project was reviewed in audit during July 1990 to February 1991 and the findings are discussed in the succeeding paragraphs.

3B.3. Organisational set-up

The electrical and mechanical works organisation is under the overall charge of the Member (Thermal) of the Board who is assisted by Chief Engineer, Thermal Design and Engineering (TDE) at the Headquarters of the Board. The TDE looks after the work of drawings, designs, tender specifications, contracts etc. of mechanical and electrical

works of the project. At the project site the work of installation of equipments, their operation and maintenance is looked after by three superintending Engineers assisted by various Executive Engineers and other subordinate engineers/staff under the administrative control of the General Manager of the rank of Chief Engineer.

3B.4. Project estimates

3B.4.1. Cost overrun

In June 1986, the Board revised the original project estimate from Rs. 83.72 crores including cost of equipments (Rs. 61.55 crores) to Rs. 198.26 crores including cost of equipments (Rs. 138.06 crores) after commissioning of the units. Of the total increase of Rs. 114.54 crores, the major increase amounting to Rs. 76.51 crores was on installation of mechanical and electrical equipments as per details below:

	(Rupees in lakhs)
Increase due to-	
Escalation in prices	30.24
Change in design	40.69
Increase in freight and insurance	0.88
Other reasons	4.70

Total	76.51

As per project report prepared in June 1986, the increase in the Project cost was attributed mainly to-

- increase in prices due to change in design and scope by the suppliers Bharat Heavy Electricals Limited, Instrumentation Limited and Heavy Engineering Corporation Limited.
- corresponding increase in the requirement of control and power cables, and
- addition of start up boiler and diesel generating sets, etc. which were not incorporated in the original estimates.

only. The Board has not analysed the reasons for the variations.

3B.4.2. Additional expenditure due to flood

In an unprecedented flood in Betwa river in September 1983, entire project area was submerged causing substantial damage to Board's equipment and stores. In October 1983, the State Government appointed a Committee to investigate the reasons for flood and to suggest remedial measures to be undertaken to safeguard Project's property from such events in future.

The Committee in its report submitted in April 1984 suggested that protective steps be taken by the Board immediately for protecting the power house and colony from floods in future and also to connect Matatila Dam and the project directly by microwave/ carrier system. Accordingly a provision of Rs. 180 lakhs for flood protection work was made in the revised project report. However, no action has been taken in this direction so far (December 1991). Of the six claims for the total amount of Rs. 226.78 lakhs lodged with the Insurance Company up to April 1989 the Project had received only Rs. 80 lakhs so far (December 1991) as on account payment.

3B.5. Time overrun

The contracts for supply and installation of major equipments were awarded during March 1978 to June 1981. The delay in execution of works ranged between 19 and 45 months as per details below:

Particulars	Month of award of work	Month of completion		Delay in completion (In months)
		Scheduled	Actual	
(1)	(2)	(3)	(4)	(5)
Boiler and T.G. Set	March 1978	August 1982	February 1985	30
Coal handling plant	March 1980	September 1982	October 1985	37
Ash handling plant	June 1980	July 1982	February 1986	43

(1)	(2)	(3)	(4)	(5)
Laying of power and control cables	April 1981	February 1983	May 1985	27
Water treatment plant	June 1981	December 1981	September 1984	33
Transformer 125 MVA	March 1979	March 1981	October 1982	19
Control and instrumentation	February 1979	June 1982	February 1985	32
L.P. Pipe Work	June 1981	October 1982	September 1985	35
Start up boiler	September 1981	June 1982	March 1986	45

The Board has neither analysed the reasons for delay in completion of works nor worked out the additional expenditure incurred due to delay in execution of works.

3B.6. Installation of equipments

3B.6.1. Maintenance of records

(a) The orders for supply, erection and commissioning of various equipments for the project were finalised by the TDE. At the project level, the plant stores division was responsible for obtaining delivery of equipments and for release of payments against supplies as per terms and conditions of the contracts. It was noticed that the division had not maintained any record to indicate the total payments made against various contracts.

(b) The plant registers, in which receipts and issue of equipments were recorded, should have been closed in 1985-86 after commissioning of the project and the equipments available in plant registers should have been transferred to stock. This has, however, not been done (December 1991). The registers have neither been reviewed to find out the equipments/ spares available with the division nor any physical verification conducted so far (December 1991).

(c) As per accounts of the project, a sum of Rs. 877.85 lakhs was outstanding as on 31st March 1991 against various suppliers for supply of equipments. The party-wise details

and the reasons for which advances could not yet been recovered were neither available nor intimated.

3B.6.2. As per original project report equipments valuing Rs. 61.55 crores were to be installed in the Project. This was revised to Rs. 138.06 crores in the revised project report (June 1986). As per expenditure reported in plan outlays up to 31st March 1988, actual expenditure incurred on installation of equipments amounted to Rs. 132.53 crores.

The details of cost of various equipments under broad heads as per original and revised estimates and actual expenditure upto 31st March 1988 as per annual plan outlay are indicated below:

Particulars of equipment	Original estimates	Revised estimates	Actual expenditure up to March 1988	percentage of increase in actual expenditure to original estimates
(Rupees in lakhs)				
Turbo-generator boilers and accessories	3300.00	4918.00	4795.78	145.3
L.P. pipe work and insulation	60.00	120.00	93.73	156.2
CW pump and travelling water screens	70.00	210.00	205.84	294.0
Water treatment plant	35.00	181.00	170.31	486.6
Miscellaneous equipment including start up boiler	10.00	125.50	126.09	1260.9
Fire protection system	40.00	400.00	188.38	470.9
Control and instruments	200.00	880.00	881.23	440.6
Coal Handling plant	260.00	800.00	771.41	296.7
Ash handling plant	120.00	150.00	131.63	109.7
Fuel oil facilities and bus duct	35.00	63.50	57.52	164.3
Transformers	237.00	328.21	32.95	135.8
Switchgears, control panels, control tables, etc.	295.00	1300.00	1275.67	432.4
Step up station	87.00	259.00	247.65	284.6
General facilities	115.00	336.50	326.83	284.2
Hoisting facilities	45.00	55.50	49.88	110.8
Construction equipments	160.00	647.50	509.30	318.3
Freight, insurance, etc.	312.00	400.00	424.42	136.0
Erection and supervision charges	520.05	1890.00	1854.89	356.6

It would be seen from the above details that increase in actual expenditure over the original estimates in respect of various equipments ranged between 109.7 *per cent* and 1260.9 *per cent*. The Board has not analysed the reasons for increase in the actual expenditure.

Some points noticed during examination in audit of installation of other equipments except electrical equipments (for which records were not made available) are discussed below:

3B.6.3. Boilers and turbo-generator sets

3B.6.3.1. A letter of intent was issued in February 1980 on BHEL for erection, testing and commissioning of boilers (Rs. 330 lakhs) and turbo-generators (Rs. 170 lakhs). The prices were subject to price variation based on variations in the all India average consumer price. The first unit was required to be commissioned by February 1982 and the second by August 1982. The letter of intent further provided that detailed order/contract would be issued in due course, which was still to be finalised (December 1991).

The units were commissioned in April 1984 and February 1985.

3B.6.3.2 Damage to turbine of unit I

The erection work of the turbine was taken up by BHEL in June 1981 and after completion was put on trial in June 1983. The Member (Generation) of the Board advised the Chief Project Manager and the Resident Engineer of BHEL on 27th June 1983 that the main oil pump should be fully tested and satisfactory operation of main oil pump ensured before continuing the over speed and generator tests. However, without ensuring the satisfactory operation of main oil pump, over speed and generator tests were continued and on 29th June 1983 the turbine got damaged. The two Superintending Engineers of the Project pointed out (December 1983) in their report that the damage to turbine had been due to failure of

oil system. Design (New Delhi) Private Limited, New Delhi, the consultants also opined (October 1983) that the accident would have been avoided had normal precautions which were necessary before commissioning been taken. The matter was, however, not investigated with a view to fixing responsibility.

Although the contract with BHEL was a turn-key job erection, testing and commissioning, an open order was placed on BHEL for the repair of the turbine in July 1983 followed by formal order in July 1984 for repairs at a cost of Rs. 48.31 lakhs for which no reasons were on record.

A claim for Rs. 96.78 lakhs lodged by the Board with the Insurance company in January 1984 was reduced to Rs. 71.77 lakhs on the basis of actual expenditure (included Rs. 50.24 lakhs paid to BHEL) incurred during July 1983 to December 1983. The Insurance Company settled in May 1985 the claim for Rs. 41.11 lakhs only. This has resulted in an extra expenditure of Rs. 30.66 lakhs which had not been recovered from BHEL since the damage occurred during trial run. Besides there was loss of generation due to delay in commissioning, the extent of which was not ascertainable.

3B.6.3.3. After repairs, the unit I was again rolled and synchronised on 31st March when the vibrations on generator bearings were found to be very high. After inspection of bearing and realignment of rotor, the unit was again rolled during July-August 1984 but the problems of high vibration persisted. A team from University of Roorkee also conducted hammer and ultrasonic tests of turbine foundation and found the concrete grout to be in order. The matter was referred to Foster Wheeler Energy Corporation, Livingston, USA by issue of letter of intent in January 1985 for analysing the reasons for vibrations. Formal order was placed on the foreign firm in June 1986 for US \$25000 (Rs. 3.12 lakhs). Report in respect of study conducted by them during March 1985 was not made available to Audit.

Units I and II were commissioned in April 1984 and February 1985, respectively. Both the units had realignment and balancing of turbo-generator problems and the units could start commercial operation from April 1985 and December 1985 only. The quantities of furnace oil and light diesel oil, consumed in the two units for bringing the vibration level within permissible limit during the period from July 1984 to February 1985 were as under:

	Unit I	Unit II
	(In kilolitres)	
Furnace oil	2821	152
Light diesel oil	1881	291

While the oil consumed in Unit II was considered by the Board to be normal, the oil consumed in Unit I was not considered to be a part of commissioning activity and the recovery of excess consumption of 2669 kilolitres of furnace oil and 1590 kilolitres of light diesel oil valuing to Rs. 157.04 lakhs was insisted from BHEL. In a meeting held between BHEL and Board in October 1990, the matter could not be resolved and was referred to TDE for taking a decision about recovery of cost of oil from BHEL. A decision in the matter was awaited (December 1991).

3B.6.3.4. Damage of L.P. rotor of Unit I

On 27th April 1987, L.P. rotor of unit I was damaged and was sent in May 1987 for repairs to BHEL. A formal order for the repair of the rotor was placed with BHEL in February 1988 for Rs. 40.93 lakhs. The rotor after repairs was to be sent to Tanda Thermal Power Project from where a rotor had been obtained for Parichha in June 1987 and with which the machine had been synchronised on 27th October 1987.

The Board asked in August 1987 the Regional Research laboratory, Bhopal for metallurgical examination of the damaged rotor to be carried out at a cost of Rs. 0.20 lakh. In its report (October 1987), the laboratory reported that the metallurgy of the guide wheel was substandard and the

engineering disaster was caused by the presence of extraneous material which was supposed to have been originated from guide wheel region.

Besides loss on account of repair charges the generation loss during 27th April 1987 to 27th October 1987 amounted to 241.68 MkwH equal to units actually generated during the rest period of six months by this unit valuing Rs. 16.03 crores at average revenue earned at 66.33 paise per unit during 1986-87.

The Board constituted a Committee in May 1987 to investigate the cause of damage and to fix responsibility. However, the committee had not submitted its report so far (December 1991) due to which no responsibility could be fixed.

3B.6.3.5. Price variation

The Board decided in September 1988 to allow extension in time in the commissioning of Unit I to April 1984 as against contractual date of February 1982 and unit II to February 1985 as against contractual date of commissioning in August 1982 subject to the condition the BHEL would not claim extra payment due to variation in labour rates during the extended period.

It was, however, noticed that a sum of Rs. 97.71 lakhs had already been paid upto August 1988 towards price variation due to increase in labour rates.

The Board had taken up the matter with BHEL (March 1989) regarding refund of the above amount but no recovery had been made so far (December 1991).

3B.6.3.6. Other recoverables from BHEL

The Board intimated BHEL in March 1989 that the following recoveries were still to be made from BHEL:

(i) Rs. 23.54 lakhs on account of non-entertainment or rejection of 51 claims by the underwriters due to failure of BHEL to furnish the required documents or other reasons attributable to BHEL.

(ii) Rs. 3.84 lakhs towards delayed installation of tower crane brought from Harduaganj resulting in its non utilisation.

(iii) Cost of non-commissioning of seven equipments to be decided mutually.

(iv) Recoveries towards rent and water charges (amount not worked out and intimated).

The position of recovery of above claims was awaited (December 1991).

3B.6.4. Coal handling plant

The work of design, manufacture, construction, installation, testing and commissioning of complete coal handling plant including design and execution of appertaining civil and structural works was awarded in March 1980 to Heavy Engineering Corporation Limited, Ranchi, for Rs. 915.38 lakhs on turn-key basis. The work which was scheduled for completion in September 1982, was completed in October 1985. In this connection the following points were noticed:

(a) As per terms of the order the firm supplied 36 numbers of nucleonic bunker level indicators valuing Rs. 8.16 lakhs in May and June 1983. As the installation of these indicators was not possible without modification of bunker plate thickness at desired points and removal of gunniting at given points in the bunker, it was decided (September 1985) not to install these indicators. Since the indicators were lying unutilised, a clarification was sought from the Electronics Corporation of India Limited (ECIL) in June 1987 about installation of nucleonic gauges at existing coal bunkers. The ECIL intimated (June 1987) that these could not function at the specified level with existing structure.

because of source strength limitations. It was also intimated that the working life of radioactive source used in the gauge was 5.2 years from the date of supply. It was noticed that Bhabha Atomic Research Centre advised in October 1988 and again in August 1990 that it was not advisable to store unwanted radioactive material from radiation safety view point and it should be disposed at the earliest. However, these gauges were still lying at the project (December 1991).

The project authorities stated (February 1991) that cost of the equipment would be debited to the firm for which correspondence was being made. No recovery has, however, been made so far (December 1991).

(b) As per term of the contract the firm installed during 1984-85 two weighbridges at a cost of Rs. 13.55 lakhs. The weighbridges did not function at all because of inherent design defects of wagon tipplers. No action has been taken to repair or replace these weighbridges. As a result the coal wagons could not be weighed and Board's funds to the extent of Rs. 13.55 lakhs had remained locked up since 1984-85.

3B.6.5. Ash and coal mill rejects handling plant

In September 1980, the Board placed an order on Indure Private Limited, New Delhi for design, supply, erection, testing and commissioning of complete ash handling and coal mill reject handling plant for the project for Rs. 140 lakhs. The system for the unit I and II was commissioned in July 1984 and February 1985 and was taken over for operation and maintenance in August 1984 and February 1986, respectively. The supplier failed to give performance tests of the plant as per terms of the contract. The plant was operated departmentally up to December 1986. In the meantime the Board asked (August 1986) the supplier to offer their rates for operation and maintenance of the ash handling plant for a period of three months on the ground that there were frequent snapping of electrodes due to heavy accumulation of ash in the electrostatic precipitators and as such the plant was not working satisfactorily. There was nothing on record to show

whether any effort was made to analyse the reasons for the problems and how far these were attributable to the supplier who had failed to give performance tests. The supplier offered in August 1986 to operate and maintain the plant and also to train the operational and maintenance staff of the Board at a cost of Rs. 0.85 lakh per month. It was, however, noticed that the order placed on the supplier for operation and maintenance of the plant during January-March 1987 at Rs. 0.85 lakh per month did not include training of Board's staff as offered by the supplier and no reduction was made from the offered rate on this account. The supplier requested (March 1987) the Board to entrust the operation and maintenance of the plant to them for a minimum period of one year so that the system could be brought back to the entire satisfaction of the Board. However, it was noticed in audit that the agreement for operation and maintenance of the plant was reviewed from time to time at monthly costs ranging from Rs. 0.80 lakh to Rs. 0.97 lakh during the period from April 1987 to June 1992 and total payment of Rs. 52.17 lakhs had been made to the firm from January 1987 to November 1991. Operation of coal mill reject system, which was a part of ash handling plant was separately awarded to the supplier for the period from July 1989 to July 1992 at monthly costs ranging from Rs. 0.15 lakh to Rs. 0.21 lakh and payment of Rs. 7.14 lakhs was made on this account up to November 1991. Thus, had the Board included the clause for training of its staff in the agreement the payments amounting to Rs. 56.76 lakhs (excluding Rs. 2.55 lakhs paid during initial period of three months) could have been avoided.

The total staff strength of Boiler Maintenance Division I and II was as under:

As on	Number of staff
31.3.86	55
31.3.87	52
31.3.88	52
31.3.89	60
31.3.90	60

This shows that there was no reduction in the strength despite the fact that operation and maintenance was being done by the firm.

Further according to the terms of order placed in September 1980, the firm was required to depute one of their competent service engineers free of cost for a period of 15 days per year for five years at agreed time for satisfactory maintenance of the plant. With the operation contracts awarded to the firm itself, the firm was given undue benefit of relieving them of their contractual responsibility.

It was also noticed that spare parts valuing Rs. 21.89 lakhs were issued to the firm during January 1987 to June 1990 for replacements in the plant. Account of damaged/replaced spare parts was, however, not, made available to Audit.

It was stated (February 1991) by the Board that due to shortage of staff the work of operation and maintenance of the plant was awarded to the firm and for the same reason a clause for training Board's personal was not included in the contract. It was, however, noticed that the Board had operated the plant with existing staff during August 1985 to December 1986. Further the manpower in the Project was already in excess of the sanctioned strength (refer paragraph 11 infra).

3B.6.6. Fabrication of miscellaneous steel tanks

The Board placed an order in April 1980 on Khatauli Engineering Works, Khatauli (Muzaffar Nagar) for design and supply of fittings and accessories, fabrication, erection, testing and commissioning and Painting of miscellaneous steel tanks at Rs. 7000 per tonne less cost of steel to be supplied by the Board at Rs. 3811 per tonne. The prices were inclusive of all taxes and excise duty. The estimated quantity of steel to be used was 469 tonnes. The firm started the work in January 1981 and completed 16 tanks (412 tonnes) in November 1984.

In this connection, following points were observed:

(i) In December 1982, when the firm had fabricated 8.009 tonnes of steel for one of the tanks (fire water tank), the firm was asked to stop the work for reasons not on record. The tank was got fabricated from Bridge and Roof, Calcutta at a cost of Rs. 0.83 lakh. The fabricated steel (8.009 tonnes) valuing Rs. 0.43 lakh had also remained unutilised so far (December 1991).

It was stated in February 1991 that the work had to be got done on debitable basis from other firm as the work done by Khatauli firm was not satisfactory. However, Board had neither worked out the amount recoverable nor any recovery had been made from Khatauli firm so far (December 1991).

(ii) The firm had been paid Rs. 29.28 lakhs for work done upto March 1984 (23rd running bill) only. It was noticed that the quantities for the work done were not worked out correctly while making the payments resulting in excess payment of Rs. 0.86 lakh as worked out by the Board in November 1984.

(iii) During March 1981 to January 1983, 473.673 tonnes of steel was issued to the firm out of which the firm had fabricated tanks with 412.285 tonnes of steel and returned 18.082 tonnes of fresh steel to the Board. As per specification, one *per cent* of steel was to be allowed as invisible wastage and four *per cent* as visible against which scrap was to be returned to the Board. It was noticed that the firm returned 35.324 tonnes of scrap steel against permissible wastage of 16.491 tonnes. No recovery towards excess scrap of 18.833 tonnes and 3.859 tonnes of fresh unreturned steel which amounted to Rs. 0.86 lakh at issue rate had been made from the firm (December 1991).

(iv) For painting the interior of the condensate storage tank the firm used paints of specifications different than those specified in the contract. The paint was washed out within a short period. Accordingly the tank had to be

repainted in November 1984 again by Gyan Traders, Kanpur at a cost of Rs. 0.71 lakh. Recovery on this account was not made from the firm.

(v) The fabrication charges payable to the firm included cost of 41 glass gauge fittings to be supplied by the firm. Additional supply of gauge glass fittings was to be paid at Rs. 2000 each. It was noticed that the firm had supplied and fitted 61 gauge glass fittings in the tanks and as such additional payment of Rs. 0.40 lakh towards 20 additional gauge glass fittings was payable to the firm. However, the firm was paid in October 1983 and December 1983, a total amount of Rs. 0.74 lakh towards cost of 37 additional gauge glass fittings instead of 20 fittings resulting in excess payment of Rs. 0.34 lakh.

(vi) In addition, a sum of Rs. 0.86 lakh towards hire charges of crane (Rs. 0.06 lakh), electricity charges (Rs. 0.36 lakh), quarter rent (Rs. 0.40 lakh) and amount on account of work got done from other agencies (Rs. 0.04 lakh) was also required to be recovered from the firm.

It was stated by the management in February 1991 that recoveries would be made from the final bill of the contractor. It was, however, seen that against the recovery of Rs. 4.24 lakhs from the firm, only a sum of Rs. 1.30 lakhs was payable to the firm towards value of work done after 23rd running bill. Although the work had been finally completed in November 1984, the final bill of the firm had not yet been finalised and the matter was still stated (December 1991) to be under correspondence with the firm.

3B.6.7. Digital clock system

The Board placed an order on Kerala State Electronics Corporation Limited in February 1985 for supply, erection, testing and commissioning of electronic digital clock system at a cost of Rs. 11.52 lakhs (including erection charges of Rs. 1.78 lakhs). The system included supply of 111 digital

clocks. Advance payment of Rs. 1.13 lakhs was released in January 1986 to the firm as per terms of the contract. The system was despatched by the firm in June 1986.

After receipt of the system the project authorities informed in October 1986 the TDE that the requirement at the project was for only 10 to 20 clocks. TDE informed the project authorities in October 1986 that order was placed on the basis of requirement of 93 single sided slave clocks and 9 double sided slave clocks as assessed by the consultants and desired to reassess the requirement of the Project so that excess clocks could be diverted to some other project, no action to assess the requirement for diversion of surplus clocks was taken.

Out of 111 digital clocks, the Thermal Central and Instrumentation Division obtained 90 clocks in August/September 1989, but only 70 clocks could be installed in September 1989 and made operative in January 1991 by the supplier firm.

The project authorities could not clarify as to how 70 clocks were installed against the requirement of only 10 to 20 clocks and also as to how the remaining 41 clocks are proposed to be utilised.

3B.7. Operational performance

3B.7.1. Plant availability and outages

The table below indicates the position of plant availability and outages during the five year period ending March 1991:

Year	Total avail- [*] able hours	Actual hours utilised	Outages	Percentage of outages to total availa- ble hours.
(1)	(2)	(3)	(4)	(5)
<u>1986-87</u>				
Unit I	8760	5620	3140	35.8
Unit II	8760	5200	3560	40.6
Overall	17520	10820	6700	38.2
<u>1987-88</u>				
Unit I	8784	2738	6046	68.8
Unit II	8784	5611	3173	36.1
Overall	17568	8349	9219	52.5
<u>1988-89</u>				
Unit I	8760	5535	3225	36.8
Unit II	8760	5478	3282	37.5
Overall	17520	11013	6507	37.1
<u>1989-90</u>				
Unit I	8760	5938	2822	32.2
Unit II	8760	4858	3902	44.5
Overall	17520	10726	6724	38.4
<u>1990-91</u>				
Unit I	8760	3052	5708	65.2
Unit II	8760	2776	5984	68.3
Overall	17520	5828	11692	66.7

A Technical Committee on Power appointed by the State Government recommended in its report (December 1972) that the power stations of the Board should aim to achieve 80 *per cent* of plant availability for thermal generating units within a short time and 85 *per cent* within next two to three years. The actual achievements fell short in all the cases.

From above it would appear that the outages ranges between 32.2 *per cent* and 68.8 *per cent* of available hours in case of Unit I and between 36.1 *per cent* and 68.3 *per cent* in case of Unit II. A new Division viz. Operation General Division was created in November 1989 with one of its functions to analyse the trippings and to ascertain the causes thereof so that remedial measures could be taken, but the division did not undertake any such analysis.

An analysis of the outages in respect of both units for the five years up to 1990-91 is given below:

* Available hours are on the basis of three shifts per day.

	1986-87	1987-88	Outages in hours		
			1988-89	1989-90	1990-91
A External factors					
a) Absence of demand in grid	49	200	10	47	9
b) Grid disturbance	241	105	79	27	--
c) Non-availability of coal	--	--	92	1107	2263
d) Non-availability of furnace oil	--	--	892	224	--
e) Statutory inspection of Boiler/turbine	115	--	96	110	68
	----	----	----	----	----
Total A	405	305	1169	1515	2340
	----	----	----	----	----
B Internal factors					
a) Major overhauling	--	4403	--	2460	--
b) Annual maintenance	2206	1509	2218	--	6070
d) Repairs and rectification of various defects in boiler turbine and generator, etc.	4089	3002	3120	2749	3282
	----	----	----	----	----
Total B	6295	8914	5338	5209	9352
	----	----	----	----	----
Total A+B	6700	9219	6507	6724	11692

3B.7.2. Capacity utilisation

The following table indicates the percentage of capacity utilisation during the five year period up to 1990-91

Year	Installed generating capacity (on basis of 110 MW each)	Possible generation (Mkwh) with reference to available	Actual generation (Mkwh)	Percentage of possible generation to installed capacity	Percentage of actual generation to installed capacity	Percentage of actual generation to possible generation
	1	2	3	4	5	6
1986-87						
Unit I	962.60	618.20	487.90	64.2	50.6	78.9
Unit II	963.60	572.00	477.80	59.4	49.6	83.5
Overall	1927.20	1190.20	965.70	61.7	50.1	81.1
1987-88						
Unit I	966.24	301.18	241.70	31.2	25.0	80.2
Unit II	966.24	617.21	512.50	63.9	53.0	83.0
Overall	1932.48	918.39	754.20	47.5	39.0	82.1
1988-89						
Unit I	963.60	608.85	502.90	63.2	52.2	82.6
Unit II	963.60	602.58	497.20	62.5	51.6	82.5
Overall	1927.20	1211.43	1000.10	62.8	51.9	82.6

	1	2	3	4	5	6
<hr/>						
<u>1989-90</u>						
Unit I	963.60	653.18	526.20	67.8	54.6	80.6
Unit II	963.60	534.38	466.60	55.5	48.4	87.3
Overall	1927.20	1137.56	992.80	61.6	51.5	83.6
<u>1990-91</u>						
Unit I	963.60	335.72	241.41	34.8	25.1	71.9
Unit II	963.60	305.36	247.94	31.7	25.7	81.1
Overall	1927.20	641.08	489.35	33.3	25.4	76.3

It would appear from the above that both units could not be run at their installed capacity. The actual generation ranged only between 71.9 and 87.3 *per cent* of the possible generation (*i.e.* generation in actual operating hours with reference to installed capacity) during 1986-87 to 1990-91 while possible generation itself was 31.2 to 67.8 *per cent* of the installed capacity during the same period.

An analysis made by the CEA in their monthly review for January 1990 for the period April 1989 to January 1990 indicated that the plant load factor (PLF) achieved by both units of the Parichha project was the lowest as compared to some other 110 MW units in the northern region (Delhi, Jammu and Kashmir, Punjab, Rajasthan and Uttar Pradesh) as indicated below:

Plant load factor
during April 1989
to January 1990

Panipat 4x110 MW	53.1
Bhatinda 4x110 MW	71.8
Kota Unit II 1x110 MW	71.8
Parichha 2x110	51.4

Further the PLF achieved in the power station was much below the all India average and the average PLF of northern region (for Thermal power stations) as indicated below:

	1988-89 (April 1988 to March 1989)	1989-90 (April 1989 to January 1990)
All India average	55.0	55.6
Northern Region	58.2	58.2
Parichha station	51.9	51.4

(Source: Monthly review for January 1990 by Central Electricity Authority)

Had the project achieved the PLF of the northern region, the project could have generated 231.280 million units more thereby realising an additional revenue of Rs. 1628.03 lakhs as per details below:

Year	Northern region average plant load factor	Parichha station plant load factor	Shortfall (in Kkwh)	Average revenue realisation per unit (paise per Kwh)	Total loss of revenue (Rupees in lakhs)
1988-89	58.2	51.9	121.414	68.43	830.84
1989-90 (April 1989 to January 1990)	58.2	51.4	109.866	72.56	797.19
			----- 231.280 -----		----- 1628.03 -----

Similar, monthly reviews of the Central Electricity Authority for the remaining years were not available.

The project authorities attributed (February 1991) the lower capacity utilisation to the following:

- delay in commissioning of unit auxiliaries transformer due to their non-availability.
- delay in commissioning of two bowl mills which could be commissioned only in August 1989 and February 1990.
- poor quality of coal
- high turbine moisture problem which could be corrected by BHEL only in 1988.
- non-availability of HP heaters which directly affect the load by 2 MW.

3B.7.3. Annual maintenance and overhauling

3B.7.3.1 A Technical Committee on Power, appointed by State Government, in its report of December 1972 stated that by organising proper maintenance and operation schedule and

mobilisation of technical and operating staff, it should be possible for the Board to reduce the period of annual maintenance and major overhauling to 672 hours and 1344 hours, respectively. The time taken by the power station for annual maintenance and major overhauling of the units was far in excess as indicated below:

Year	Unit I			Unit II		
	Hours taken	Hours as recommended	Excess hours	Hours taken	Hours as recommended	Excess hours
1986-87	1050 (August to September)	672	378	1156 (August to September)	672	484
1987-88	4404 (April to October)	1344	3060	1508 (May to July)	672	836
1988-89	1023 (July to August)	672	351	1195 (May to October)	672	523
1989-90	--	--	--	2460 (June to October)	1344	1116
1990-91	2984	672	2312	3086	672	2414
	----	----	----	----	----	----
	9461	3360	6101	9405	4032	5373
	----	----	----	----	----	----

Thus, as against the recommended 7392 hours, 18866 hours were taken in all. The loss of generation in 11474 hours taken in excess worked out to 1262.14 MkwH of energy valuing Rs. 87.70 crores at average realisable value. The reasons for the excess time taken were not on record. The excessive time taken in annual maintenance in 1990-91 was attributed by the project authorities in December 1991 to non-availability of spares/material and also disturbances in the country due to agitations.

3B.7.3.2. Sky climber power scaffolding system.

Greaves Cotton & Company, New Delhi informed the project authorities in January 1985, about the utility of sky climber powered scaffolding system manufactured by their principal - N.V. Sky Climber Europe S.A. Belgium. The system was stated

to reduce the downtime per shut down of the boiler by 10 to 12 days. Accordingly, after obtaining the offer from the New Delhi firm in June 1985, an order was placed on the Belgium firm in November 1985. The system was received at the project in December 1987 at a total cost of Rs. 19.51 lakhs (including foreign exchange of Rs. 7.78 lakhs).

It was, however, noticed that inspite of using the scaffolding system during 1988-89 to 1990-91, there was no apparent reduction in the time taken for maintenance and overhauling.

3B.7.4. Auxiliary consumption

Some of the energy generated is consumed in auxiliaries and is not available for sale. The original project estimate contemplates auxiliary consumption of about 8 per cent of generation. The actual consumption, however, exceeded the norms in all the years as shown below:

Year	Actual generation (in Mkwh)	Auxiliary consumption as per norms (in Mkwh)	Actual consumption of power in auxiliaries (in Mkwh)	Percentage of auxiliaries consumption to total generation (in Mkwh)	Excess consumption (in Mkwh)	Average revenue realisation per kwh of power sold (in paise)	Total sales value of energy consumed in excess (Rupees in lakhs)
1986-87	965.705	77.256	96.548	10.0	19.292	64.27	123.99
1987-88	754.210	60.336	73.452	9.7	13.116	66.33	87.00
1988-89	1000.060	80.005	106.534	10.7	26.529	68.43	181.54
1989-90	992.790	79.423	109.311	11.0	29.888	72.56*	216.87
1990-91	489.300	39.148	65.044	13.3	25.896	72.56*	187.90
					-----		-----
					114.721		797.30
					-----		-----

It would, thus, appear that consumption of power in auxiliaries ranged between 9.7 and 13.3 per cent resulting in excess consumption of 114.721 Mkwh during 1986-87 to 1990-91 depriving the Board of the revenue of Rs. 797.30 lakhs.

* Figures are provisional.

The project authorities stated (February 1991) that excess auxiliary consumption was because of frequent trippings when auxiliaries had to be run without any generation.

3B.7.5. Consumption of turbine oil

The Board has not fixed norms for consumption of turbine in T.G. sets. As per the turbine operation and maintenance manual of BHEL consumption of 0.38 Kg (equivalent to 0.40 litre) of turbine oil is required per hour of operation of TG set. It was noticed that during 1986-87 to 1989-90, the sets were operated for 40978 hours requiring 16391 litres of turbine oil. Against this 192552 litres of turbine oil was actually consumed during this period resulting in excess consumption of 176161 litres of oil valuing Rs. 32.77 lakhs at the average rate of Rs. 18.60 per litre.

3B.8. Fuel management

3B.8.1. Fuel cost

The table below indicates the power generated, fuel consumed, cost of fuel consumed, total cost of generation and percentage of fuel cost to total cost:

Particulars*	Year				
	1986-87	1987-88	1988-89	1989-90	1990-91
(1)	(2)	(3)	(4)	(5)	(6)
a) Power generated (in Mkw)	965.705	754.210	1000.060	992.790	489.300
b) Consumption in auxiliaries (in Mkw)	96.548	73.452	106.534	109.311	65.044
c) Net generation at Bus Bar					
(a)-(b)	869.157	680.758	893.526	883.479	424.256
d) Consumption of coal (in tonnes)	724.404	565518	788283	794232	389771
e) Consumption of coal per unit of power generated (Kg/Kwh)	0.75	0.75	0.79	0.80	0.82

* Data is based on cost sheet prepared by the project authorities.

(1)	(2)	(3)	(4)	(5)	(6)
f) Consumption of furnace oil and light diesel oil (in KL)	14947.00	11995.00	11801.00	10657.00	10161.00
g) Average consumption of furnace oil and light diesel oil (Ltr/Kwh)	0.0015	0.0016	0.0012	0.0011	0.0025
h) Total cost of fuel (Rupees in lakhs)	4380.30	3830.00	5601.50	6286.20	3293.80
i) Cost of fuel per Kwh (in paise)	50.40	56.26	62.69	71.15	101.20
j) Total cost of generation of power (paise per Kwh)	84.17	101.25	97.32	107.98	148.17
k) percentage of fuel cost to total cost	59.9	55.6	64.4	65.9	68.3

The Board had not analysed the reasons for variations in cost of generation in order to have effective control.

3B.8.2. Weighment of coal

The agreement with Coal India Limited provided that the coal wagons loaded for the Project would invariably be weighed at the weigh bridges of Railway station/colliery/coal field and stamped and actual weight recorded in Railway receipts. The purchaser had a right to witness the weight at weigh bridges. However, neither the actual weight at colliery was ever witnessed nor coal received at the Project could be weighed, owing to weigh bridges being defective, and the quantities received were accounted for on the basis of weight recorded in Railway receipt.

Similarly there is no system of weighment of coal actually consumed in the operation and the consumption of coal is worked out on presumptive weight of coal consumed per unit of power generated. Although the power house started receiving coal from June 1985, no physical verification has ever been conducted by the Management. it was stated

(February 1991) that physical verification would be got done shortly, but the same had not been done so far (December 1991).

3B.8.3. Excess consumption of coal

The consumption of coal directly depends upon the calorific value of coal used. As per revised project report the coal consumption was to be 0.667 Kg per unit of power generated based on 3850 K.Cal/Kg of coal and boiler efficiency at 84.7 per cent with heat rate of turbine at 2176 cal/kwh. The details of requirement of coal based on weighted average calorific value of coal actually received and quantity of coal consumed in excess during the five years period up to March 1991 are indicated in the table below:

Particulars	Years				
	1986-87	1987-88	1988-89	1989-90	1990-91
1) Generation in M.U.	965.705	754.210	1000.060	992.79	489.30
2) Weighted average calorific value of coal received during the year in K.Cal/Kg.	4296	4391	4165	3860	3935
3) Coal required to be consumed as per weighted average of calorific value of coal actually received in kg per unit of power generated	0.598	0.585	0.616	0.665	0.653
4) Total coal required to be consumed (in tonnes)	577491	441213	616037	660205	319545
5) Coal actually consumed (in tonnes)	724404	565518	788283	794232	399771
6) Excess consumption of coal (4-5) (in tonnes)	146913	124305	172246	134027	80226
7) Average cost per tonne (in rupees)	537.52	608.92	661.40	746.73	729.94
8) Value of coal consumed in excess (Rupees in lakhs)	789.69	756.92	1139.24	1000.82	585.60

It would be evident from the details that 657717 tonnes of coal valuing Rs. 4272.27 lakhs was consumed in excess during the period from 1986-87 to 1990-91 and Board had not analysed the reasons for the same.

3B.8.4. Consumption of furnace oil and light diesel oil

Furnace oil and light diesel oil is required during starting up and flame stabilisation. The norms for consumption of oil as provided in the original project report was 2.5 per cent of the cost of coal used. The same percentage was again reiterated in June 1986 in the revised project report.

Consumption of oil was on much higher side as compared with the norms laid in the project report resulting in excess consumption of 43476 kilolitres of oil valuing Rs. 1456.08 lakhs during the five years period ending 31st March 1991 as per details below:

Year	Coal consumption	Oil required to be consumed at 2.5 per cent of coal consumption	Oil actually consumed	Excess consumption of oil
(1)	(2)	(3)	(4)	(5)
			(Rupees in lakhs)	
1986-87	3893.80	97.35 (2991)*	486.50 (14947)	389.15 (11956)
1987-88	3444.30	86.10 (2669)	385.70 (11955)	299.60 (9286)
1988-89	5213.70	130.34 (3966)	387.80 (11801)	257.46 (7835)
1989-90	5930.80	148.28 (4446)	355.40 (10657)	207.12 (6211)
1990-91	2918.10	72.95 (1973)	375.70 (10161)	302.75 (8188)
			Total	1456.08 (43476)

* Figures in brackets denote the quantity of oil in kilolitres. The quantity of oil under column 3 had been worked out on the basis of average rate of oil for the respective year.

There were no records to show whether the reasons for excess consumption of fuel oil had been analysed and remedial actions taken.

3B.9. Inventory control

The table below indicates details of inventory excluding fuel stock held by the Project at the close of each of five years up to 31st March 1991:

As on 31st March	Capital stock	Inventory
		Operation and maintenance stock (Rupees in lakhs)
1987	140.75	345.17
1988	130.68	446.98
1989	130.60	444.37
1990	131.29	556.78
1991	131.45	517.11

It would appear from the above details that the inventory holdings had been increasing continuously and reached up to Rs. 648.56 lakhs as on 31st March 1991. In a test check during the course of audit the following points were noticed:

- i) The PVC power cables valuing Rs. 100.49 lakhs left over after the commissioning of the plant and transferred to stock in July 1986 were lying unutilised.
- ii) While placing orders for supply of CW pumps, the TDE also placed orders in October 1979 for supply of spares for Rs. 5.53 lakhs. Out of the spares received during April 1982 to December 1982 only one spare part valuing Rs. 68 was issued up to August 1990. Further during January 1984 to August 1986, the project management purchased other spares for Rs. 46.71 lakhs. Against this the total consumption up to December 1990 amounted to Rs. 4.44 lakhs only. This was mainly because non-availability certificates were never called for from stores by the purchasing divisions before placement of orders.

iii) 2700 tonnes of steel valuing Rs. 169.71 lakhs and remaining unutilised after the commissioning of the Project, was neither disposed off nor its utilisation by other projects of the Board sought.

On being pointed out by Audit in December 1990, the project authorities circulated (March 1991) the list of surplus steel to other units of the Board. Only 47 tonnes of steel could be lifted up to December 1991.

iv) The order placed by the Board in September 1983 for supply of two diesel electric shunting locomotives also included supply of spares and special tools for these locomotives. The spares and special tools valuing Rs. 39.13 lakhs received in February 1987 have not been used so far (December 1991). Since the maintenance of these engines is done by the Diesel Loco Sheds of Central and Northern Railways situated at Jhansi and Delhi, the chances of utilisation of these spares and special tools were remote.

v) The whole inventory is held in stores division and site stores of various divisions. The break-up of inventory held by each division was not available.

vi) The Board had not prescribed any procedure for periodical verification and segregation of items rendered surplus to its requirement. It was noticed that 725 items (approximate value Rs. 45.62 lakhs) were held in the site stores of the Thermal Control and Instruments division. In the case of 157 items (value Rs. 9.88 lakhs) there was no issue during last two years.

vii) Maximum, minimum and re-ordering levels of stock had not been fixed.

viii) Materials had not been classified into critical, non-critical, fast and slow-moving items.

xi) Standardisation of the items and codification had not been introduced.

3B.10. Purchase of stores

3B.10.1. The project has one Central Purchase Division which is required to procure all the material for meeting the requirement of the various divisions of the project on the basis of indents received. Besides, other divisions are also making purchases for meeting their urgent requirements.

The table below indicates the purchases made by the Central Purchase Division for operation and maintenance of power station during 1986-87 to 1990-91 (the details of purchases made by other divisions were not available):

Year	Value of purchases made by Central Purchase Division (Rupees in lakhs)
1986-87	572.94
1987-88	459.16
1988-89	615.34
1989-90	518.97
1990-91	431.81

The following points were noticed:

- (a) Annual purchase estimates were not prepared.
- (b) The Board has prescribed (July 1969) that the material required for consumption should be purchased only from manufacturer or their sole selling agents after inviting tenders. The Board has also prescribed (April 1970) preparation of lists of approved suppliers indicating the items in which they specialise and their capacity to deal in the items.

The project has not maintained any list of suppliers dealing in different items. It was noticed that most of the purchase orders were being placed on limited suppliers, who were neither manufacturers nor their sole selling agents, for supply of various items required by the project. For instance, 70 orders aggregating Rs. 26.02 lakhs were placed during January 1989 to March 1990 on one supplier - Kay Mohan

Corporation of Kanpur which was neither manufacturer nor sole selling agent of any manufacturer.

3B.10.2. In the purchase orders placed by Central Purchase division and other divisions following points were noticed:

3B.10.2.1. Procurement of dozer spares

In the tenders invited in April 1988 by the Central Purchase Division offers were invited mentioning part no. of spares without any requirement regarding imported or indigenous make of the spare. It was noticed that only three firms* of Delhi quoted their rates in May 1988. One firm quoted rates for imported spares, second for imported type and the third for imported quality. The rates quoted by the firms were, however, treated at par and orders for supply of spares valuing Rs. 4.96 lakhs were distributed in February 1989 among the three firms in respect of spares for which they had quoted the lowest rate.

In this connection the following points were noticed:

i) The tender notice was stated to have been given wide publicity by sending it to three news papers of Delhi, Bombay and Madras. However news papers cuttings were neither kept in tender file nor could be shown to Audit.

ii) The postal orders submitted by the firms towards cost of tender form were serially numbered purchased on the same date. Tenders with earnest money were also received from the firms on the same day.

iii) While checking the comparative statement the representative of accounts remarked that since none of the tenderers appeared to be manufacturer/authorised dealer BEML should have been invited to quote their rates. However, neither the rates of BEML were called nor compared with their approved rates list.

* M/s V. Shah & Company.
M/s Om sons Tractors
M/s Friends Trading Company

iv) The orders placed on all the three firms were for imported spares' although two of the firms had not quoted their rates for imported spares. The Management did not also try to ascertain the source of imports or whether the firms were having import licence.

v) The rate list of BEML was not shown to Audit. Against tenders invited in February 1988, where also the above three firms had quoted their rates, the orders were placed in April 1988 on all the three firms for Rs. 1.97 lakhs. A scrutiny in audit disclosed that four parts were common in both the orders placed in April 1988 and February 1989 and as compared to the rates of order placed in April 1988 the extra expenditure on these four items alone amounted to Rs. 0.86 lakh in the order placed in February 1989 (against tenders opened in May 1988).

vi) During test check it was noticed that against orders placed in April 1988 for spares valuing Rs. 1.97 lakhs, spares valuing Rs. 1.62 lakhs were available in Central Stores Division as on 31st January 1991. Similarly against orders placed in February 1989 for Rs. 4.96 lakhs, spares valuing Rs. 3.74 lakhs were lying in Central stores division as on 31st January 1991. This showed that purchase were being made without assessing their availability thereby leading to unnecessary locking up the scarce funds of the Board to the tune of Rs. 5.36 lakhs.

3B.10.2.2. Procurement of radiator assembly

Tender were invited in April 1989 for manufacturing and supply' of Radiator assemblies for D-155 Dozers of BEML make (imported). The same three firms of New Delhi as stated in para 10.2.1 above participated (May 1989) in the tender and the lowest quoted rate was Rs. 2,72,000 for destination less 2 per cent discount.

On being sought a clarification on 2nd July 1989 by a member of the purchase committee that if the radiator was to be manufactured by tenderer as per technical specification

how could it be treated as 'imported', a letter from the lowest tenderer, Om sons Tractors, Delhi, was obtained on 3rd July 1989 to the effect that the firm would supply the complete radiator unit of 'KOMATSU' Japan make. Accordingly an order was placed on the firm in July 1989 for supply of 2 nos. imported 'KOMATSU' make radiators for Rs. 5.33 lakhs.

In this connection the following points deserve mention:

(a) Neither the tender specification nor the firms quoted rates for a particular make and the firms had quoted the rates as per tender specification. There was nothing on record to show as to how the lowest tenderer of New Delhi could know about the clarification sought by a member of the Committee and clarify that 'Komatsu make' radiator would be supplied. Enquiries were also not made from other 2 firms about the rates of Komatsu make radiators.

(b) The radiators were inspected by an engineer of the Project in September 1989. The inspection report did not indicate whether the radiators were imported and of 'Komatsu' make.

(c) The purchase of two radiators from this firm involved an extra expenditure of Rs. 4.13 lakhs as compared to Rs. 0.60 lakh for one radiator assembly ordered by Coal Handling Division in March 1989 on BEML, who are the original manufacturers of the Dozers.

3B.11. Manpower analysis

The project report did not envisage the staff requirement for the project and no attempt was made by the Management to assess the requirement of manpower. Following was the position of manpower during the three years up to the end of March 1990:

		Year ending 31st March		
		1988	1989	1990
Total strengt		1038	1268	1285
personnel fac	per			
MW of install	capacity	4.7	5.8	5.9

The Technical Committee on Power in its report (December 1972) to the State Government recommended that the personnel factor should be around 4 per MW in Obra Thermal Power Station. Compared to this the extra deployment of manpower at Parichha was 158, 380 and 405 in the year 1987-88, 1988-89 and 1989-90, respectively.

The actual strength of 1285 persons as on 31st March 1990 was also in excess of the sanctioned strength of 1039 persons as on that date. The staff as on 31st March 1990 included 312 workers (skilled and unskilled) employed at the project during January 1979 to January 1985 as contract labourer. These labourers continued to be employed through contractors. During the period from April 1985 to March 1990, the Board had to pay Rs 9.11 lakhs to the contractors by way of Management charges ranging from 4.2 per cent to 6 per cent besides regular payment to the labourers at the rates prescribed by the Board.

Following points were noticed in this connection:

i) According to Board's orders (October 1971) workers could be engaged on daily rate basis to meet casual and emergent requirement only. In spite of this the Management engaged labourers on daily rates on continuous basis through contractors without obtaining Board's approval to such an arrangement.

ii) The workers were employed by different divisions on the basis of quarterly/half yearly/annual contracts. During the period of contract the labourers employed remained the same with contractors changing from time to time. It was also observed that during the period when either no contract was in force or awarding of a new contract was delayed, payment to the labourers was made by the management directly to the labourers without paying any Management charges to the contractors. There was, thus, no justification for employing middlemen and this had resulted in extra expenditure of Rs. 9.11 lakhs.

iii) It was also noticed that the rate of Management charges payable to the contractors differed from division to division during the same period for which there was no justification.

3B.12. Financial results

The revised project report envisaged generation of surplus of net revenues over total expenditure including depreciations and interest on capital from the year 1985-86. The table below indicates the financial results envisaged in the revised project report during 1985-86 to 1987-88 up to which projections were made:

Year	Rate of return on capital outlay (percentage)	Surplus (Rupees in crores)
1985-86	10.57	0.76
1986-87	13.37	6.73
1986-88	14.64	10.33

As against the above projected financial results, the project has not yet started giving return on the capital outlay and the revenue deficit during the six years up to 1990-91 amounted to Rs. 151.51 crores as per details below:

Year	Generation excluding auxiliary consump- tion (in MkwH)	Total cost of genera- tion incl- uding dep- reciation and interest as worked out by the Management	Cost of genera- tion per unit (in paise) (Rupees in crores)	Average revenue realis- ation per Kwh on sale of power by the Board (in paise)	Deficit per unit (in paise)	Total deficit (Rupees in crores)
1985-86	398.427	43.22	108.47	55.11	53.36	21.26
1986-87	869.157	73.15	84.17	64.27	19.90	17.30
1987-88	680.758	68.93	101.25	66.33	34.92	23.77
1988-89	893.526	86.96	97.32	68.43	28.89	25.81
1989-90	883.479	95.40	107.98	72.56*	35.42	31.29
1990-91	424.256	68.86	148.17	72.56*	75.61	32.08
						----- 151.51

* Figures are provisional.

Though the Board had not analysed the reasons for non achievement of the projected surplus, but lower capacity utilisation and excessive outages could be the major reasons.

3B.13. Other points of interest

3B.13.1. Elevators

The Board placed an order in July 1980 on Otis Elevators, New Delhi for manufacture, supply, installation, testing and commissioning of two elevators at a cost of Rs. 8.50 lakhs. The elevators were commissioned during February 1985 and August 1986. The elevators, however, did not function properly since their commissioning and had to be stopped in November 1986. Details regarding operation of the elevators were not maintained on the ground that no regular operator was posted to operate the elevators. The elevators are still inoperative (December 1991).

As per the details furnished by the project authorities in February 1991, payments aggregating Rs. 8.09 lakhs had been made to the firm during March 1984 to April 1989, towards supply and erection of the Elevators. The firm, however, had acknowledged receipt of only Rs. 5.14 lakhs and served a legal notice in April 1990 for realisation of the balance amount and interest due thereon. Action for reconciliation of the account had not been taken so far (December 1991).

In the legal notice the firm had claimed the payment of Rs. 11.58 lakhs towards balance payment against supply (Rs. 5.95 lakhs) and commissioning of elevator and towards interest at the rate of 18 per cent per annum (Rs. 5.34 lakhs) up to December 1989. No action on the claim had been taken by the Board so far (December 1991).

The project authorities stated (February 1991) that the elevators were operative up to July 1988 when these were under maintenance contract with the firm and efforts were made to get the elevators repaired but nothing could be done.

Non-release of payment to the firm was attributed to non-availability of funds. Reasons for difference in the payment released to the firm and those acknowledged by the firm were not intimated.

3B.13.2. Unutilised civil works

(a) Main gate

Although there already exists one security gate in the power house, the project authorities got another main gate constructed in August 1987 at a cost of Rs. 4.43 lakhs which was to be opened on National Highway. As per standard norms of PWD, a second gate within 300 metres of first gate could not be opened unless separate road along boundary wall parallel to National Highway was constructed. The Board had not yet constructed the required road due to which the gate could not be opened for traffic. This had resulted in locking up of Board's fund to the tune of Rs. 4.43 lakhs for more than four years.

(b) Administrative building

The work of construction of administrative building was awarded to a contractor* of Jhansi at a cost of Rs. 31.53 lakhs. The work, which was required to be completed by October 1988, was stopped by the contractor in March 1988 for want of steel to be supplied by the Board. Up to March 1988, Rs. 6.02 lakhs had been spent on the work and it could not be started after that date. The project authorities finally decided in February 1991 for the stoppage of the work for want of funds. This resulted in locking up Board's funds to the tune of Rs. 6.02 lakhs for more than three years. In addition recovery on account of 295 bags of cement (value Rs. 0.15 lakh) and 37.93 tonnes of steel (value Rs. 2.77 lakhs) had also not been effected from the contractor so far (December 1991).

* M/s R.K. Agrawal

3B.13.3. Loss due to delay in taking delivery from Railway

Two cases containing two sets of warm gears and warm shafts despatched by BHEL, Hyderabad in April 1987 were received at Jhansi Railway Station on 6th June 1987. Although intimation was received from bank in May 1987, the documents were released from bank in October 1987. In the meantime one case containing two warmgears was stolen from Railway station in July 1987 and the project authorities lodged a claim with the Railways/Insurance company for Rs. 7.41 lakhs in September 1987. After taking delivery of the balance material in October 1987, the project authorities enquired (November 1987) about the cost of warmgears from BHEL who intimated that the warmgears and warmshafts were supplied to match each other and without warmgears the warmshafts were useless and the claim was revised to Rs. 9.20 lakhs in December 1987.

The surveyor of the Insurance Company, however, informed in December 1987 that the liability of insurer in the claim did not exist as per policy conditions. Railways also rejected the claim on the ground that the delivery of the material was not taken during transit time up to 7th July 1987.

The project authorities stated in February 1991 that delay in taking delivery of material was due to shortage of funds. Thus, due to non arrangement of funds in time Board had to suffer a loss of Rs. 9.20 lakhs.

3B.13.4. Oil filtration plant

Oil filtration plant (2500 litres/hour capacity) received in June 1984 at a cost of Rs. 6.26 lakhs against an order placed by TDE in October 1982 had not been utilised. After being pointed out by Audit in August 1990 it was stated by project authorities in February 1991 that oil filtration work was being done with 500 litre/hour plant received against the same order and the Board was being intimated about surplus plant for its utilisation elsewhere. However,

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there was no further development in the matter (December 1991).

The above matters were reported to Management and Government in July 1991, their replies had not been received (December 1991)

SECTION 3C

REVIEW ON FUEL MANAGEMENT OF HARDUAGANJ AND PANKI THERMAL POWER STATIONS

Highlights

The Harduaganj Thermal Power Station (HTPS) and Panki Thermal Power Station (PTPS) with installed capacity of 530 MW and 284 MW had been in operation since 1976-77 and 1967-68, respectively.

The power generated by HTPS and PTPS constituted 18.09 and 12.43 *per cent* of the total thermal power generation of the Board in 1986-87 which declined to 5.78 and 3.69 *per cent* respectively, in 1990-91. The consumption of coal per unit of energy generated was higher by 14.10 to 23.46 *per cent* in HTPS and 7.5 to 13.58 *per cent* in PTPS during 1986-87 to 1990-91 and consumption of oil per unit was higher by 37.03 to 7.27 *per cent* in HTPS during 1989-90 and 1990-91 and 5.26 to 161.81 *per cent* in PTPS during 1987-88 to 1990-91 as compared to the average consumption of coal and oil per unit of energy generated by the Board.

In terms of the provisions of the agreements entered into with the contractors for unloading of coal, the amount of Rs. 217.44 lakhs paid by HTPS and Rs. 22.95 lakhs paid by PTPS during 1986-87 to 1990-91 as demurrage charges to Railways was recoverable from the contractors which had not been recovered so far.

In HTPS, the coal supplied by Coal India Limited (CIL) during October 1986 to October 1989 contained 19104 MT of stone boulders. The amount of Rs. 121.90 lakhs, being the value of coal equivalent to the weight of boulders, was not deducted from the bills of CIL as was done in PTPS.

The extra expenditure of Rs. 10.40 lakhs incurred by PTPS on account of breaking of oversize coal to the required size could not be recovered from CIL in the absence of any provision in the agreement.

Due to non-repair of defective mechanical equipments meant for unloading and shifting of coal, HTPS had to get the work done manually, resulting in an avoidable expenditure of Rs. 23.82 lakhs during 1986-87 to 1990-91.

In PTPS, contracts were awarded for shifting and stacking of coal without analysing the manpower requirement with reference to tender specifications, resulting in an extra expenditure of Rs. 12.22 lakhs.

Non-charging of heaters, low vacuum of turbines, large number of trippings and leakage of steam were mainly responsible for excess consumption of heat with consequential excess consumption of coal valuing Rs. 11822.59 lakhs and Rs. 7621.59 lakhs in HTPS and PTPS, respectively, during 1986-87 to 1990-91.

The consumption of oil exceeded the norms fixed by the Board by 16412 kilolitres valuing Rs. 524.88 lakhs in HTPS and by 1039 kilolitres valuing Rs. 39.37 lakhs in PTPS during the five years ended March 1991.

3C.1. Introduction

The Harduaganj Thermal Power Station (HTPS) having three generating units viz. 'A' 'B' and 'C' power houses with installed capacity of 90 MW (3X30), 210 MW (2X50 and 2X55) and 230 MW (2X60 and 1X110) sets are operating since 1962-64, 1968-72 and 1977-78, respectively, whereas the Panki Thermal Power Station (PTPS) comprising four generating units viz. 2x32 and 2x110 MW sets commenced operation in 1967-68 and 1976-77, respectively.

Coal, Light Diesel Oil (LDO) and Furnace Oil (FO) are the basic fuel for operation of the boilers, producing steam for operation of turbines and generators for generating electricity. The Power stations obtain coal from Coal India Limited (CIL) and LDO and FO from Indian Oil Corporation (I.O.C) on the price determined by the Central Government from time to time. HTPS obtains supply of coal and oil

through the Railways whereas in PTPS coal is received through the Railways and oil by road transport through private carriers arranged by I.O.C.

3C.2. Organisational set-up

Fuel management including procurement, storage, consumption of fuel in the power stations is controlled by respective handling division, under the charge of an Executive Engineer and overall charge of the General Manager of the each power station.

3C.3. Scope of Audit

In this review the procedures relating to procurement, transportation, storage and efficiency in consumption of the fuel for the five years up to March 1991 have been studied through test check of records of PTPS and HTPS conducted from January 1990 to August 1990 and February 1991 to June 1991.

3C.4.(a) Power generation and Fuel consumption

The table below indicates the total power generated by the Board and the power generated by the two Thermal Power stations during five years ended 31st March 1991.

Year	Total power generated by the Board (MU)	Power generated by Thermal power stations		Percentage of power generated by HTPS and PTPS to total thermal power generated by the Board	
		HTPS (MU)	PTPS (MU)	HTPS	PTPS (%)
(1)	(2)	(3)	(4)	(5)	(6)
1986-87	9516	1721.382	1182.959	18.09	12.43
1987-88	11845	1831.523	391.356	15.46	3.30
1988-89	13948	1507.930	1241.714	10.81	8.90
1989-90	13484	981.759	958.598	7.28	7.11
1990-91	14284	826.271	526.986	5.78	3.69

As is evident from the above table, the power generated by HTPS and PTPS which constituted 18.09 per cent and 12.43 per cent of the total power generation of the Board in 1986-

87 declined to 5.78 *per cent* and 3.69 *per cent* respectively in 1990-91.

(b) The table below indicates fuel consumed, cost of fuel etc. for the two power stations as well as for the Board during 1986-87 to 1990-91.

Particulars	HTPS					PTPS				
	1986-87	1987-88	1988-89	1989-90	1990-91	1986-87	1987-88	1988-89	1989-90	1990-91
1. Total power generated (MU)	1721.382	1831.523	1507.930	981.759	826.271	1182.959	391.356	1241.714	958.598	526.986
2. Consumption of coal (Tonnes)	1675908.90	1703063.8	1345752.7	915722.41	833676.3	937944.0	338482.22	974072.7	732157.57	485040.44
3. Consumption of coal per unit of power generated (Kg/Kwh)	0.97 (0.81)	0.93 (0.80)	0.89 (0.78)	0.93 (0.80)	1.00 (0.81)	0.79 (0.81)	0.86 (0.80)	0.78 (0.78)	0.76 (0.80)	0.92 (0.81)
4. Consumption of LDO (KL)	10446.81	7773.52	1981.25	7243.19	4907.89	8407.89	4688.97	7483.46	7679.36	7566.75
5. Average consumption (litre/Kwh)	0.0081 (0.014)	0.0042 (0.0087)	0.0013 (0.0057)	0.0074 (0.0054)	0.0059 (0.0055)	0.0071 (0.014)	0.0119 (0.0082)	0.0060 (0.0057)	0.0080 (0.0054)	0.0144 (0.0055)
6. Consumption of furnace oil (KL)	7926	7109	3780	2855	7625	1023.16	112	40	37	26
7. Cost of fuel (Rupees in lakhs)	9475.30	9058.90	9486.20	7874.30	7285.00	4298.00	1650.00	6329.20	4856.70	3778.00
8. Cost of fuel per unit (in paise)	55 (37.24)	50 (33.05)	63 (36.15)	80 (38.48)	88 (41.84)	38 (37.24)	42 (33.05)	51 (36.15)	51 (38.48)	72 (41.86)*

The consumption of coal per unit of power generated in these power houses was much higher as compared to the average consumption of coal for the Board as a whole, which was higher by 14.10 *per cent* to 23.46 in HTPS during the years 1986-87 to 1990-91 and higher by 7.5 *per cent* in 1987-88 and 13.58 in 1990-91 in PTPS and consumption of oil per litre per Kwh of electricity generated in HTPS and PTPS was in excess. It was 37.03 *per cent* higher in 1989-90 and 7.27 *per cent* in 1990-91 in HTPS and varied from 5.26 *per cent* to 161.81 *per cent* in PTPS during 1987-88 to 1990-91

* Figures in bracket give the consumption per unit of power generated for the Board as a whole.

respectively as compared to the average consumption of coal and oil per unit of energy generated by the Board.

3C.5. COAL

3C.5.1. Procurement of coal

The Standing Linkage Committee of Government of India (Ministry of Energy) approves in advance for each quarter, the monthly linkage of coal for each Thermal Power Station in the country, taking into account factors like average coal consumption per unit generated, average plant load factor, of the station, its location etc.

The table below indicates the coal linkage sanctioned for both the Power Stations and receipt thereof for the five years ended 31st March 1991:

Year	PTPS				HTPS			
	L (In lakh metric tonnes)	A (In lakh metric tonnes)	S (In lakh metric tonnes)	P (Percentage)	L (In lakh metric tonnes)	A (In lakh metric tonnes)	S (In lakh metric tonnes)	P (Percentage)
1986-87	11.1	9.2	1.9	17.11	21.30	16.44	4.86	22.82
1987-88	7.69	2.43	5.26	68.40	19.65	17.58	2.07	10.53
1988-89	10.80	9.45	1.35	12.50	17.40	14.70	2.70	15.51
1989-90	11.10	6.64	3.44	30.99	12.00	7.867	1.98	16.50
1990-91	9.90	5.21	4.69	47.37	12.00	7.75	4.25	35.42

Note: L=Linkage; A=Actual; S=Shortfall; P= Percentage S to L.

The percentage of short fall in receipt of coal to the allotment during the five years up to 1990-91 ranged between 12.50 per cent to 68.40 per cent in PTPS and 10.53 per cent to 35.42 per cent in HTPS. While adverse effect of short supply of coal on power generation in both the Power Stations had been reported by the Board/State Government to the Central Government from time to time, the exact impact on generation due to short supply of coal had not been worked out by the Board and taken up with CIL.

3C.5.2. Demurrage charges

Coal wagons placed inside power houses are to be unloaded within the free time allowed by Railways and in case of delay the Railways impose demurrage charges for the period beyond the free time until the wagon is released. The handling contractors were liable under the terms of agreement for payment of demurrage charges incurred due to delay in unloading of coal wagons. The table below indicates the amount paid to Railways, amount recovered from contractors during the last five years ended March 1991.

Period	Demurrage charges Levied	Amount waived off by Railways	Amount recovered from handling contractors	Balance
(1)	(2)	(3)	(4)	(5)
(Rupees in lakhs)				
HTPS				
1986-87	9.81	7.40	1.15	1.26
1987-88	39.71	39.62	0.09	..
1988-89	124.43	111.50	1.44	11.49
1989-90	173.92	..	..	173.92
1990-91	98.97	62.78	5.42	30.77
(February 1991) Total	446.84	221.30	8.10	217.44
PTPS				
1986-87	10.99	10.57	NIL	0.42
1987-88	2.64	2.57	NIL	0.07
1988-89	7.95	7.13	NIL	0.82
1989-90	23.20	4.03	NIL	19.17
1990-91	4.04	1.57	NIL	2.47
Total	48.82	25.87	NIL	22.95

Thus HTPS paid Rs. 217.44 lakhs and PTPS paid Rs. 22.95 lakhs to Railways during the period from 1986-87 to 1990-91 as demurrage charges which were recoverable from the contractors in terms of the provision of contract executed with them, which had not been recovered so far.

In reply the Management (HTPS) stated in June 1991 that Rs. 8.32 lakhs deducted from the bills of contractors as security would be adjusted against the recoverable amount.

The amount of security was, however, too meagre as compared to the amount recoverable. In regard to PTPS it was stated by the Management in July 1991 that the contractor was responsible for payment of demurrage charges, in case the responsibility for delay in unloading was due to their fault. No responsibility has been fixed so far (December 1991). The reply was, however, contrary to the provisions of the contracts.

3C.5.3. Supply of Substandard Coal

Department of Power, Ministry of Energy constituted a working group under the Chairmanship of Member (Operation) Central Electricity Authority (CEA) in January 1985 to look into the problems if any, experienced in the implementation of the agreements signed by various State Electricity Boards with CIL and its subsidiaries and to suggest such suitable modifications in its provision as may be necessary to ensure supply of proper quality of coal to Thermal Power Stations. The working group made the following recommendations:

(a) Weight of shales and stones and freight should be deducted from the bills equivalent to the cost of coal and 50 *per cent* of the amount should also be deducted as penalty for supplying shales and stones to the Power Stations.

(b) If the coal supplied was of one grade lower than that stipulated, 90 *per cent* of the cost of the grade of coal actually received and when, two grades lower than the stipulated grade, 80 *per cent* cost of the coal actually received would be payable by the customer.

As per agreement entered into with CIL in February 1985 the supplier was to take remedial steps to ensure that pickable shales/stones are removed and no lumpy coal is supplied and that quality of coal shall fall within the parameters indicated in the schedule to the agreement.

In this connection following points were noticed:

(i) Poor Quality of Coal

The recommendations of the working group were not being implemented. However, during the years from 1986-87 to 1990-91 the two power stations were making deductions on the basis of sampling of coal received at the station and compared to what had been stated in the despatch documents. PTPS had preferred claims for Rs. 904.31 lakhs during the period from 1986-87 to 1990-91, while HTPS deducted Rs. 87.71 lakhs from CIL bills during the same period.

(ii) Shales/Stone with Coal

In HTPS the coal supplied by CIL contained stone boulders which were got segregated through labour contractor. During the period from October 1986 to October 1989 the contractor's labour segregated 19104.00 MT stone/boulders out of which freight charges of Rs. 10.41 lakhs (for 965.65 MT stone) were recovered from CIL but cost of coal equivalent to weight of stones aggregating Rs. 121.90 lakhs was not deducted from the cost of coal bills as was done in PTPS.

(iii) Supply of irregular quantity of Coal at PTPS

According to the agreement of February 1985 with CIL, slack coal has been defined as the coal that can pass through a screen with 200 mm x 22 mm apertures. The agreement stipulated supply of slack coal of standard size and specification.

It was, however, noticed that large lumps of oversize coal was supplied to PTPS which had to be broken to the required size before use at an extra expenditure of Rs. 10.40 lakhs. Which could not be recovered from the bills of CIL in the absence of any specific clause in the agreement for such deductions.

3C.5.4. Unloading and Shifting of Coal

3C.5.4.1. In HTPS

The Power station was having its own mechanical equipment for unloading of coal wagons (2 nos. wagon tipplers) and shifting of coal (8 dumpers, 3 payloaders and 12 bulldozers). In the event of mechanical equipments not being made available to contractors for doing the actual job, the work was to be carried out manually by the contractors on payment of extra charges.

During the period 1986-87 to 1990-91 power house 'A' and 'B' got coal unloaded from Railway wagons and its shifting to the feeding points through contractors with the help of mechanical equipments and manually as detailed below:

<u>Year</u> <u>Particular</u>	<u>Work</u> <u>Mechanically</u> <u>(In</u>	<u>done</u> <u>Manually</u> <u>MT)</u>	<u>Percentage of work</u> <u>done by mechanical</u> <u>equipment (%)</u>
-----	-----	-----	-----
(1)	(2)	(3)	(4)
-----	-----	-----	-----
<u>'A' Power House</u>			
1986-87 to			
1990-91			
Unloading	6,589	4,60,264	1.41
Shifting	NIL	5,09,234	NIL
<u>'B' and 'C'</u>			
<u>Power house</u>			
1986-87 to			
1990-91			
Unloading	36,84,830	10,66,736	77.54
Shifting	38,864	5,99,745	6.10

In this connection following observations are made:

(a) For unloading of coal power house 'A' was having one wagon tippler which was lying defective since 1987 and no action had been taken for its repair so far (June 1991). The work of unloading of railway wagons was, however, got done through labour contracts resulting in an extra expenditure of Rs. 7.89 lakhs during the period from 1986-87 to 1990-91. In case of 'B' power house there were two wagon tipplers. Contractors were, however, engaged to unload Railway wagons manually for reasons not on record, resulting in an extra

expenditure of Rs. 15.93 lakhs during the years from 1986-87 to 1990-91.

(b) Shifting of coal to the feeding points is done by the dozers as well as dumpers and payloaders. Four dozers and two payloaders were purchased from Bharat Earth Movers Limited (BEM) during the period 1983 to May 1986 at a cost of Rs. 86 lakhs (Rs. 80 lakhs for bulldozers and Rs. 6 lakhs for payloaders).

Four bulldozers were damaged within a period of six years of their purchase as detailed below:

Sl. No.	Vehicle No.	Date of Purchase	Date of damage	Period of operation
(1)	(2)	(3)	(4)	(5)
1.	Buldozer -245	11/1983	12/1988	5 years
2.	Buldozer -614	5/1986	12/1987	1 ¹ / ₂ years
3.	Buldozer -615	5/1986	1/1988	1 ¹ / ₂ years
4.	Buldozer -169	4/1983	7/1989	6 years

One bulldozer (D-169) was repaired in May 1990 by replacing the engine and three new engines were purchased in March 1991 at a cost of Rs. 6.72 lakhs for the repair of remaining three bulldozers. The repair had not been carried out so far (December 1991) and the Board continues to incur expenditure on shifting coal manually.

(c) On the basis of test checks in Audit it was noticed that while the rate for manual unloading of coal per tonne allowed by 'B' and 'C' power houses and 'A' power house were the same for 1986-87 (Rs. 2.25), 1987-88 (Rs. 2.09) and 1988-89 (Rs. 2.05), the rates allowed by 'A' power house for 1989-90 was Rs. 3 per tonne as against Rs. 2 per tonne allowed by 'B' and 'C' power houses. Thus on the unloading of 88289 tonnes coal during 1989-90 'A' power house incurred an extra expenditure of Rs. 0.88 lakh.

3C.5.4.2. In PTPS

There were two wagon tippers in the Power house for unloading coal. From the wagon tippler the coal is fed into

the crusher through conveyor belts and surplus coal is also sent to stacking yard through conveyor belts.

However, during the period from April 1986 to March 1990 three contracts were executed for shifting and stacking of coal.

In this connection it was noticed that in working out the tender specifications for the agreements the annual manpower required was estimated at 104 men, when one/both units of 2x110 MW Power house were in operation and 80 men when neither of the two units were running. Based on this estimate of labour input and labour rate prevailing during the period, labour cost for the work has been worked out in the table below which also indicates the corresponding payment actually made under each agreement.

Agreement NO./TS. NO.	Period days involved	Labour/ rate per day (Rs.)	No. of labour as per T.S.	Estimated amount (Col. 3x Col. 4x Vol 5) (Rs.)	Amount actually paid to as per agreement (Rs.)	
99/86	16.4.86	281	13.00	104	3,79,912	7,23,470
-----	to	10	13.00	80	10,400	20,360
438/85	31.1.87					
	1.2.87	113	18.70	104	2,19,762	3,81,617
	to	7	18.70	80	10,742	18,429
	31.5.87					
	1.6.87	101	20.15	104	2,11,656	3,53,766
	to	113	20.15	80	1,82,156	3,08,243
	31.12.87					
				Total	10,14,358	18,05,885
62/88	5.2.88	328	20.15	104	6,87,357	12,33,599
-----	to	38	20.15	80	61,256	1,12,462
192/87	4.2.89					
					7,48,413	13,46,061
8/89	5.2.89	336	25.23	104	8,81,637	13,43,324
-----	to	53	25.23	80	1,06,975	1,66,631
67/88	4.2.90					
					9,88,612	15,09,955
				Grand Total	Rs. 27,51,583	46,61,901

Thus, the monthly rates agreed upon were very high as the work was envisaged to be done by 104/80 workers whose wages as per daily rates prevailing came to only 30.60 per cent of the agreed rate. Even if another 25 per cent is added to cover other expenditures and over heads, the profit retained by the contractor was 44.4 per cent of the rate paid to them. Thus the power house had to incur an avoidable expenditure of Rs. 12.22 lakhs as contracts were awarded without analysing manpower requirement with reference to tender specification.

3C.5.5 CONSUMPTION OF COAL

(i) Thermal Efficiency

Thermal efficiency means the percentage of heat equivalent to electricity generated to the amount of the input in the fuel consumed. It was noticed in audit that the thermal efficiency actually achieved by two Thermal power stations were substantially less than the efficiency guaranteed by the suppliers of the plant as given below:

Particulars/year	PTPS			HTPS	
	2x32 MW	2x110 MW	A	B	C
Guaranteed thermal efficiency (Percentage)	29	29.8	27	27.15	29.8
Overall actual thermal efficiency (percentage)					
1986-87	23.19	20.42	15.436	18.9165	19.159
1987-88	20.33	23.17	11.311	17.334	17.526
1988-89	20.28	20.86	11.56	17.57	17.92
1989-90	25.33	20.42	11.90	17.50	17.89
1990-91	28.25	22.41	11.72	17.50	17.90

Reasons for not achieving the guaranteed thermal efficiency by the manufactures were not analysed by both the Power stations.

(ii) Heat utilisation

Tables given in the annexure (5) and (6) indicates the stipulated heat rate, actual heat rate and excess heat consumed in the generation of electricity in both the Power Stations. As is evident from the table, consumption of excess heat in terms of coal aggregated to 14.84 lakh tonnes, valuing Rs. 11822.59 lakhs in HTPS during the 1986-87 to 1990-91. While in PTPS the excess heat in terms of coal aggregated to 13.49 lakh tonnes valuing Rs. 7621.59 lakhs.

Reasons for excess consumption of heat and lower thermal efficiency as analysed in audit during test check and confirmed by the management (March 1991), were:

- non-charging of high pressure/low pressure heaters:
- low vacuum of the turbine:
- large number of trippings/cold starts up during stabilisation of the unit;
- low Coal mill fineness;
- leakage of steam from valves/flanges, pipes etc. from time to time; and
- partial load on the units during stabilisation period of units.

3C.6 FUEL OIL**3C.6.1 Procurement of oil**

The table given below indicates the total receipt and consumption of fuel oil in both the Power Stations during the five years up to 1990-91.

<u>HTPS</u>		<u>Receipt</u>			<u>Consumption</u>		
<u>'A' Power house</u>	Year	LDO (KL)	FO (KL)	HPS (MT)	LDO (KL)	FO (KL)	HPS MT
including opening balance	1986-87	1225.61	..	..	1119.81	..	..
	1987-88	1123.44	..	..	1032.52	..	..
	1988-89	1200.21	..	..	1126.05	..	..
	1989-90	1356.18	..	..	1299.79	..	..
	1990-91	1226.61	..	..	1068.89	..	..
<u>'B' and 'C' Power house:- including opening balance</u>	1986-87	11006.54	9287.54	1552.82	9327.00	7926.00	1067.00
	1987-88	8609.93	7707.41	3306.69	6741.00	7109.00	2828.00
	1988-89	11490.17	5025.82	1808.75	855.20	3780.00	1152.00
	1989-90	7499.78	3076.43	1751.86	5943.40	3655.00	1480.00
	1990-91	6274.30	6315.01	2350.83	3839.00	7625.00	2285.00

<u>PTPS</u>		<u>2x32 MW + 2x110 MW Receipt</u>		<u>2x32 MW + 2x110 MW Consumption</u>			
	Year	LDO (KL)	FO (KL)	LDO (KL)	FO (KL)	LDO (KL)	FO (KL)
including opening balance	1986-87	8954.38	1250.16	1430.58	..	6998.80	1023.16
	1987-88	5311.57	227.00	41.00	..	4847.97	112.00
	1988-89	7946.00	115.00	1253.00	..	6230.46	40.00
	1989-90	7855.35	75.00	1307.50	..	6371.86	37.00
	1990-91	8802.60	38.00	1632.00	..	5934.75	26.00

In this connection it was noticed that :

(i) In November 1989, reconciliation of the advance payments received and supply of oil made during the period April 1987 to September 1989 had been carried out by I.O.C. Aligarh in respect of HTPS which revealed that:

(a) payment amounting to Rs. 4.39 lakhs made on 21.10.88 (Rs. 1.02 lakhs), 9.12.88 (Rs. 0.84 lakh), 4.2.89 (Rs. 0.84 lakh), 24.5.89 (Rs. 0.84 lakh), 22.6.89 (Rs. 0.84 lakh) to I.O.C was neither accounted for nor supply made there against.

(b) Rs. 25.74 lakhs was lying with I.O.C since April 1987 being the credit allowed by I.O.C in March 1987 (31.3.87) adjusted against supply of oil made in November 1989.

(c) Supply made by I.O.C during May 1987 to March 1989 valuing Rs. 21.49 lakhs was not accounted for by the power house.

No action had yet been initiated to locate the payment of Rs. 4.39 lakhs made to I.O.C and to account for the oil supply valuing Rs. 21.49 lakhs received by the Power Station (June 1991).

(ii) Similarly in respect of PTPS the I.O.C submitted in July 1985 details of payments made by the Power Station to I.O.C and oil supplied by I.O.C. According to it the advance payment pending with I.O.C at the end of March 1984 was Rs. 11.84 lakhs. Even after submission of this account by I.O.C to the Power Station, the management neither verified the details submitted by I.O.C nor maintained further records to show the details of advance payments made and supply of oil received w.e.f April 1984 onwards.

3C.6.2. Consumption of oil

In February 1983 the Board prescribed norm for fuel (LDO) consumption in HTPS as under:

'A' Power house -	5 KL/MU
'B' and 'C' Power house -	12 KL/MU

As against the prescribed norm of 5 KL/MU in 'A' Power house the actual consumption of oil ranged from 9.54 KL/MU to 30.78 KL/MU during the year 1986-87 to 1990-91 resulting into excess consumption of 3707.23 KL oil valuing Rs. 117.35 lakhs as detailed below:

Year	Energy generated	Oil consumption as per norms (KL/MU)	Oil actually consumed (KL/MU)	Excess oil consumed per MU (KL/MU)	Total excess consumption (KL)	Rate (Rupees/Kl)	Amount (Rupees in lakhs)
HTPS							

'A'PH							
1986-87	117.345	5	9.54	4.54	532.75	3197.26	17.03
1987-88	108.346	5	9.53	4.53	490.81	3109.06	15.26
1988-89	74.279	5	15.14	10.14	753.18	3093.12	23.30
1989-90	52.876	5	24.58	19.58	1035.31	3105.62	32.15
1990-91	34.724	5	30.78	25.78	895.18	3307.29	29.61
					-----		-----
					3707.23		117.35

Similarly, against the prescribed norm of 12 KL/MU in 'B' and 'C' Power houses the actual consumption of oil ranged from 13.06 KL/MU to 18.30 KL/MU in 'B' Power house during the period 1986-87 to 1990-91. During the same period in 'C' Power house it was below the prescribed norm up to 1989-90 i.e. 5.65 KL/MU to 8.34 KL/MU when there was an abnormal increase to 18.37 KL/MU in 1990-91. The resultant excess consumption of oil was 9603.51 KL valuing Rs. 304.95 lakhs in 'B' Power house and 3101.54 KL oil valuing Rs. 102.58 lakhs in 'C' Power house as tabulated below:

Year	Energy generated	Oil consumption as per norms	Oil actually consumed	Excess oil consumed per MU	Total excess consumption	Rate	Amount
(MU)	(KI/MU)	(KI/MU)	(KI/MU)	(KL)	(Rs./KL)		(Rupees in lakhs)
'B'P.H (1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1986-87	737.051	12	18.30	6.30	4649.09	3197.26	148.64
1987-88	669.021	12	13.81	1.81	1210.93	3109.06	37.65
1988-89	420.596	12	16.70	4.70	1976.80	3093.12	61.14
1989-90	425.103	12	13.06	1.06	450.61	3105.62	13.99
1990-91	304.649	12	16.32	4.32	1316.08	3307.29	43.53
					9603.51		304.95
'C'P.H 1990-91	486.898	12	18.37	6.37	3101.54	3307.29	102.58

In reply the Management stated that in case of 'B' and 'C' Power house the oil consumption depends on number of tripping and subsequent lighting up of boiler. However, despite abnormal increase in oil consumption, the Board had not looked into the matter and no remedial measures were taken to control it. As regards 'A' Power house it was stated that the required/designed grade of coal for Hitachi boilers, (grade 'A'/'B') were seldom available. Mostly grade 'C'/'D' were supplied by CIL, resulting into poor combustion, unstability of flame necessitating more oil support for stabilisation of flame. Reasons for abnormal variations had not been specifically investigated by the Management.

Similarly, on the basis of oil consumption norm of 12 KL/MU prescribed by the Board (February 1983) for PTPS, the excess consumption of oil in 2x32 MW unit worked out to 1039.42 KL for Rs. 39.37 lakhs as detailed below:

Year	Energy generated (MU)	Oil consumption as per norms (KL/MU)	Oil actually consumed (KL/MU)	Excess oil consumed (KL/MU)	Total excess oil consumed (KL)	Rate (Average) (Rs./KL)	Amount (Rupees in lakhs)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1986-87	86.441	12	16.55	4.55	393.31		14.90
1987-88	...	...	...	...	...
1988-89	97.940	12	12.79	0.79	77.38	3788.00	2.93
1989-90	154.961	12	...	...	...
1990-91	86.302	12	1859	6.59	568.73		21.54
					1039.42		39.37

However, in 2x110 MW unit consumption of oil was below the norm during the above period.

The above matters were reported to the Board and Government in September 1991; their replies had not been received so far (December 1991).

SECTION 3D

RENOVATION AND MODERNISATION IN HARDUAGANJ AND PANKI THERMAL POWER STATIONS

Highlights

Central Electricity Authority approved, in April/May 1985, renovation and modernisation (R&M) schemes of Harduaganj Thermal Power Station (HTPS) and Panki Thermal Power Station (PTPS) for Rs. 6395 lakhs and Rs. 3703 lakhs, revised to Rs. 8295 lakhs and Rs. 4466 lakhs in May 1988 and February 1989, respectively. All the R&M works in both the power stations were to be completed in totality within a period of three years so as to derive maximum benefits from improvement in the plant load factor and increase in generation. The works which were scheduled for completion in March/April 1988 were, however, completed in March 1991 only.

The R&M works were to be financed from Central and State assistance. Against Rs. 3680.00 lakhs and 2514.00 lakhs under Central assistance for HTPS and PTPS, Rs. 2277.48 lakhs and Rs. 2323.02 lakhs, respectively, had been received up to November 1991. Whereas, against Rs. 1615.45 lakhs and Rs. 1952.00 lakhs under State assistance for HTPS and PTPS, only Rs. 866.57 lakhs and Rs. 614.05 lakhs, respectively, had been received up to November 1991.

In spite of incurring Rs. 543.85 lakhs for repair of John Thompson boilers against the advice of the consultant to replace them, there was no improvement in power generation and operation was still uneconomical due to which these boilers were closed down in July 1989, rendering the entire expenditure unfruitful.

HP heaters, purchased at a cost of Rs. 77.59 lakhs during December 1982 to April 1988 and installed in a unit of HTPS, remained uncommissioned for want of completion of other works, resulting in locking up of funds and consequential loss of interest of Rs. 13.97 lakhs per annum.

Due to non-availability of funds, a consignment of spare parts, purchased from a West German firm for Rs. 191.01 lakhs and lying at Bombay port since February 1990, could not be cleared, resulting in locking up of huge funds and consequential loss of interest of Rs. 48.73 lakhs up to December 1991.

A contract for modification of ash disposal system from dry to slurry form in two units of PTPS for Rs. 88.90 lakhs was awarded in December 1984 to a firm of Delhi and the work was scheduled for completion in September 1985. Even after incurring an expenditure of Rs. 84.80 lakhs up to December 1990, the work was not yet complete due to non-completion of certain civil/electrical works by the power station, resulting in locking up of funds and avoidable expenditure of Rs. 16.40 lakhs in manual disposal of dry ash.

3D.1. Introduction

The Government of India sponsored (March 1984) a scheme for renovation and modernisation (R&M) of all thermal power units up to 140 MW capacity which had not been giving satisfactory performance for more than three years. The scheme was to be implemented from the year 1984-85. The Board in consultation with CEA and BHEL formulated scheme for R&M of Harduaganj Thermal Power Station (HTPS) for Rs. 6395 lakhs in February 1985 and Panki Thermal Power Station (PTPS) for Rs. 3703.00 lakhs in January 1985 which was approved by CEA in April/May 1985. The project estimates were revised to Rs. 8295 lakhs (HTPS) and Rs. 4466 lakhs (PTPS) in May 1988 and February 1989 respectively. All the renovation works were to be completed in totality within a period of three years so as to derive maximum benefits from improvement in the plant load factor (PLF) and increased generation. The work which was to be completed by March 1988 was, however, completed in March 1991 only.

3D.2. Organisational set up

The Board constituted (August 1988) a Task Force Committee (TFC) having six members with the Chairman of the Board as its Chairman, Director CEA, Secretary Finance of the State Government, Member (F&A) of the Board, head of the Power Station, Chief Engineer (Thermal & Engineering) of the Board as the other members. The committee had full powers for purchase of equipments and to enter into work contracts on the basis of limited tenders or negotiated rates and to deviate, if necessary, from the standard conditions of contract as deemed fit. The committee was responsible for the supervision, monitoring and expeditious finalisation of supply and work orders for implementing the scheme. HTPS and PTPS with 10 and 4 electricity generating machines are having 530 MW (3x30, 2x50, 2x55, 2x60 and 1x110) and 284 MW (2x32 and 2x110) installed capacity respectively.

The overall charge of the two power stations is held by the respective General Managers who are assisted by the Superintending Engineers/Executive Engineers including Executive Engineer R&M Cell responsible for co-ordination of R&M activities and submission of monthly work progress and expenditure report to the Board and CEA. The Senior Accounts Officers of the power stations are also responsible for the separate maintenance of account of R&M works.

3D.3. Scope of Audit

The execution and implementation of R&M activities under the scheme in HTPS and PTPS for the last five years up to 1990-91 were reviewed in audit during January 1990 to May 1990 and February 1991 to June 1991 and the major findings are set out in succeeding paragraphs.

3D.4. Sources and utilisation of funds

The R&M of both the power houses related to overhauling and replacement of major parts of boilers, turbines, coal handling plants, electrical equipments, control and

instrumentation etc. The table below indicates the number of activities under the original estimates and revised estimates, financing thereof under Central and State assistance scheme and actual expenditure thereagainst up to March 1991.

	Harduaganj		Panki	
	Number of activities	Amount (Rupees in lakhs)	Number of activities	Amount (Rupees in lakhs)
(1) Original estimate				
(a) Centrally Sponsored schemes	36	2043.50	40	1114.83
(b) State plan	30	4351.50	20	2588.28
	--	-----	--	-----
(c) Total	66	6395.00	60	3703.11
	--	-----	--	-----
(2) Revised estimate				
(a) Centrally sponsored scheme	45	3680.00	40	2514.00
(b) State plan	33	4615.45	20	1952.00
	--	-----	--	-----
(c) Total	78	8295.45	60	4466.00
	--	-----	--	-----
(3) Actual expenditure upto 30.11.91	Number of activities completed	Number of activities completed		
(a) CSS	24	2277.48	34	2323.02
(b) State plan	15	866.57	7	614.05
(c) Own resources	..	141.95	..	...
	--	-----	--	-----
(d) Total	39	3286.25	41	2937.07
	--	-----	--	-----
(4) Percentage of actual expenditure to revised estimate				
(a) CSS		61.89		92.40
(b) State plan		18.77		31.46
(c) Total		39.61		65.76

A test check in audit revealed the following:

(i) The R&M work were to be financed from Central and State assistance. Against Rs. 3680.00 lakhs and Rs. 2514.00 lakhs under central assistance for HTPS and PTPS, Rs. 2277.48 lakhs and Rs. 2323.02 lakhs, respectively, had been received up to November 1991. Whereas against Rs. 4615.45 lakhs and Rs. 1952.00 lakhs under State assistance for HTPS and PTPS, only

Rs. 866.57 lakhs and Rs. 614.05 lakhs respectively had been received up to November 1991.

(ii) The project cost of HTPS was increased from Rs. 6395.00 lakhs to Rs. 8295.00 lakhs due to inclusion of 12 additional activities (Rs. 1082.50 lakhs), increase in the replacement cost of worn-out parts and equipments (Rs. 601.00 lakhs and increase in the cost of material, labour charges and erection charges, etc. in other works (Rs. 217.50 lakhs). The increase in project cost from Rs. 3703.00 lakhs to Rs. 4466.00 lakhs in PTPS was due to increase in cost of Electro-Static precipitators and associated work of ash handling system (Rs. 967.00 lakhs) and increase in the cost of material, labour charges and erection charges in other works.

(iii) The cost of various activities were estimated during October 1984 to January 1985 after discussions and consultations with BHEL and Instrumentation Limited, Kota, yet the equipment supplied by BHEL and others was at cost much higher cost ranging from 17.55 per cent to 152.40 per cent, as compared to estimate leading to revision of the estimated cost by Rs. 1900 lakhs and Rs. 763 lakhs in case of HTPS and PTPS which indicates that the cost as estimate by BHEL and Instrumentation Kota were not realistic. A few illustrative cases are discussed below:

(a) For replacement of Air heater block for 2x32 MW sets at PTPS a provision of Rs. 60 lakhs was made in the scheme and order for supply of air heaters was placed in July 1985 i.e., within 7 months of the formation of scheme, at a cost of Rs. 81.08 lakhs. The cost was further revised to Rs. 105.11 lakhs (June 1989) after completion of the work.

(b) Replacement of new HP heater cage in unit No. 3 and 4 in HTPS was estimated at Rs. 30 lakhs whereas order was placed on BHEL for Rs. 75.72 lakhs (December 1982, June 1986, April 1988).

(c) Arresting of air ingress in air heaters and ducts 3 to 4 at PTPS was estimated at Rs. 245 lakhs whereas as per orders

placed on BHEL (June 1985, January 1986, August 1984, November 1984, April 1986 and June 1986) the cost was Rs. 386 lakhs.

(d) Replacement of old turbine blades at PTPS was estimated to cost Rs. 210 lakhs while order was placed on BHEL and other for Rs. 247.27 lakhs in 1985-86 and 1986-87.

(iv) Two activities (PTPS) and six activities (HTPS) for Rs. 430 lakhs and Rs. 674 lakhs, respectively, were dropped/deferred. This included replacement of pressure parts of the Russian boilers, which had been categorised as one of core and essential activity at the HTPS. Due to leakages in the existing boilers there was generation loss of 217.30 MU in one year 1983-84 as assessed by the Management. Due to postponement of the work of the above activity the main object of improvement in generation and load factor had not been achieved.

3D.5. Execution of schemes

A test check of execution of works under the schemes revealed the following:

(i) The Project Report (February 1985) approved augmentation and modification of coal handling plant at HTPS at an estimated cost of Rs. 963 lakhs (Rs. 650 lakhs under central activity no. 44 and Rs. 313 lakhs under state activity no. 33) for providing additional coal feeding point.

For execution of the activity an order was placed (February 1988) on Bakhtawar Singh Bal Kishan and Co., New Delhi. The scope of work and cost were as under:

(i) Design and engineering	Rs. 80 lakhs
(ii) Supply of mechanical and electrical equipments	
F.O.R. site	Rs. 545 lakhs
(iii) Civil structural work	Rs. 280 lakhs
(iv) Erection, testing and commissioning	Rs. 40 lakhs
Total	Rs. 945 lakhs

The terms and conditions of the order, *inter-alia*, provided 5 per cent interest free advance to the firm against bank guarantee of equal amount within 30 days of the issue of the letter of intent (30th December 1987). The bank guarantee was to remain valid till the receipt of entire material. The firm was also required to furnish a bank guarantee against security deposit at the rate of 1 per cent of total contract value within 15 days from the date of issue of letter of intent which was to remain valid up to one month from the date of taking over of the plant by the management. The firm furnished (January 1988) bank guarantee of Rs. 9.45 lakhs as security money from Syndicate Bank. The firm requested (January 1988) the management for arranging funds but the firm could not submit the bank guarantee for advance payment and mobilise material at site for starting the work. The management intimated the firm (March 1988) that the arrangement of fund was being made and the firm was requested to furnish the bank guarantee as per terms and conditions of the order. The firm did not furnish bank guarantee as advance payment was not received by it and further stated (April 1988) that the delay in arrangement of funds had delayed the execution of work resulting in an overall 10 per cent increase in their quoted prices and would go ahead with the work provided this increase was given to them and advance payment released immediately. The firm's contention for advance payment before furnishing bank guarantee was, thus, contrary to the provisions of the contract. The firm gave notice (June 1988) for cancellation of the contract. The management in March 1989 gave seven days notice to the firm to start the work immediately failing which the work would be awarded to another contractor at their risk and cost. The firm did not agree to it. The contract was cancelled vide Project's order dated 31st May 1990 and no further decision had been taken for execution of the work.

The Board approached (6th July 1989) the Syndicate Bank for getting the bank guarantee extended and in case the firm did not extend it, to encash it. No reply was received from

the bank nor was any information available with the Project authorities whether the bank guarantee for Rs. 9.45 lakhs had been encashed/extended before the expiry of the bank guarantee on 20th July 1989. Since Board was aware in March 1989 that the firm was not interested in executing the work, the bank guarantee for security money should have been encashed.

(ii) The Project Report (January 1985) PTPS envisaged that since the performance of the EPs provided in both 110 MW boilers was far from satisfactory and was continuously deteriorating, thus affecting the life span of ID fan impellers and causing excessive pollution in the nearby residential area; it was decided that new more efficient and high capacity S.F. design ESPs and augmentation of existing ash disposal system in both the units of 2x110 MW should be provided. Accordingly a provision of Rs. 1000 lakhs was made under State Plan activity which was later (February 1988) transferred to Central Plan activity. In April 1990, the power station proposed revision of the estimated cost to Rs. 1967 lakhs to CEA.

Order was placed on BHEL in December 1988 for supply of equipment, erection, commissioning and civil works for Rs. 1197.57 lakhs subject to ceiling plus/minus 10 *per cent* on supply portion and 12.5 *per cent* on erection and civil works having the base date of December 1987. The work was to be completed within 23 months in both the units whenever the shutdown of the unit for three months was made available.

For implementation of the second part of the activity *i.e.*, augmentation of ash disposal system, an order was placed (June 1989) on Indure Limited, New Delhi for Rs. 374.40 lakhs as detailed below:

1. Design and Engineering	Rs. 24.00 lakhs
2. Supply FOR site including sales tax and excise duty	Rs. 259.20 lakhs
3. Erection, testing and commissioning	Rs. 38.40 lakhs
4. Structural and civil works as required	Rs. 52.80 lakhs

Total	Rs. 374.40 lakhs

The above prices were firm during the agreed delivery period and without any escalation. Unit No. 3 and 4 were to be commissioned by the firm within fourteen and twenty months respectively from the date of receipt of letter of intent *i.e.*, by July 1990 and January 1991.

The total expenditure incurred on the activity up to June 1991 was Rs. 619.77 lakhs. The scheduled period for completion of work by both the contractors was over by January 1991 but up to December 1991 BHEL had completed civil foundation of the columns and mechanical erection work was still in progress, while Indure Limited had done only part excavation of the civil work. The firms stopped work (March 1990) due to non-payment of their bills, Rs. 92.50 lakhs to BHEL and Rs. 51.51 lakhs to Indure Limited was pending. Non-payment of dues has resulted in delay in completion of work.

(iii) HTPS had six boilers and three turbines. Four of the six boilers in 'A' Power House Units I, II and III were John Thompson stoker fired boilers (JTC). The stoker grate design allowed coal and ash to enter the mechanism causing the grates to break. The boilers were operating at less than 33 *per cent* heat availability and when in operation lost more than 30 *per cent* of the heat content of the coal to the ash hopper. The stokers had been problematic from the first day of their operation. Since the original manufacturers were out of business it was recommended by the consultant (Gilbert Commonwealth International) that a design study be instituted immediately to determine the advisability of replacing them with a new design which would increase the heat availability by 30 *per cent* and reduce the discharge of unburned combustibles in the ash hopper. It was envisaged by them that the units were expected to operate for at least another 10 to 20 years. The Project Report contained provision of Rs. 2 lakhs under central plan activity for the report on a new design of JTC boilers. It was, however, noticed that the power station had taken no action in this regard. Instead parts of the existing machines were replaced with new spares by incurring expenditure of Rs. 543.85 lakhs (including Rs.

14.68 lakhs, the cost of unconsumed spares). Despite this expenditure there could be no improvement in power generation and boilers were closed in July 1989. Thus entire expenditure of Rs. 543.85 lakhs was rendered unfruitful.

(iv) The Project Report (February 1985) provided renovation of the HP heaters of Unit No. III and IV of 'B' power house (HTPS) at an estimated cost of Rs. 30 lakhs to overcome the problems of frequent leakages in the HP heaters causing unsafe operation as well as frequent and heavy maintenance. Four sets of HP heater cage and tube nests were purchased from BHEL during December 1982 to April 1988 costing Rs. 75.72 lakhs. The erection of two sets in Unit No. III was placed with BHEL in September 1988 for Rs. 1.87 lakhs. The firm completed the work in April 1991 but the HP heaters have not been commissioned for want of synchronisation of machine No. III which was under shut down since July 1988 because of non-completion of other R&M works by BHEL. The tentative date of synchronisation of machine fixed for November 1989 was now fixed for September 1991. The two sets meant for unit No. IV were still (November 1991) lying in the store and no order had been placed for its erection so far.

Thus an investment of Rs. 77.59 lakhs on the purchase of four sets of HP heaters are lying idle for the last three years involving annual interest burden of Rs. 13.97 lakhs on the Board.

(v) Air Pre-heater (APH) lower block for Unit No. V of 'C' power house (HTPS) was purchased (June 1986) from BHEL against an order of May 1985 for Rs. 20.94 lakhs and the replacement work of the block was placed (January 1986) with BHEL at a cost of Rs. 4.50 lakhs with completion period of 45 days. The work was to be carried out during scheduled overhauling in 1986. The contractor stated (June 1990) that the work could not be carried out during scheduled period due to non-availability of shutdown and they were going to revise their prices as the rates quoted five years back did not hold good. The offer was thus revised in June 1990 from Rs. 4.50

lakhs to Rs. 6.50 lakhs. The power station asked (August 1990) BHEL to take up the work during the current overhauling period but the contractor refused to do the work on the old rates and asked for atleast six weeks advance notice for taking up the work. The revised offer for Rs. 6.65 lakhs of the firm was valid up to 31st March 1991. Thus the unit No. V was still operating with old lower blocks of APH And the new block costing Rs. 20.94 lakhs supplied in June 1986 was still lying unutilised in the store. Thus due to lack of co-ordination between procurement and utilisation of material the Board had to bear annual interest liability of Rs. 3.77 lakhs on idle investment of Rs. 20.94 lakhs till to date (December 1991).

3D.6. Performance

(A) HTPS

The Project Report (February 1985) envisaged that after complete renovation of the plant as per the Project Report there would be an average improvement of PLF by 11.6, 19 and 17 per cent with simultaneous increase in electricity generation by 91.5 MU, 349.5 MU and 344.00 MU per year in 'A', 'B' and 'C' power houses respectively. The table given below indicates the power generated, PLF, fuel consumption in 1984-85 (prior to start of R&M work) and subsequent six years ending March 1991.

A-Power House Year	Generation in M.U.	PLF per cent	Coal consumption (Kg/Kwh)	Oil consumption (Kl/Mu)
(1)	(2)	(3)	(4)	(5)
1984-85	251.681	41.04	0.98	9.46
1985-86	184.935	30.16	1.06	11.099
1986-87	117.345	14.14	1.41	9.54
1987-88	108.346	41.12	1.31	9.53
1988-89	74.279	28.26	1.29	15.14
1989-90	52.876	20.12	1.12	24.58
1990-91	34.724	13.21	1.05	30.78
B-Power House				
1984.85	659.02	35.82	0.82	21.71
1985-86	557.66	30.31	0.84	20.85
1986-87	737.95	40.11	0.88	18.30

(1)	(2)	(3)	(4)	(5)
1987-88	669.02	36.28	0.90	13.81
1988-89	420.60	22.86	0.87	16.69
1989-90	425.10	23.67	0.87	13.06
1990-91	304.65	18.30	1.01	16.32
C-Power House				
1984-85	505.65	25.10	0.82	10.63
1985-86	644.77	32.0	0.84	14.94
1986-87	866.09	42.99	0.88	5.65
1987-88	1056.16	52.28	0.90	7.24
1988-89	1013.05	50.28	0.86	6.46
1989-90	553.78	27.64	0.87	8.34
1990-91	486.90	24.70	0.99	18.37

(B) PTPS

The Project Report (January 1985) had envisaged a general increase of 10 per cent in the PLF of the plant. However, while sanctioning the revised project proposal in January 1991 CEA envisaged that after completion of the plant, there would be average improvement of PLF by 11 per cent and additional power generation of 283 MU at 60 per cent load. The table below indicates the power generated, PLF, fuel consumption in 1984-85 and subsequent years ending March 1991:

Year	Generation in MU	PLF Per cent	Coal consumption (Kg/Kwh)	Oil consumption (Kl/Mu)
Panki (2x32 MW)				
1984-85	177.00	65.40	0.64	13.50
1985-86	319.00	56.90	0.63	21.50
1986-87	86.00	28.50	0.63	6.55
1987-88	NIL	NIL	..	..
1988-89	97.95	34.90	0.63	11.26
1989-90	154.96	43.80	0.76	8.05
1990-91	90.00	29.67	0.77	12.92
Panki (2x110 MW)				
1984-85	907.00	47.1	0.81	8.95
1985-86	531.00	27.6	0.80	13.20
1986-87	1097.00	56.9	0.79	7.33
1987-88	391.00	20.3	0.80	10.40
1988-89	1143.768	59.3	0.80	5.48
1989-90	803.637	65.7	0.79	7.93
1990-91	528.00	28.7	0.79	13.10

From the above tables the following facts emerged:

(i) There was an average reduction in generation by 86 per cent, 53.77 per cent and 3.70 per cent in A, B and C units of HTPS and 51 per cent in PTPS up to the end of 1990-91 as compared to 1984-85.

(ii) The coal consumption also increased from 0.98 Kg/Kwh, 0.82 Kg/Kwh in 1984-85 to 1.05 Kg/Kwh, 1.01 Kg/Kwh and 0.99 Kg/Kwh in A, B and C power house of HTPS and 0.64 Kg/Kwh to 0.77 Kg/Kwh in PTPS by the end of 1990-91.

Thus despite some activities of renovation and modernisation schemes being undertaken after 1984-85 the generation in the two power stations could not even be maintained at the 1984-85 level, besides registering an increase in coal and oil consumption per KWH of electricity generated in the years up to 1990-91.

The reasons for reduction in generation was attributed by the Management (June 1991) to the leakages due to deteriorated condition of the boiler, frequent shutdown of machine under R&M works, coal feeding problem and insufficient coal supply. Increase in consumption of coal was attributed to supply of poor quality of coal. It may be stated here that except for shut down of machines for renovation works, the other reasons given by Management were existing in the year 1984-85 and the main object of the R&M schemes was only to overcome them. An analysis of the reasons for poor generation and excess consumption of coal and oil inspite of carrying out R&M work, was not carried out by the Management.

3D.7. Upkeep of records

A test check in audit of maintenance of records/accounts brought to light the following deficiencies:

(i) As per records a sum of Rs. 354.60 lakhs in PTPS and Rs. 3.92 lakhs in HTPS was outstanding as at the end of August 1990 and February 1991 respectively against various suppliers. Party-wise details and reasons as to why the

outstanding advances could not be adjusted/recovered were not on record.

(ii) In HTPS and PTPS material issued from the Store Division had been charged to works (consumed) without verifying actual consumption as material-at-site accounts were not maintained. The Register had neither been reviewed/maintained to find out equipment/material available with the division at site nor was its physical verification conducted (June 1991).

3D.8. Other topics of interest

3D.8.1. Damage to turbine

Unit No. II of 2x32 (PTPS) was closed on 6th May 1986 on account of damage to turbine. The matter was not investigated by the Board. The foreign supplier* of the turbine, however, conducted a fact finding assessment of the damage and reported in August 1986 that primary damage, to the thrust bearing had been caused by following factor:

- Additional thrust due to heavy salt deposits on the blades.
- Reduction of thrust bearing carrying capacity due to roughness of the babbitt material of pads caused by dirty lubrication oil.
- Restriction in absolute expansion of front bearing pedestal, caused by scoring, results of tilting of pedestal.

The damage was caused by non-tripping of the thrust bearing protection device.

In October 1986, the Board constituted a committee to examine the report submitted by the foreign supplier. The Committee, in its report submitted in December 1986, while broadly agreeing with the fact finding report, did not fix any responsibility nor suggested any remedial measures.

* Kraft Works Union of West Germany supplier

For rehabilitation of the unit an order for turbine rotor and repairs was placed in March 1988 on the same foreign supplier for D.M. 60,00,000 (Rs. 485.24 lakhs inclusive of Rs. 9.55 lakhs towards Indian agent's commission) FOB German port. The Board had incurred an expenditure of Rs. 440.58 lakhs on the import of rotor as per details below:

	Month of payment	(Rupees in lakhs)
Opening of letter of credit	April 1988	4.16
Bill amount	December 1989	418.51
Indian Agent's Commission	December 1989	11.35
Insurance charges	Quarterly up to November 1990	6.56
	Total	----- 440.58 -----

Due to the non-availability of funds the rotor received at Bombay port in November 1989 could be cleared only in April 1991 on payment of Rs. 682.06 lakhs (custom duty Rs. 678.35 lakhs wharfage/demurrage Rs. 2.24 lakhs and Rs. 1.47 lakhs freight charges). The work of installation of rotor had not been started (July 1991) for want of funds of Rs. 327.815 lakhs demanded by the General Manager from the Board in May 1991, which has not been provided so far (December 1991). Consequently, investment of Rs. 682.06 lakhs is lying idle.

3D.8.2. Non-clearance of imported material

The power Station (HTPS) placed orders (January 1985, March, April and July 1988) with a West German firm* for supply of spare parts of AEG machines valuing Rs. 191.01 lakhs installed in 'A' Power Station. The spare parts were received at Bombay Port in February 1990. The clearing agent (M/s Bombay Shipping Agency) intimated (February 1990) the

* M/s KVV, West Germany

Power Station to send a bank draft for Rs. 89.13 lakhs for payment of customs duty and port charges. The Power Station could not made arrangement of the requisite funds for clearance of goods and in March 1991 the Bombay Port Trust Authority asked the Power Station to make payments of Rs. 116.85 lakhs on account of customs duty, port charges, demurrage charges, etc. by 15th April 1991 otherwise the material would be auctioned. The General Manager requested (April 1991) the Board for immediate release of funds of Rs. 117.00 lakhs which was revised to Rs. 117.67 lakhs in January 1992 so that the consignment of spares could be obtained from the Port authorities and General Manager of the Power Station had requested the Customs authorities not to auction the material as funds were being arranged. The Board had not made available the required funds (December 1991). In this connection it is interesting to note that these spare parts of the governing system, control valves, etc. had been specifically manufactured by the German manufacturer on the request of the Board. Thus due to non-availability of funds for making payment of custom duty, port charges, demurrage charges, etc. the imported spares valuing Rs. 191.01 lakhs were lying idle since February 1990 and the Board was incurred interest burden of Rs. 48.73 lakhs, besides avoidable liability of Rs. 117.67 lakhs (up to January 1992) on account of Custom duty, port and demmuraage charges incurred by Board.

3D.8.3. Idle investment and loss on modification of ash disposal system 2x32 MW units (PTPS)

Ash disposal in both 32 MW boilers is being arranged manually by trucks through contractors. In the project report for renovation and modernisation dry disposal of ash in the units was planned for modification to slurry form so that the ash could be disposed of in the ash pond meant for the 110 MW units. The object of this activity was to control pollution in the vicinity of the power house caused by the present system of manual disposal of dry ash. The estimated cost of this activity under State Plan was estimated at Rs. 200 lakhs

which was reduced (1989-90) to Rs. 130 Rs. lakhs by the Power Station.

A contract on turn-key basis was awarded (December 1984) to Indure Limited, New Delhi for design, engineering, manufacturing, supply and commissioning of the proposed ash disposal system for Rs. 88.90 lakhs on firm prices and without any escalation clause. The supply of materials, erection, etc. was to be completed by the end of September 1985. Ninety *per cent* payment was to be made against despatch of material and its installation. Balance ten *per cent* payment was to be released on commissioning of the system against a suitable bank guarantee valid, for the duration of the warranty period.

It was observed that the Power Station had incurred an expenditure of Rs. 84.80 lakhs on the activity by the end of December 1990 (Rs. 83 lakhs up to March 1990) but the plant had not been commissioned (June 1991) due to non-completion of certain civil/ electrical works on the part of the Power Station and delay in supply of material by the firm. The scheduled date for commissioning was September 1985 and the material could be supplied during the period from 1984-85 to June 1991. The guarantee period of the material supplied had since expired. Further the bank guarantee for Rs. 8.89 lakhs as ten *per cent* security deposit valid till September 1985 and extended up to March 1986 had also elapsed and no extension had been sought by the management.

Thus due to non-commissioning of the ash disposal system the Board was deprived of the benefits of the investment of Rs. 84.80 lakhs involving interest charges of Rs. 15.26 lakhs per annum. Besides, the Power Station had to continue with manual disposal of ash even after September 1985, and the expenditure on this account during the period 1985 to March 1991 aggregated Rs. 16.40 lakhs.

3D.8.4. Construction of water treatment plant

The Project Report (PTPS) envisaged augmenting the existing water treatment plant in respect of Unit No. III and IV (2x110 MW) by a new 40 tonnes capacity water treatment plant together with 30 tonnes capacity acid tank at estimated cost of Rs. 45 lakhs. The scheduled period of completion of work was December 1985. The estimated cost was revised to Rs. 70 lakhs in February 1988 and again to Rs. 80.42 lakhs in February 1991. According to the progress report (December 1990) Rs. 48.36 lakhs had been incurred on the activity.

For supply of material and erection of the plant an order was placed (April 1986) on IAEC Bombay Limited, for Rs. 23.94 lakhs (supply of material ex works Rs. 23.05 lakhs and erection and commissioning charges Rs. 0.89 lakh) on firm prices and without any provision for price escalation. The supply of material was to be completed within ten months from the date of receipt of the letter of intent and erection and commissioning within two months from the date of supply. The payment clause provided for payment of 15 *per cent* of the contract value (supply portion) as design and engineering charges, 75 *per cent* against despatch documents through bank and 10 *per cent* against submission of performance guarantee to remain valid till the warranty period *i.e.*, twelve months from the date of commissioning or eighteen months from the date of last supply whichever was earlier. Fifty *per cent* of erection and commissioning charges were payable on opening of office at work site. The firm supplied 50 *per cent* of the material valuing Rs. 12.88 lakhs by March 1990 and had not made further supply of material (June 1991). Although the firm did not fulfil its contractual obligation the bank guarantee for Rs. 2.39 lakhs valid up to 30.9.1989 was neither encashed nor extended.

Thus due to failure on the part of the firm, Board's investment of Rs. 48.36 lakhs remained idle with consequential interest burden of Rs. 8.70 lakhs per annum.

In reply the Management stated (March 1991) that despite personal contacts the firm had not restarted supply/work. The Power Station had written (January 1991) to the Thermal Design and Engineering Division for taking suitable action against the firm and to stop all pending payments, if any, due to the firm in all the Power Stations of the Board and Store Purchase Division was asked to take legal action against the firm and to procure material from other sources for completion of the work. No action had been taken by the Stores Purchase Division so far (June 1991).

The above matters were reported to the Board (April/June 1991) and Government (August 1991), their replies had not been received (December 1991).

CHAPTER IV

MISCELLANEOUS TOPICS OF INTEREST RELATING TO GOVERNMENT COMPANIES AND STATUTORY CORPORATIONS

SECTION 4A GOVERNMENT COMPANIES

SECTION 4B STATUTORY CORPORATIONS

SECTION 4

MISCELLANEOUS TOPICS OF INTEREST RELATING TO GOVERNMENT COMPANIES AND STATUTORY CORPORATIONS

4A GOVERNMENT COMPANIES

4A.1. Uttar Pradesh Tyres and Tubes Limited

Locking up of fund and loss of subsidy

In March 1988, Company placed an order on Escorts Limited, New Delhi for supply, installation and commissioning of one Diesel Generating (D.G.) set of 437.5 KVA capacity at a cost of Rs. 10.58 lakhs. As per terms of the purchase order the D.G. set was to be supplied by the firm within 4 to 6 weeks from the date of order. The guarantee period of the engine of the set was 24 months from the date of despatch or 6000 hours from the date of installation whichever was earlier and covered only defects due to workmanship or defective material. It did not cover wrong handling or improper maintenance. During test check by Audit in January 1991 it was noticed that D.G. set was received in November 1988 and full payment of Rs. 10.63 lakhs (inclusive of increase in excise duty) was released by the Company to the firm during March to November 1988. The D.G. set had, however, not been installed so far (December 1991) as the Company could not complete the construction of shed for its installation and the firm did not send its Engineer for testing and commissioning. The guarantee period of 24 months from the date of despatch had also expired in December 1990. Further, the subsidy admissible on the D.G. set from the Government which was available up to September 1990, had also not been claimed by the Company as it could not furnish the installation certificate.

Thus, due to non-installation of D.G. set the Company's funds to the tune of Rs. 10.63 lakhs have remained locked up since December 1988, besides subsidy of Rs. 3.12 lakhs which

could not be claimed. Loss of production due to non-installation of the D.G. set was unascertainable.

The matter was reported to the Company and Government in October 1991; their replies had not been received (December 1991).

4A.2. Uttar Pradesh State Handloom Development Corporation Limited

Locking up of funds and loss of subsidy

In order to obviate the adverse effect on the existing processing capacity of its Process House at Khalilabad (District Basti) due to frequent disruptions in electric supply, the Board of Directors of the Company decided (September 1987) to go in for a diesel generating (D.G.) set of 200 KVA capacity.

The Company invited tenders (opened on 3rd August 1987) and placed an order on 15th October 1987 on S.M. Brothers, Kanpur, not an authorised dealer for Kirloskar Cummins make generating sets, to supply one D.G. set of 200 KVA capacity of Kirloskar Cummins make, besides an 'Alternator' of 200 KVA capacity and other standard accessories at an all inclusive cost of Rs. 4.47 lakhs. The supply order inter alia stipulated guarantee against all manufacturing defects for twelve months from the date of commissioning and three free service after commissioning.

The firm delivered a D.G. set at the Process House in March 1988 and Rs. 4.02 lakhs (being 90 *per cent* value of cost of equipment) was released to the firm without ascertaining whether or not the firm had supplied accessories of the D.G. set. On an inspection carried out of the generating set by the authorised dealer of Kirloskar Cummins in September 1989 on request of the Company, it was found that the firm had actually supplied D.G. set and 'Alternator' of 180 KVA capacity. Moreover, the after-cooler had also not been fitted on the engine. The Chief Executive Officer,

Process House Khalilabad asked (October 1989) the firm to replace the equipment by a D.G. set and 'Alternator' of 200 KVA capacity as had been ordered but the matter was, however, not pursued effectively and the Head Office of the Company neither sought replacement of the lower capacity equipment supplied nor initiated legal action against the firm for defrauding the Company. The price differential between diesel generating sets of 200 KVA and 180 KVA capacity was also not recovered (December 1991) and the generating set was still lying unutilised (December 1991).

Meanwhile, the Company incurred an expenditure of Rs. 1.37 lakhs on the construction of foundation and room for the D.G. set. Thus, the entire expenditure of Rs. 5.39 lakhs on purchase of generating set and civil works had remained locked up with a consequential loss of interest of Rs. 0.75 lakh per annum (at the rate of 14 *per cent*). The loss of production suffered due to non-availability of the diesel generating set during the last three and half years period could not be ascertained.

Besides, due to non-installation of the D.G. set in time, Company could not avail the Government subsidy amounting to Rs. 0.90 lakh, which was available only up to September 1990.

The matter was reported to the Company in July 1990 and the Government in October 1991; their replies had not been received (December 1991).

4A.3. Uttar Pradesh State Brassware Corporation Limited

Avoidable payment of interest

Under Section 8-D of the Uttar Pradesh Sales Tax Act, 1948 the amount of sales tax deducted shall be deposited into Government Treasury before expiry of the month following that in which deduction is made failing which interest at the rate of 2 *per cent* per month is payable on the amount of Sales Tax

deposited after the due date. During test check conducted by Audit (March 1991) it was noticed that in the final assessment made on 12th December 1990 for the year 1986-87 interest was imposed on the Company for delayed deposit of Sales Tax ranging from 34 to 44 months to the extent of Rs. 2.46 lakhs.

The Company attributed the delay in deposit of Sales Tax to delayed receipt of information/statement from its branch offices. Thus, due to delay in depositing the Sales Tax, the Company had to incur an avoidable expenditure of Rs. 2.46 lakhs.

The matter was reported to the Company in July 1991 and to Government in September 1991; replies had not been received (December 1991).

4B. STATUTORY CORPORATIONS

UTTAR PRADESH STATE ELECTRICITY BOARD

4B.1. Under billing due to incorrect application of tariff

4B.1.1. Prior to 1st February 1986 there was no separate rate schedule for arc/induction furnace consumers and these consumers were being billed under rate schedule HV-1 or HV-2 depending upon their contracted load.

With effect from 1st February 1986, arc/induction furnace consumers having two connections - one for main furnace and the other for auxiliaries (above 100 BHP) were billed separately under HV-1 and HV-2 respectively.

During test check in audit it was noticed that Electro Steel Casting Limited, under the jurisdiction of Electricity Commercial Division, Ghaziabad having a load of 1000 KVA for main furnace and 700 KVA for auxiliaries continued to be billed under rate schedule HV-2 applicable to arc/induction furnace and engineering units. Whereas w.e.f. 1st February 1986, the consumer was to be billed under two tariffs viz.

(a) under HV-1 for the arc/induction furnace (at the rate of Re. 0.95 per Kwh up to 16.10.89 thereafter at the rate of Rs. 1.30 per Kwh being continuous process) and (b) under HV-2 for auxiliaries (at the rate of Rs. 66/KVA for demand charges and Rs. 0.70/Kwh for energy charges). Application of incorrect tariff, thus, resulted in under billing of Rs. 56.79 lakhs for the period from February 1986 to April 1991 which will further increase till the correct rate is applied.

Divisional Officer stated (September 1990) that billing of the consumer could not be done under revised tariff as Board's orders (April 1985) treating the consumer as an engineering unit had not been withdrawn.

The reply is not acceptable as rate schedule applicable from February 1986 introducing separate tariffs for arc/induction furnace (continuous process) and auxiliaries (non-continuous process) was in supersession of all previous modifications, orders and instructions and as such specific withdrawal of the Board's order categorising the consumer as engineering unit was not necessary.

The matter was reported to the Board in January 1991 and the Government in October 1991; replies had not been received (December 1991).

4B.1.2. Rate schedule HV-2 applicable to World Bank tubewells w.e.f. 1st February 1986 inter alia provide for billing for unmetered supply at the rate of Rs. 53 per BHP for demand charges and Re. 0.60 per Kwh for consumption in a month. Capacity of the motors of energised World Bank tubewells on 15th day of the month was to be treated as maximum demand during the month and energy consumption was to be assessed on the basis of load drawn multiplied by factor of 0.5, 18 hours supply and number of days of supply drawn.

Scrutiny of records in Electricity Distribution Division-1, Jaunpur (March 1991) revealed that two World Bank tubewell consumers, having combined load of 1165 BHP where meters were not installed up to April 1986, were billed under

rate schedule LMV-8 applicable to State tubewells, pumped canals and Lift Irrigation during the period from February 1986 to April 1988. Application of incorrect tariff to World Bank tubewell consumers, resulted in short billing of Rs. 38.91 lakhs.

Divisional Officer, while accepting Audit view, reassessed the consumer in November 1991 and on the basis of actual consumption recorded by a similar consumer, raised an arrears bill on these consumers for Rs. 5.74 lakhs only, the recovery of which was still awaited (December 1991).

The bill raised by the Divisional Officer was not as per the provisions of the Rate Schedule HV-2 applicable to World Bank tubewell consumers.

The matter was reported to the Board in July 1991 and to Government in August 1991; replies had not been received (December 1991).

4B.1.3. Para 4 (ii) (d) of LMV-2 of rate schedule effective from 1st August 1986 stipulates the rate of charge at the rate of Rs. 1.10 per Kwh (revised to Rs. 1.55 per Kwh w.e.f. August 1990) for non-domestic consumers other than schools, colleges, hospitals, libraries, trusts, recognised research institutions, residential colonies etc. The Board vide B.O. dated 28th November 1983 also clarified that Post and Telegraph Department will be billed under Para 4 (ii) (d) of LMV-2 rate schedule.

A test check in Electricity Commercial Division, Ghaziabad revealed that Advanced Level Telecommunication Training Centre, Ghaziabad under Department of Telecommunication, Government of India having contracted load of 2480 KVA was being billed at the rate of 95 paise per Kwh up to July 1990 and Rs. 1.05 thereafter, applicable to recognised research institution, instead of Rs. 1.10 and Rs. 1.55 per Kwh. The incorrect application of tariff, thus, resulted into short billing of revenue of Rs. 27.57 lakhs during the period August 1986 to July 1991.

Divisional Officer, on being pointed out in audit, in November 1989, raised a bill for Rs. 11.55 lakhs in September 1990. On representation by the consumer, the bill was withdrawn in February 1991. On further pursuance by Audit, the Chief Engineer (Commercial) finally accepted (September 1991) the contention and directed the concerned authorities to revise assessment but bill had not been revised so far (December 1991).

Thus, incorrect application of tariff resulted in short billing of revenue amounting to Rs. 27.57 lakhs during the period from August 1986 to July 1991 which would further increase till the correct rate was applied.

The matter was reported to Board and Government in November 1991; replies had not been received (December 1991).

4B.1.4. From August 1986, billing for electricity supplied to residential colony/township of Feroz Gandhi Thermal Power Station, Unchahar (a unit of Uttar Pradesh Rajya Vidyut Utpadan Nigam) was to be done at rates applicable under para 4 (ii) (c) of rate schedule LMV-2 which specified the rate of Re. 0.80 per unit up to July 1990 and Rs. 1.05 per unit thereafter..

A scrutiny in audit revealed (August 1991) that the consumer was billed at Re. 0.70 per unit, the rates applicable to Board's offices, etc. under rate schedule LMV-2, without any reason on record. This resulted in undercharge of revenue amounting to Rs. 20.72 lakhs during August 1986 to July 1991 which would further increase till the correct rate is applied.

The matter was reported to the Board and the Government in November 1991; replies had not been received (December 1991).

4B.2. Short billing due to incorrect current transformer connection

Cheema Paper Mills, Rajpur, a large and heavy power consumer, under the jurisdiction of Electricity Distribution Division, Kashipur, had a contracted load of 850 KVA since August 1984. At the time of releasing the connection the consumer was provided with a two part tariff meter, instead of a trivector meter, as required under the Board's order dated 21st July 1982. From 1st August 1984 to May 1987 the consumer was billed in accordance with readings of the two part tariff meter. In May 1987 a trivector meter was installed on the premises and the billing was made on the basis of the readings recorded by trivector meter. In December 1987, during the course of normal checking of the metering installations by the Electricity Test Division, Haldwani, it was noticed that the mode of current transformer connection was not consistent with the current transformer ratio for working out multiplying factor, a fact which the department failed to notice at the time of release of the connection as also at the time of installation of the trivector meter in May 1987. This oversight on the part of the department had resulted in the application of only $2/3$ of actual multiplying factor. The current transformer ratio was corrected from December 1987 and billing was started on the basis of new multiplying factor.

Due to application of the incorrect multiplying factor during the period August 1984 to December 1987, the consumer was billed short to the extent of 39,20,900 Kwh of energy and 10,967 KVA of demand involving a total revenue of Rs. 38.32 lakhs. Although the fact of under assessment had come to the notice of the Division as early as in December 1987, no action for recovery has been taken so far (December 1991).

The matter was reported to Board in March 1990 and to Government in November 1991; replies had not been received (December 1991).

4B.3. Non-realisation of additional security deposit

The Board vide its order dated 22nd January 1987 revised the amount of security deposit realisable from various category of consumers. The power consumers having contracted load above 100 BHP (88.24 KVA) were required to deposit the security at the rate of Rs. 200 per KVA for non-continuous process and Rs. 300 per KVA for continuous process. The additional security was to be realised in 3 to 12 monthly instalments alongwith their energy bills failing which, the connections were liable to be disconnected.

Against the Board order *ibid*, the Eastern U.P. Chamber of Commerce, a recognised body of public companies obtained a stay order on 21st June 1987 from Supreme Court of India which was vacated on 9th May 1988 by passing an interim order directing the Board to re-issue the circular and realise the amount of additional security from the consumer, on which, interest at the rate of 12 *per cent* would be payable by the Board. Consequently, Board re-issued the orders on 12th May 1988 keeping intact the provisions of earlier orders of 22nd January 1987 and directed (October 1988) all the field units to realise the additional security deposit from the consumers.

A test check by Audit in six Distribution Divisions during the period June 1988 to December 1990, revealed that the Division neither realised additional security amounting to Rs. 13.44 lakhs from 36 large and heavy power consumers nor initiated any action for disconnection as prescribed in the Board order. Non-realisation of additional security resulted in a loss of interest amounting to Rs. 1.43 lakhs at differential rate of 4 *per cent* per annum which Board had paid on its borrowed funds during the period from May 1989 to December 1991 as per details given in the annexure-7.

The matter was reported to Board during the period March 1991 to June 1991 and to the Government in October 1991: replies had not been received (December 1991).

4B.4. Short billing of fuel surcharge

Para 12 of rate schedule HV-2 applicable to World Bank Tubewells connected on 11 KV independent feeders provides for charging of fuel surcharge to be notified by the Board for each month. Consequent upon the revision of tariff in respect of certain categories of consumers from 17th October 1989, separate rates of fuel surcharge were prescribed for consumers whose tariff was revised and for others (which included World Bank Tubewells) whose tariff was not revised.

A test check of records (June 1991) of Electricity Distribution Division, Kanpur and Fatehpur revealed that rates of fuel surcharge were incorrectly applied in 3 cases of World Bank Tubewells consumer which led to short-billing of Rs. 8.20 lakhs during November 1989 to March 1991.

On being pointed out by Audit, the Kanpur Division raised arrear bills for Rs. 6.12 lakhs in June 1991, realisation of which was awaited while the Fatehpur Division had not raised the bill so far (December 1991).

The matter was reported to the Board in July 1991 and to Government in November 1991; replies had not been received (December 1991).

4B.5. Underassessment of jammed meter

Commercial Manual of the Board provides for assessment, in case of jammed meters, on the basis of the average consumption recorded by the meter during preceding three months when the metre was recording correct reading for non-seasonal processes and on the basis of the average consumption during corresponding period of previous season for seasonal processes. In case above records are not available, the assessment may be made on the basis of demand and consumption as recorded during three months subsequent to the installation of correct meter.

A test check (January 1991). of records of Electricity Distribution Division-I, Mirzapur revealed that the meter of Co-operative Cold Storage, Mirzapur having a contracted load of 185 KVA since February 1986 (actual commercial consumption of load commenced w.e.f. December 1986) remained jammed during the period from March 1987 to February 1990. Instead of assessing the consumer as per provision referred to ibid, the consumer was billed on the basis of energy charges based on hours run by the Cold Storage of the consumer although the Division did not have any independent system of recording day-to-day hourly run and load utilisation by the consumer. Incorrect billing of consumer, thus resulted in an underassessment to the extent of Rs. 5.66 lakhs (809251 Kwh at the rate of Re. 0.70 per Kwh) for a season of 8 months calculated on the basis of average consumption of 65610 units per month from April to June 1990 after the replacement of meter as detailed below:

Season	Assessable units as per commercial Manual	Units actually assessed	Units under assessed
March-October 1987	524880	349140	175740
March-October 1988	524880	217336	307544
March-October 1989	524880	198913	325967
		Total	809251

The matter was reported to the Board in July 1991 and the Government in October 1991; replies had not been received (December 1991).

4B.6. Non-assessment of theft cases

In case of theft of energy, para 7.2 of Commercial and Revenue Manual provides for assessment of energy consumption for the last six months by multiplying connected load, average number of hours of supply per day, number of days and the prescribed factor which in the case of small and medium power consumer is 0.50. The consumption so assessed is to be charged at thrice the rate per unit of the applicable tariff. Further, as per Board's order of 14th October 1976, the

connection is to be disconnected immediately; besides such a consumer is also liable for criminal proceedings.

A test check of billing of small and medium power consumers by Electricity Distribution Division-II, Bijnor revealed that despite detection of theft of energy by the meter reader and recording of the same in the reading books the assessment of energy consumption as per provisions quoted above was not done in the following cases:

Sl. No.	Service connection Number	Connected load (In Kw)	Month of reading	Remarks given by meter reader	Units to be assessed (In Kwh)	Units billed (In Kwh)	Under assessment (In Kwh)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1.	4803/9499	7.46	October 1988	TP and body seal broken	16114	297	15817
2.	3203/11171	5.84	October 1988	Seal duplicate	12614	673	11941
3.	3303/11173	5.84	December 1988	Seal duplicate	12614	398	12216
4.	4903/346	7.46	December 1988	Meter jammed by making holes in its body	16114	Nil	16114
5.	4303/10397	5.84	December 1988	wire of TP meter reversed	12614	Nil	12614
6.	4803/11154	7.46	January 1989	Meter snapped	16114	336	15778
7.	3703/194	7.46	February 1989	Meter seal broken	16114	63	16051
8.	3703/206	7.46	February 1989	Used direct	16114	414	15700
9.	3703/11270	5.84	February 1989	Meter seal tampered	12614	218	12396
10.	3303/295	7.46	February 1989	TP and body seal duplicate	16114	583	15531
						Total	144158

Thus, non-assessment of energy in theft cases resulted in underassessment of 1,44,158 units and consequent loss of revenue of Rs. 2.81 lakhs. The Divisional Officer, without any reasons on record, failed to disconnect the supply of the consumers. Further, no criminal proceedings were initiated in any case.

The Divisional Officer stated in reply that the report of meter reader was subject to verification by Subdivisional

compared to rates prevailing during the original schedule for despatch of material.

Thus, inclusion of an inspection condition which was found to be impractical and inordinate delay in revision of inspection clause led to re-scheduling of delivery period and consequent avoidable extra expenditure of Rs. 1.52 lakhs, apart from delay in laying of the pipe line at the consignee's end.

In reply, it was stated (August 1991) by the Division that all efforts had been made to issue the amendment expeditiously but delay was unavoidable.

The matter was reported to the Board in March 1991 and to Government in October 1991; their replies had not been received (December 1991).

4B.18. Nugatory expenditure

Publicity and propaganda work of State Government including State Government undertakings are carried out by State Information Department. Director Information during 1967 to 1988 had prepared five documentary films highlighting various activities of the Board at their cost. Lucknow Doordarshan had also prepared three documentary films on Thermal and Hydro Electric Projects in the State during 1989-90 for telecast without the Board bearing any part of the cost.

In deviation of past practice and without any justifiable reasons on record, Chairman, of the Board on 10th January 1988 approved preparation of a documentary film on development made in Uttar Pradesh in the area of electricity to be ready for exhibition before 26th January 1988. The work was entrusted in January 1988 to ESSAARPEE New Delhi on single enquiry basis at a cost of Rs. 3.20 lakhs. Travelling, boarding, lodging and local transport was to be provided free by the Board. Advance payment of Rs. 1.60 lakhs was released to the firm in January 1988.

As the Chairman was empowered to sanction non-recurring expenditure of only Rs. 2 lakhs, it was decided that ratification of the decision by the Board would be obtained later as the matter was urgent and could not be delayed. Against the stipulated date of completion by 26th January 1988, the film was made available in March 1988 by the firm for approval of review committee which finally approved the film in March 1989. The payment of the balance Rs. 1.60 lakhs and travelling expenses (Rs. 0.08 lakh) was made to the firm during the period December 1988 to February 1989. The film was exhibited on three to four occasions in fairs held in the State during March 1989 to January 1991.

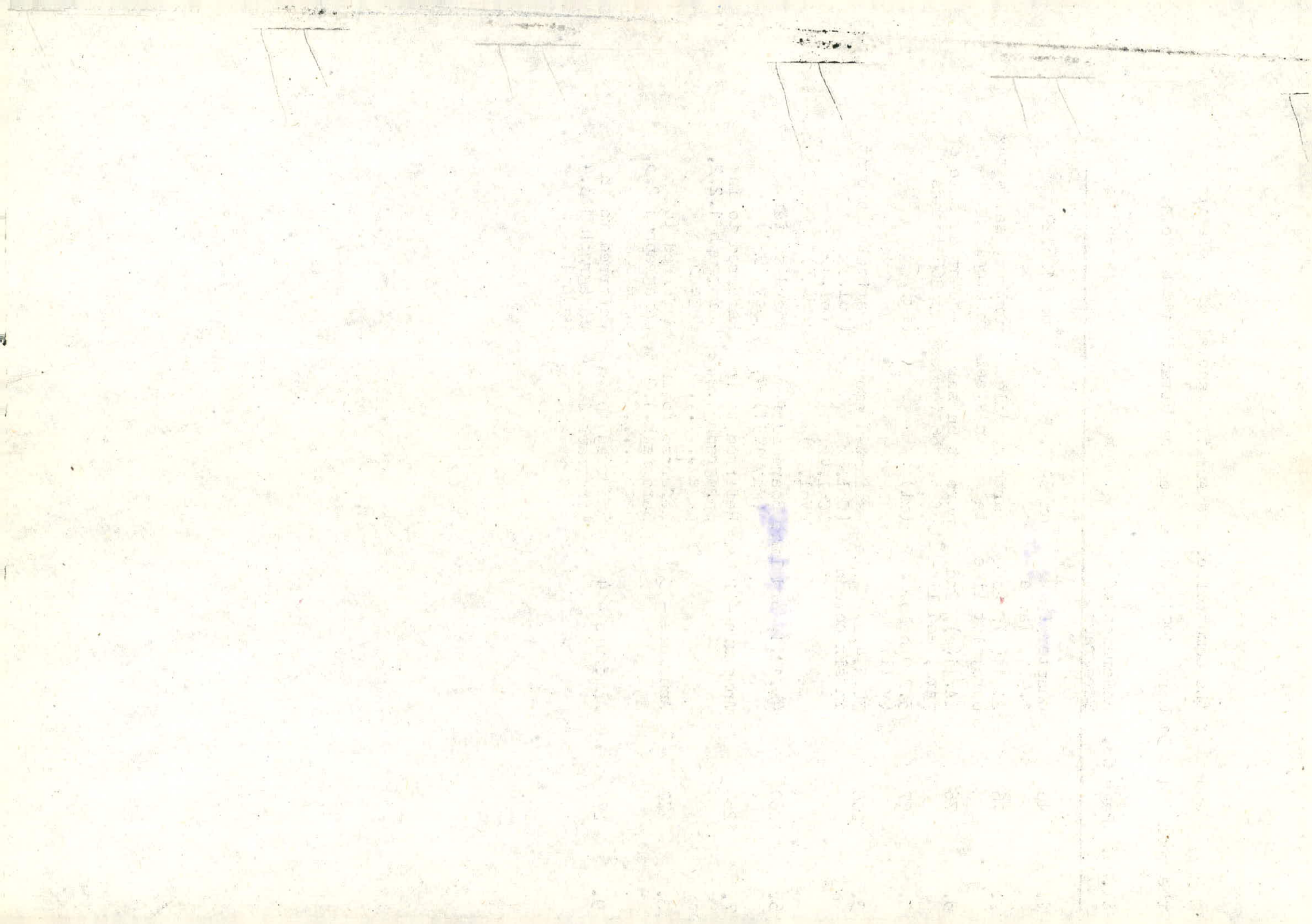
In reply the Secretary of the Board stated (May 1991) that the film was exhibited in various exhibitions and Mela's on six occasions during the August 1988 to January 1991. Reply is contradictory as exhibition of film before March 1989 was not possible as it was finally approved for exhibition in only March 1989. Further exhibition of film containing statistics/datas of prior to 1988 at this stage did in no way serve the purpose of publicity.

It was noticed in Audit that:

1. The decision to make a film and the expenditure of more than Rs. 2 lakhs had not been ratified by the Board so far (may 1991).
2. There were no reasons on record to indicate the justification for incurring expenditure on such an item of publicity when the Directorate of Information of the State Government had already prepared various publicity programmes of UPSEB in the previous years up to 1988.
3. The need for urgency in getting the film made on an single offer basis and before 26th January 1988 was not on record nor was the film ready by that date. Infact it was only in March 1989 that the film was finally approved by the Review Committee. Any penalty for delay

Report of the Comptroller and Auditor General of India for
the year ended 31 March 1991 - Government of Uttar Pradesh, No.1.

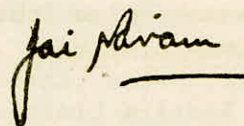
Sl.No.	Page No.	Reference of Paragraph	For	Read
1.	18	Chapter I, 1.4.1, Table	* on 6937.49	* on 5126.29
2.	76	2A.11(a), 2nd para, 1st line	Further, sales tax on steel	Further, sales tax on steel
3.	76	2A.11(a), 2nd para, end line	percent on sale of 32 66 tonnes	percent on sale of 325.266 tonnes
4.	187	3.B.9 below (viii)	(xi)	(ix)
5.	208	3C.5.4.2, Table in six column	estimated amount (Col.3x Col.4x Vol.5)	estimated amount (Col.3x Col.4x Col.5)
6.	260	4B.18.1, 3rd line	Board so far (may 1991)	Board so far (May 1991)
7.	264	Annexure - 2	Referred to in paragraph 1.2.2 page	Referred to in paragraph 1.2.2, Page 3
8.	270	Annexure - 3	Referred to in paragraph 1.2.3, page	Referred to in paragraph 1.2.3, page 5
9.	279	Annexure - 4	Referred to in paragraph 1.3.4, page	Referred to in paragraph 1.3.4, Page 17.



in completing the film by the firm was neither considered nor imposed.

4. The film after exhibitions in a few melas is lying unused and unexhibited since January 1991.

The matter was reported to the Board and Government in September 1991; replies had not been received (December 1991).



(JAI NARAIN)
ACCOUNTANT GENERAL (AUDIT)-II
UTTAR PRADESH

LUCKNOW
The

10th. July 1991

Countersigned



(C.G. SOMIAH)
COMPTROLLER AND AUDITOR
GENERAL OF INDIA

NEW DELHI
The

14th. July 1992

ANNEXURE -1

List of companies in which Government have invested more than Rs. 10 lakhs but which are not subject to audit by the Comptroller and Auditor General of India.

(Referred to in para 3 of Preface)

Sl. Name of the Company	Total investment up to 1990-91 (Rupees in lakhs)
(1)	(2)
(1)	(3)
1. Triveni Metal Tubes Limited	525.00
2. U.P. Fibre Glass Limited	62.02
3. Haji Manzoor Alam Industries Limited	26.51
4. Upper Chem Limited	27.10
5. Synthetic Foams Limited	29.72
6. Ajanta Textile Limited	20.46
7. Basant Paper Mill Limited	10.22
8. Jain Sudh Vanaspati Limited	14.37
9. Magnesites and Minerals Limited	11.08
10. Somaya Organics (India) Limited	18.89
11. Shivalik Rasayan Limited	14.48
12. U.P. Straw and Agro Products Limited	20.90
13. Welga Food Limited	48.98
14. Aditya Chemical Limited	25.00
15. Modi Nagar Paper Mills Limited	10.75
16. Shree Bhawani Paper Mills Limited	39.00
17. Vam Organic Chemicals Limited	38.50
18. Belwal Spinning Mill Limited	26.99
19. Ganges Fertilisers and Chemicals Limited	20.00
20. Mayur Syntex Limited	20.00
21. Mittal Fertilizers Limited	32.50
22. Shiva Paper Mills Limited	20.00
23. Shree Acids & Chemicals Limited	20.00
24. Regal Polymers Limited	15.00
25. Best Boards Limited	40.00
26. More Water Pipes Limited	14.00
27. PVK Distellary Limited	19.00
28. Sarvodaya Paper Mills Limited	20.48
29. Sanjay Paper and Chemicals Industries Limited	27.00
30. Mahadeo Fertilizers Limited	30.00
31. Vikas Industrial Gases Limited	13.75
32. Shamken Multifab Limited	15.00
33. ARC Cement Limited	14.00
34. India Polyfibres Limited	803.25
35. UPCom Cables Limited	159.80
36. Srinivas Fertilizers Limited	30.00
37. Indo-Gulf Fertilizers and Chemicals Corporation Limited	1815.00
38. Nicco Batteries Limited	45.00
39. Bharat Garg Limited	50.00
40. Road Master Strips Limited	49.50
41. Jalpac India Limited	32.00
42. National Switchgears Limited	26.00
43. Vegpro Food and Feeds Limited	223.01

(1)	(2)	(3)
44.	Raunaq Automotive Components Limited	150.85
45.	U.P. Asbestos Limited	28.00
46.	SAB Electronic Devices Limited	34.00
47.	Pashupati Acrylon Limited	424.71
48.	India Maize and Chemicals Limited	218.00
49.	Suraj Vanaspati Limited	143.00
50.	Resistance Alloys (India) Limited	12.68
51.	National Lamp Industries Limited	20.91
52.	Picdan Heavy Equipments Limited	30.40
53.	North India Petro Chemicals Limited	23.13
54.	Solarsons Burners Limited	47.35
55.	Oswal Foods Limited	109.18
56.	Samrat Bicycles Limited	19.00
57.	Shri Durga Bansal Fertilizers Limited	28.00
58.	Telemecanique & Controls India Limited	12.00
59.	Modipan Limited	62.12
60.	Hariq Crank Shafts Limited	258.72
61.	Universal Insulators & Ceramics (Private) Limited	10.60
62.	Continental Float Glass Limited	673.61

ANNEXURE - 2

Statement showing the particulars of up-to-date paid-up capital, outstanding loans, amount of guarantees given by the Government, amounts outstanding thereagainst and up-to-date working results of all the Government Companies.

(Referred to in paragraph 1.2.2., Page

(Except in column 6(a) figures are in lakhs in rupees)

Serial Number	Name of Company	Name of the Department	Paid-up capital at the end of 1990-91				Loans outstanding at the close of 1990-91	Amount of guarantees given	Amount of guarantee outstanding at the close of 1990-91	Outstanding guarantee commission payable at the close of 1990-91	Position at the end of the year for which accounts were finalised			
			State Government	Central Government	Others	Total					Year for which accounts were finalised	Paid-up capital at the end of the year	Accumulated loss	Any excess of loss over paid-up capital
1	2(a)	2(b)	3(a)	3(b)	3(c)	3(d)	4	5(a)	5(b)	5(c)	6(a)	6(b)	6(c)	6(d)
1.	Indian Turpentine and Rosin Company Limited	Industries	18.73	..	3.29	22.02	85.00	..	..	..	1989-90	22.02	..	..
2.	Uttar Pradesh Small Industries Corporation Limited	Rural and Small Industries	559.00	..	..	559.00	443.91	500.00	443.91	..	1987-88	437.05	105.19	..
3.	Uttar Pradesh State Industrial Development Corporation Limited	Industries	2255.29	..	..	2255.29	2614.54	..	..	..	1989-90	2142.29	..	..
4.	Mohammadabad Peoples Tannery Limited	Planning	3.06	..	2.55	5.61	..	..	..	..	1976-77	5.61	4.26	..
5.	The Uttar Pradesh Export Corporation Limited	Export Promotion	434.27	22.00	..	456.27	151.88	..	..	..	1988-89	368.47	94.57	..
6.	Uttar Pradesh Agro Industrial Corporation Limited	Agriculture	1566.92	332.83	..	1899.75	..	..	..	..	1984-85	753.83	1494.36	740.53
7.	Uttar Pradesh State Textile Corporation Limited	Industries	11637.37	..	..	11637.37	2692.47	3729.00	2692.47	..	1990-91	11637.37	3244.82	..
8.	Uttar Pradesh State Sugar Corporation Limited	Sugar and Cane Development	32781.12	..	..	32781.12	6330.64	12475.66	11188.32	..	October 1987 to March 1989	24331.12	19170.15	..
9.	Uttar Pradesh Bundeikhand Vikas Nigam Limited	Area Development	123.30	..	..	123.30	5.00	..	..	..	1977-78	85.80	25.07	..
10.	Uttar Pradesh Poorvanchal Vikas Nigam Limited	Area Development	129.80	..	..	129.80	35.00	..	..	..	1984-85	110.80	80.33	..
11.	Kumaon Mandal Vikas Nigam Limited	Hill Development	816.61	..	..	816.61	134.50	..	..	..	1987-88	479.73	51.34	..
12.	Kichha Sugar Company Limited (Subsidiary of Uttar Pradesh State Sugar Corporation Limited)	Sugar and Cane Development	32.59	..	1403.70	1436.29	553.55	..	..	..	October 1987 to March 1989	703.77	987.69	283.92
13.	The Pradeshiya Industrial and Investment Corporation of Uttar Pradesh Limited	Industries	10357.50	..	..	10357.50	33141.33	1870.00	1870.00	..	1990-91	10357.50	..	..
14.	The Uttar Pradesh State Cement Corporation Limited	Industries	6828.16	..	..	6828.16	5434.56	..	..	..	1989-90	6828.16	15526.37	8698.21

1	2(a)	2(b)	3(a)	3(b)	3(c)	3(d)	4	5(a)	5(b)	5(c)	6(a)	6(b)	6(c)	6(d)
15.	Uttar Pradesh Plant Protection Appliances (Private) Limited (Subsidiary of Uttar Pradesh Small Industries Corporation Limited)	Rural and Small Industries	..	..	3.20	3.20	..	..	..	..	1974-75	0.92	0.81	..
16.	Uttar Pradesh State Bridge Corporation Limited	Public Works	150.00	..	..	150.00	3600.00	4000.00	3800.00	..	October 1987 to March 1989	150.00	..	..
17.	Auto Tractors Limited	Industries	749.99	..	0.01	750.00	1287.40	..	..	..	1989-90	750.00	5706.95	4956.95
18.	Uttar Pradesh State Handloom Corporation Limited	Rural and Small Industries	1375.49	..	..	1375.49	1201.21	..	..	..	1981-82	753.49	284.72	..
19.	Uttar Pradesh Panchayati Raj Vitta Evam Vikas Nigam Limited	Panchayati Raj	77.77	..	55.69	133.46	..	..	..	..	1985-86	105.43	..	..
20.	Teletronix Limited (Subsidiary of Kumaon Mandal Vikas Nigam Limited)	Hill Development	..	..	174.65	174.65	35.27	..	..	..	1989-90	174.71	32.33	..
21.	Trans Cables Limited (Subsidiary of Kumaon Mandal Vikas Nigam Limited)	Hill Development	..	..	63.24	63.24	155.55	..	..	..	1988-89	63.24	105.34	42.10
22.	Northern Electrical Equipment Industries Limited (Subsidiary of Kumaon Mandal Vikas Nigam Limited)	Hill Development	..	..	0.07	0.07	..	..	..	..	1983-84	0.07	Under construction	..
23.	Uttar Pradesh State Leather Development and Marketing Corporation Limited	Export Promotion	568.94	..	..	568.94	179.02	..	..	..	1989-90	568.94	349.51	..
24.	The Uttar Pradesh State Brassware Corporation Limited	Export Promotion	527.86	10.00	..	537.86	68.85	65.01	53.85	..	1987-88	480.36	397.99	..
25.	Bundelkhand Concrete Structurals Limited (Subsidiary of Uttar Pradesh Bundelkhand Vikas Nigam Limited)	Area Development	..	..	2.40	2.40	..	..	..	..	1980-81 1981-82	2.40 2.40	0.56 0.58	....
26.	Uttar Pradesh State Mineral Development Corporation Limited	Industries	4456.38	..	..	4456.38	258.00	545.00	198.50	..	1987-88	3261.91	83.70	..
27.	Uttar Pradesh Electronic Corporation Limited	Electronics	5633.00	..	..	5633.00	366.00	..	..	..	1989-90 1990-91	4927.06 5533.00	....	....
28.	Uttar Pradesh State Tourism Development Corporation Limited	Tourism	553.25	..	..	553.25	60.33	..	..	..	1980-81	111.41	5.59	..
29.	Uttar Pradesh State Spinning Company Limited (Subsidiary of Uttar Pradesh State Textile Corporation Limited) (Successors of Uttar Pradesh State Spinning Mills Company (No. I) Limited)	Industries	..	..	4601.84	4601.84	3483.57	5398.50	4167.05	..	1990-91	4601.84	8473.20	3871.36
30.	Uttar Pradesh State Yarn Company Limited (Subsidiary of Uttar Pradesh State Textile Corporation Limited) (Successors of Uttar Pradesh State Spinning Mills Company (No. II) Limited)	Industries	..	..	2439.52	2439.52	1865.79	1945.00	1473.04	..	1990-91	2439.52	3668.29	1228.77
31.	Uttar Pradesh Food and Essential Commodities Corporation Limited	Food and Civil Supplies	387.39	..	..	387.39	497.39	..	..	..	1982-83	50.00	..	..
32.	Uttar Pradesh Poultry and Livestock Specialities Limited	Animal Husbandry	78.75	40.75	..	119.50	..	..	..	..	1988-89	60.00	22.37	..

1	2(a)	2(b)	3(a)	3(b)	3(c)	3(d)	4	5(a)	5(b)	5(c)	6(a)	6(b)	6(c)	6(d)
33.	Uttar Pradesh Instruments Limited (Subsidiary of Uttar Pradesh State Industrial Development Corporation Limited)	Industries	..	..	202.22	202.22	791.34	..	..	..	1990-91	193.22	1017.77	824.55
34.	Uttar Pradesh Pashudhan Udyog Nigam Limited	Animal Husbandry	146.08	..	..	146.08	61.11	100.00	108.99	..	1983-84	80.05	118.69	38.64
35.	Uttar Pradesh Scheduled Castes Finance and Development Corporation Limited	Harijan and Social Welfare	1268.60	1222.50	..	2491.10	..	..	..	..	1986-87	970.43	..	..
36.	Mandganj Sihori Sugar Company Limited (Subsidiary of Uttar Pradesh State Sugar Corporation Limited)	Sugar and Cane Development	..	..	2307.72	2307.72	..	..	..	..	July 1988 to March 1989	2320.57	3020.37	699.80
37.	Chhata Sugar Company Limited (Subsidiary of Uttar Pradesh State Sugar Corporation Limited)	Sugar and Cane Development	..	..	543.24	543.24	271.36	..	..	..	August 1988 to March 1989	450.89	332.17	..
38.	Uttar Pradesh Rajkiya Nirman Nigam Limited	Public Works	100.00	..	..	100.00	..	..	..	..	1987-88	100.00	..	..
39.	Garhwal Anusuchit Janjati Vikas Nigam Limited (Subsidiary of Garhwal Mandal Vikas Nigam Limited)	Hill Development	20.00	..	30.00	50.00	62.35	..	..	..	1981-82	20.00	1.10	..
40.	Kumaon Anusuchit Janjati Vikas Nigam Limited (Subsidiary of Kumaon Mandal Vikas Nigam Limited)	Hill Development	22.00	..	28.00	50.00	..	..	..	..	1982-83	25.00	..	..
41.	Tarai Anusuchit Janjati Vikas Nigam Limited	Harijan and Social Welfare	45.00	..	..	45.00	63.96	590.00	63.96	..	1982-83	45.00	..	..
42.	Uttar Pradesh (Rohelkhand Tarai) Ganna Beej Even Vikas Nigam Limited	Sugar and Cane Development	12.75	..	12.12	24.87	898.72	1000.00	898.72	..	1989-90	24.87	..	..
43.	Uttar Pradesh (Paschim) Ganna Beej Even Vikas Nigam Limited	Sugar and Cane Development	12.25	..	10.20	22.45	539.94	540.00	539.94	..	1989-90	22.21	0.84	..
44.	Uttar Pradesh (Poorva) Ganna Beej Even Vikas Nigam Limited	Sugar and Cane Development	20.18	..	6.54	26.72	..	..	..	..	1989-90	26.60	..	..
45.	Uttar Pradesh (Madhya) Ganna Beej Even Vikas Nigam Limited	Sugar and Cane Development	10.00	..	4.57	14.57	13.50	380.00	80.07	..	May 1985 to June 1986 May 1986 to June 1987	14.96 15.06	2.32..	....
46.	Uttar Pradesh Chalchitra Nigam Limited	Institutional Finance	818.21	..	..	818.21	489.63	..	..	..	1985-86	616.87	350.14	..
47.	Uttar Pradesh Textile Printing Corporation Limited (Subsidiary of Uttar Pradesh State Handloom Corporation Limited)	Rural and Small Industries	10.00	..	26.00	36.00	..	..	..	..	1980-81	16.00	..	..
48.	Uttar Pradesh Tyres and Tubes Limited (Subsidiary of State Industrial Development Corporation Limited)	Industries	..	..	183.14	183.14	679.93	67.50	67.50	..	1989-90	183.13	615.22	432.09
49.	Lucknow Mandaliya Vikas Nigam Limited	Area Development	70.00	..	..	70.00	100.76	..	..	..	1980-81	50.00	0.64	..
50.	Allahabad Mandal Vikas Nigam Limited	Area Development	67.00	..	..	67.00	2.88	10.06	2.88	..	1982-83 1983-84	60.00 60.00	6.67 11.43	....

1	2(a)	2(b)	3(a)	3(b)	3(c)	3(d)	4	5(a)	5(b)	5(c)	6(a)	6(b)	6(c)	6(d)
51.	Agra Mandal Vikas Nigam Limited	Area Development	100.00	..	..	100.00	..	..	..	..	1986-87	100.00	33.13	..
52.	Gorakhpur Mandal Vikas Nigam Limited	Area Development	93.56	..	32.47	126.03	91.60	..	..	..	1983-84	122.03	119.86	..
53.	Garhwal Mandal Vikas Nigam Limited	Hill Development	431.50	..	..	431.50	959.16	..	..	..	1982-83	245.00	13.83	..
54.	Varanasi Mandal Vikas Nigam Limited	Area Development	70.00	..	..	70.00	30.00	..	..	..	1985-86	70.00	23.57	..
55.	Meerut Mandal Vikas Nigam Limited	Area Development	100.00	..	..	100.00	..	..	..	..	1986-87	100.00	11.42	..
56.	UPSIC Potteries Limited (Subsidiary of Uttar Pradesh Small Industries Corporation Limited)	Rural and Small Industries	..	..	75.00	75.00	146.00	..	..	..	1982-83	59.26	19.72	..
57.	Uttar Pradesh Malkoop Nigam Limited	Irrigation	390.00	100.00	..	490.00	88.62	88.62	88.62	..	1988-89	490.00	167.67	..
58.	Handloom Intensive Development Corporation (Gorakhpur and Basti) Limited (Subsidiary of Uttar Pradesh State Handloom Corporation Limited)	Rural and Small Industries	..	..	3.00	3.00	77.30	..	..	..	1981-82	3.00	..	..
59.	Bhadohi Woollens Limited (Subsidiary of Uttar Pradesh State Textile Corporation Limited)	Industries	..	..	375.54	375.54	400.87	..	..	..	1990-91	375.54	615.05	239.51
60.	Harijan Evam Nirbal Varg Avas Nigam Limited	Harijan and Social Welfare	15.00	..	..	15.00	1610.74	1766.34	176.52	..	1990-91	15.00	..	..
61.	Handloom Intensive Development Project (Bijnore) Limited (Subsidiary of Uttar Pradesh Handloom Corporation Limited)	Rural and Small Industries	..	..	2.00	2.00	95.78	..	..	..	1978-79	2.00	3.35	1.35
62.	Uttar Pradesh Paschimi Kshetriya Vikas Nigam Limited	Area Development	125.00	..	..	125.00	..	..	..	..	1982-83	100.00	11.48	..
63.	Uttar Pradesh Development Systems Corporation Limited	Planning	100.00	..	..	100.00	..	..	..	..	1988-89	100.00	..	..
64.	Uttar Pradesh State Horticultural Produce Marketing and Processing Corporation Limited	Agriculture	603.76	..	64.25	668.01	480.88	90.00	90.00	..	1984-85	190.76	255.33	64.57
65.	UPAI Limited	Hill Development	15.00	..	2.01	17.01	..	..	..	..	1981-82	17.00	1.33	..
66.	Uptron Powertronics Limited (Subsidiary of Uttar Pradesh Electronics Corporation Limited)	Electronics	..	..	22.00	22.00	18.75	..	..	..	1990-91	22.00	..	..
67.	Uptron Sempack Limited (Subsidiary of Uttar Pradesh Electronics Corporation Limited)	Electronics	..	..	2.55	2.55	..	..	..	..	1979-80	2.55	..	..
68.	Uttar Pradesh Digitals Limited (Subsidiary of Uttar Pradesh State Industrial Development Corporation Limited)	Industries	..	..	35.20	35.20	122.41	..	..	..	1988-89	35.20	70.79	35.59
69.	Moradabad Mandal Vikas Nigam Limited	Area Development	25.00	..	..	25.00	84.80	..	..	..	1983-84	20.00	..	..

1	2(a)	2(b)	3(a)	3(b)	3(c)	3(d)	4	5(a)	5(b)	5(c)	6(a)	6(b)	6(c)	6(d)
70.	Uttar Pradesh Bhumi Sudhar Nigam Limited	Agriculture	150.00	..	..	150.00	..	..	..	..	1985-86	130.00	3.7	..
71.	Uptron Components Limited (Subsidiary of Uttar Pradesh Electronics Corporation Limited)	Electronics	..	..	5.30	5.30	..	..	..	..	Accounts not finalised since inception.			
72.	Uttar Pradesh Carbide and Chemicals Limited (Subsidiary of Uttar Pradesh State Mineral Development Corporation Limited)	Industries	..	..	658.73	658.73	964.38	872.00	872.00	..	1987-88	497.36	199.77	..
73.	Uptron India Limited (Subsidiary of Uttar Pradesh Electronics Corporation Limited)	Electronics	..	..	3102.15	3102.15	1445.14	..	..	..	May 1987 to June 1988	1782.15	..	..
74.	Uttar Pradesh Matsya Vikas Nigam Limited	Fisheries	100.00	..	..	100.00	100.61	100.61	100.61	..	1986-87	100.00	38.25	..
75.	Uttar Pradesh Rajya Vidyut Utpadan Nigam Limited	Energy	26200.00	..	..	26200.00	27180.00	4800.00	3500.00	..	1988-89	3183.00	Under construction	
76.	Uttar Pradesh Alp Sankhyak Vittiya Evam Vikas Nigam Limited	Industry	357.50	..	..	357.50	360.42	..	..	..	1987-88	255.00	12.50	..
77.	Uttar Pradesh Laghu Jal Vidyut Nigam Limited (Successors of Uttar Pradesh Alparthak Evam Laghu Jal Vidyut Nigam Limited)	Energy	70.00	..	..	70.00	900.00	..	..	..	1987-88	20.00	Under construction	
78.	Uttar Pradesh Hill Electronics Corporation Limited	Hill Development	494.03	..	..	494.03	..	..	..	..	1989-90	494.03	23.93	..
79.	Vindhyachal Abrasives Limited (Subsidiary of Uttar Pradesh Mineral Development Corporation Limited)	Industries	..	..	7.60	7.60	12.24	..	..	..	December 1985 to June 1986	0.0027	1.63	1.6273
80.	Ghatampur Sugar Company Limited (Subsidiary of Uttar Pradesh State Sugar Corporation Limited)	Sugar and Cane Development	..	..	541.18	541.18	395.22	..	..	..	1989-90	636.07	821.49	185.42
81.	Uttar Pradesh Police Avas Nigam Limited	Home	100.00	..	..	100.00	..	..	..	..	1989-90	100.00	1.07	..
82.	Kumaon Television Limited (Subsidiary of Kumaon Mandal Vikas Nigam Limited)	Hill Development	..	..	33.95	33.95	84.93	..	..	..	1989-90	33.95	21.15	..
83.	Uttar Pradesh Waqf Vikas Nigam Limited	Waqf	150.00	..	..	150.00	..	..	..	..	1988-89	150.00	..	..
84.	Kumtron Limited (Subsidiary of Uttar Pradesh Hill Electronics Corporation Limited)	Hill Development	..	..	18.31	18.31	..	..	..	..	1989-90	18.31	1.61	..
85.	Uttar Pradesh Hillphones Limited (Subsidiary of Uttar Pradesh Hill Electronics Corporation Limited)	Hill Development	..	..	3.27	3.27	..	..	..	..	Accounts not finalised since inception.			
86.	Shreetron India Limited (Subsidiary of Uttar Pradesh Electronics Corporation Limited)	Electronics	..	..	114.18	114.18	133.91	..	..	..	1990-91	114.18	268.71	154.53
87.	Uptron Leasing Limited (Subsidiary of Uptron India Limited)	Electronics	..	..	100.00	100.00	..	..	..	..	1989-90	100.00	..	..
88.	Uttar Pradesh Mahila Kalyan Nigam Limited		20.00	19.00	..	39.00					Accounts not finalised			
89.	Uttar Pradesh Hill Quartz (Subsidiary of Uttar Pradesh Hill Electronics Limited)	Hill Development	..	..	0.79	0.79					Accounts not finalised			
90.	Uttar Pradesh Carbon and Chemical Limited (Subsidiary of Uttar Pradesh State Industrial Development Corporation Limited)	Industries	..	..	1.27	1.27					Accounts not finalised			

1	2(a)	2(b)	3(a)	3(b)	3(c)	3(d)	4	5(a)	5(b)	5(c)	6(a)	6(b)	6(c)	6(d)
91.	Uttar Pradesh Prestressed Products (Private) Limited (Subsidiary of Uttar Pradesh Small Industries Corporation Limited)	Rural and Small Industries				Under Liquidation								
92.	Uttar Pradesh Abcscott (Private) Limited (Subsidiary of Uttar Pradesh Small Industries Corporation Limited)	Rural and Small Industries				Under Liquidation								
93.	The Indian Bobbin Company Limited	Industries				Under Liquidation								
94.	The Turpentine Subsidiary Industries Limited (Subsidiary of The Indian Turpentine and Rosin Company Limited)	Industries				Under Liquidation								
95.	Uttar Pradesh Potteries (Private) Limited (Subsidiary of Uttar Pradesh Small Industries Corporation Limited)	Rural and Small Industries				Under Liquidation								
96.	Uttar Pradesh Buildwares (Private) Limited (Subsidiary of Uttar Pradesh Small Industries Corporation Limited)	Rural and Small Industries				Under Liquidation								
97.	Uttar Pradesh Roofings (Private) Limited (Subsidiary of Uttar Pradesh Small Industries Corporation Limited)	Rural and Small Industries				Under Liquidation								
98.	Krishna Fasteners Limited (Subsidiary of Uttar Pradesh Small Industries Corporation Limited)	Rural and Small Industries				Under Liquidation								
99.	Faizabad Roofings Limited (Subsidiary of Uttar Pradesh Small Industries Corporation Limited)	Rural and Small Industries				Under Liquidation								
100.	The Gandak Samadesh Kshetra Vikas Nigam Limited					Under Liquidation								

ANNEXURE 3

Summarised Financial Results for all Government Companies for the latest year for which Accounts were finalised

(Referred to in paragraph 1.2.3., Page) (Except Columns 20 and 21 figures are in lakhs of Rupees)

Serial Number	Name of Company	Name of the department	Date of incorporation	Year of accounts	Capital invested				Profit (+)/ Loss (-)	Total interest charged to profit and Loss Account	Interest on Longterm loans	Total return on capital invested	Capital employed						Return on capital employed	Percentage of total return on	
					paid-up capital	Reserves and surplus	Longterm loans	Total					Gross block	Depreciation	Net Fixed Assets	Current assets loans and advances	Current liabilities and provisions	Total		Capital invested	Capital employed
1	2(a)	2(b)	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1.	The Indian Turpentine and Rosin Company Limited	Industries	22nd February	1989-90	22.2	136.81	108.50	267.33	(-) 55.75	4.87	3.08	(-) 52.07	542.18	193.98	348.19	399.02	480.58	167.23	(-) 50.88	..	
2.	Uttar Pradesh Small Industries Corporation Limited	Rural and Small Industries		1987-88	437.05	28.08	356.43	821.56	(-) 49.12	102.57	102.57	53.45	168.96	45.51	123.45	2422.75	1106.05	1440.15	53.45	6.5	3.70
3.	Uttar Pradesh State Industrial Development Corporation Limited	Industries	29th March 1961	1989-90	2142.29	1093.98	2408.54	5644.81	(+) 307.43	127.45	127.45	434.88	..	..	..	..	..	5511.50	434.88	7.7	7.9
4.	Mohammadabad Peoples Tannery Limited	Planning	21st December 1964	1976-77	5.61	..	..	5.61	(-) 0.01	..	..	(-) 0.01	..	..	..	1.49	0.14	1.35	(-) 0.01	..	..
5.	The Uttar Pradesh Export Corporation Limited	Export Promotion	20th January 1966	1988-89	368.47	14.55	151.88	534.9	(-) 22.10	21.49	13.68	8.42	122.51	38.64	83.87	869.54	487.86	465.55	(-) 0.61	..	..
6.	Uttar Pradesh State Agro Industrial Corporation Limited	Agriculture	29th March 1967	1984-85	753.83	1.03	17.00	771.86	(-) 112.08	255.1	47.49	(-) 64.59	241.73	158.17	83.56	3813.90	2002.99	3694.47	143.02	..	3.87
7.	Uttar Pradesh State Textile Corporation Limited	Industries	2nd December 1969	1990-91	11637.37	275.00	2692.47	14604.84	1514.05	696.12	330.56	1844.61	7301.65	5410.27	1891.38	7345.59	2463.74	6773.23	2210.17	12.6	32.6
8.	Uttar Pradesh State Sugar Corporation Limited	Sugar and Cane Development	26th March 1971	October 1967 to March 1989	24331.12	202.85	2190.40	26724.37	(-) 4360.92	2783.30	250.38	(-) 4110.54	7851.04	5182.27	2668.47	20744.72	7772.15	15641.04	(-) 157.62	..	..
9.	Uttar Pradesh Bundel-Khand Vikas Nigam Limited	Area Development	30 March 1971	1977-78	85.80	0.67	..	86.47	(-) 10.25	0.12	..	(-) 10.25	35.65	11.93	23.72	47.33	8.31	62.74	(-) 10.13	..	..
10.	Uttar Pradesh Provanchal Vikas Nigam Limited	Area Development	30th March 1971	1984-85	110.80	..	5.00	115.00	(-) 11.41	0.50	..	(-) 11.41	50.79	24.19	26.60	53.70	78.49	1.81	(-) 10.91	..	..
11.	Kumaon Mandal Vikas Nigam Limited	Hill Development	30th March 1971	1987-88	479.73	15.17	242.00	736.90	(-) 51.77	18.75	18.62	(-) 33.15	441.85	171.95	269.90	727.43	600.69	396.64	(-) 33.02	..	..

1.	2(a)	2(b)	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
12.	Kichha Sugar Company Limited (Subsidiary of Uttar Pradesh State Sugar Corporation Limited)	Sugar and Cane Development	17th February 1972	October 1987 to March 1989	703.77	99.88	35.00	838.65	(+) 346.84	147.29	36.71	383.55	1029.39	846.65	182.74	1623.73	398.14	1408.33	444.13	45.7	31.0
13.	The Pradeshia Industrial and Investment Corporation of Uttar Pradesh Limited		29th March 1972	1990-91	10357.50	1408.71	27457.86	39224.07	(+) 503.11	2721.07	2721.07	3224.18	..	..	..	..	..	41612.28	3224.18	8.2	7.7
14.	The Uttar Pradesh State Cement Corporation Limited	Industries	29th March 1972	1989-90	6828.16	0.05	5435.56	12262.77	(-) 3098.32	1156.84	1057.68	(-) 12040.64	12686.77	6840.66	5846.11	4982.64	13148.23	(-) 2319.48	(-) 1941.48	..	..
15.	Uttar Pradesh Plant Protection Appliances (Private) Limited (Subsidiary of Uttar Pradesh Small Industries Corporation Limited)	Rural and Small Industries	28th June 1972	1974-75	0.92	0.23	4.35	5.50	(-) 0.81	0.28	0.28	(-) 0.53	4.07	0.91	3.7	1.65	0.81	4.63	(-) 0.53	..	..
16.	Uttar Pradesh State Bridge Corporation Limited	Public Works	18th October 1972	October 1987 to March 1989	150.00	2205.50	1950.00	4305.50	(-) 169.72	19.67	..	(-) 169.72	2727.47	2466.20	261.28	7501.22	3452.83	4309.67	(-) 150.05	..	..
17.	Auto Tractors Limited	Industries	28th December 1972	1989-90	750.00	143.24	1287.40	2180.64	(-) 1087.14	377.24	338.85	(-) 748.39	1404.01	666.70	737.31	451.70	1673.78	(-) 484.67	(-) 701.17	..	..
18.	Uttar Pradesh State Handloom Corporation Limited	Rural and Small Industries	9th January 1973	1981-82	753.49	5.97	384.82	1144.28	(-) 264.09	30.34	30.34	(-) 233.75	230.52	43.89	186.63	481.94	4297.91	700.66	(-) 233.75	..	..
19.	Uttar Pradesh Panchayati Raj Vikas Nigam Limited	Panchayati Raj	24th April 1973	1985-86	105.43	15.90	2.00	123.33	(+) 6.03	0.11	0.11	6.14	..	..	..	..	..	132.03	6.14	4.9	4.65
20.	Teletronics Limited (Subsidiary of Kumaon Mandal Vikas Nigam Limited)	Hill Development	27th January 1973	1989-90	174.71	12.18	4.19	191.08	(-) 33.81	12.24	0.73	(-) 33.08	79.86	32.49	47.37	397.78	241.18	203.96	(-) 21.57	..	..
21.	Trans Cables Limited (Subsidiary of Kumaon Mandal Vikas Nigam Limited)	Hill Development	29th November 1973	1988-89	63.24	4.96	0.65	68.85	(-) 1.44	16.06	4.43	2.99	36.55	22.88	13.68	118.41	40.92	91.17	14.62	4.34	16.04
22.	Northern Electrical Equipment Industries Limited (Subsidiary of Kumaon Mandal Vikas Nigam Limited)	Hill Development	29th January 1974	1983-84	0.07	..	..	0.07	Under Construction				0.68	..	0.68	0.02	1.10	(-) 0.40	..	..	..

1.	2(a)	2(b)	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
23.	Uttar Pradesh State Leather Development and Marketing Corporation Limited	Export Promotion	12th February 1974	1989-90	568.94	9.90	179.02	757.86	(-) 33.77	5.01	2.50	(-) 31.27	418.39	91.88	325.51	507.31	115.94	717.80	(-) 28.76	..	..
24.	The Uttar Pradesh State Brassware Corporation Limited	Export Promotion	12th February 1974	1987-88	480.36	226.28	256.31	962.95	(-) 36.85	46.18	34.57	(-) 2.28	278.91	142.86	136.05	539.36	229.74	445.67	(+) 9.33	..	2.09
25.	Bundelkhand Concrete Structural Limited (Subsidiary of Uttar Pradesh Bundelkhand Vikas Nigam Limited)	Area Development	2nd March 1974	1980-81	2.40	..	..	2.40	(-) 0.03	..	..	(-) 0.03	1.62	0.04	1.58	0.16	0.21	1.53	(-) 0.03	..	..
				1981-82	2.40	..	..	2.40	(-) 0.02	..	..	(-) 0.02	1.62	0.04	1.58	0.17	0.23	1.52	(-) 0.02	..	..
26.	Uttar Pradesh State Mineral Development Corporation Limited	Industries	23rd March 1974	1987-88	3261.91	261.38	489.50	4012.79	(+) 52.58	34.93	29.98	82.56	1680.72	378.27	1302.45	1803.63	501.46	2604.62	87.51	0.75	3.4
27.	Uttar Pradesh Electronics Corporation Limited	Electronics	30th March 1974	1989-90	4927.06	51.94	1322.75	6301.75	(+) 2.36	0.18	0.18	2.54	20.91	15.84	5.07	1715.26	171.78	1548.55	2.54	0.04	0.16
				1990-91	5533.00	54.18	1229.80	6816.98	(+) 4.8	0.09	0.09	4.89	20.29	15.33	4.96	2086.52	262.8	1828.68	4.89	0.07	0.27
28.	Uttar Pradesh State Tourism Development Corporation Limited	Tourism	5th August 1974	1980-81	111.41	..	30.72	142.13	(-) 6.03	..	..	(-) 6.03	40.91	13.52	27.39	48.15	6.46	69.08	(-) 6.03	..	..
29.	Uttar Pradesh State Spinning Company Limited (Subsidiary of Uttar Pradesh State Textile Corporation Limited) (Successors of Uttar Pradesh State Spinning Mills Company (No. I) Limited)	Industries	20th August 1974	1990-91	4601.84	337.16	2901.2	7840.2	(-) 881.5	835.50	414.39	(-) 467.11	6163.74	4512.01	1651.73	3234.25	2587.45	2298.53	(-) 46.00	..	..
30.	Uttar Pradesh State Yarn Company Limited (Subsidiary of Uttar Pradesh State Textile Corporation Limited) (Successors of Uttar Pradesh State Spinning Mills Company (No. II) Limited)	Industries	20th August 1974	1990-91	2439.52	517.50	1473.04	4430.06	(-) 417.11	488.01	232.80	(-) 184.31	4209.03	2813.48	1395.55	1723.42	1769.37	1349.6	50.9	..	3.80
31.	Uttar Pradesh Food and Essential Commodities Corporation Limited	Food and Civil Supplies	22nd October 1974	1982-83	50.00	70.48	..	120.48	(+) 65.59	28.37	..	65.59	19.42	6.55	12.87	352.83	140.05	225.15	91.96	54.4	4.0
32.	Uttar Pradesh Poultry and Livestock Specialities Limited	Animal Husbandry	7th December 1974	1988-89	60.00	4.90	..	64.90	(-) 1.88	..	..	(-) 1.88	3.86	2.44	1.42	63.12	22.31	42.23	(-) 1.88	..	..

1.	2(a)	2(b)	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
33.	Uttar Pradesh Instruments Limited (Subsidiary of Uttar Pradesh State Industrial Development Corporation Limited)	Industries	1st January 1975	1990-91	202.22	..	398.67	600.89	(-) 171.78	88.05	72.20	(-) 99.58	54.00	46.61	12.39	111.66	492.68	(-) 368.63	(-) 83.73	..	..
34.	Uttar Pradesh Pashudhan Udyog Nigam Limited	Animal Husbandry	5th March 1975	1983-84	80.05	0.20	20.00	100.25	(-) 15.41	7.96	1.63	(-) 13.78	39.53	22.28	10.75	101.52	108.99	9.28	(-) 7.45	..	..
35.	Uttar Pradesh Scheduled Castes Finance and Development Corporation Limited	Harijan and Social Welfare	25th March 1975	1986-87	970.43	189.03	..	1159.46	(+) 61.26	..	..	61.26	38.04	14.96	23.08	4839.05	3704.32	1157.81	61.26	5.38	5.3
36.	Mandganj Sihori Sugar Company Limited (Subsidiary of Uttar Pradesh State Sugar Corporation Limited)	Sugar and Cane Development	18th April 1975	July 1988 to March 1989	2320.57	30.50	..	2351.07	(-) 205.21	87.34	62.22	(-) 142.99	1261.37	1005.05	256.32	885.63	756.95	385.00	(-) 117.87	..	..
37.	Chhata Sugar Company Limited (Subsidiary of Uttar Pradesh State Sugar Corporation Limited)	Sugar and Cane Development	18th April 1975	August 1988 to March 1989	450.81	17.48	31.86	500.15	(+) 43.91	34.91	3.95	47.50	704.95	574.41	130.54	712.34	230.36	612.52	78.86	9.5	12.0
38.	Uttar Pradesh Rajkiya Nirman Nigam Limited	Public Works	1st May 1975	1987-88	100.00	1093.90	2.88	1196.78	(+) 419.95	4.95	4.95	424.54	1406.65	781.23	6263.62	6623.79	6110.62	1136.59	424.54	35.5	37.3
39.	Garhwal Anusuchit Janjati Vikas Nigam Limited (Subsidiary of Garhwal Mandal Vikas Nigam Limited)	Hill Development	30th June 1975	1981-82	20.00	..	..	20.00	(-) 0.29	..	..	(-) 0.29	1.30	0.40	0.90	38.86	15.60	24.16	(-) 0.29	..	..
40.	Kumaon Anusuchit Janjati Vikas Nigam Limited (Subsidiary of Kumaon Mandal Vikas Nigam Limited)	Hill Development	30th June 1975	1982-83	25.00	3.78	..	28.78	(-) 0.78	..	..	(-) 0.78	0.46	0.08	0.38	38.53	11.40	27.51	(-) 0.78	..	..
41.	Tarai Anusuchit Janjati Vikas Nigam Limited	Harijan and Social Welfare	2nd August 1975	1982-83	45.00	0.45	25.00	70.45	(-) 4.00	..	..	(-) 4.00	2.99	1.29	1.70	102.10	4.27	99.53	(-) 4.00	..	..
42.	Uttar Pradesh (Rohelkhand Tarai) Ganna Beej Evam Vikas Nigam Limited	Sugar and Cane Development	27th August 1975	1989-90	24.87	22.81	..	47.68	(+) 6.99	52.41	..	6.11	35.84	7.19	28.65	642.03	60.75	609.92	59.40	14.7	9.7
43.	Uttar Pradesh (Paschim) Ganna Beej Evam Vikas Nigam Limited	Sugar and Cane Development	27th August 1975	1989-90	22.21	7.21	..	29.42	(-) 0.51	47.49	..	(-) 0.51	4.62	0.51	4.11	615.66	51.36	568.41	46.98	..	8.3

1.	2(a)	2(b)	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21			
44.	Uttar Pradesh (Poorva) Ganna Beej Evam Vikas Nigam Limited	Sugar and Cane Development	27th August 1975	1989-90	26.60	4.79	..	31.39	(+)	0.89	20.3	..	0.89	3.22	1.20	2.02	287.69	13.41	267.30	21.19	2.8	7.7		
45.	Uttar Pradesh (Madhya) Ganna Beej Evam Vikas Nigam Limited	Sugar and Cane Development	27th August 1975	May 1985 to June 1986	14.96	..	87.28	102.24	(-)	3.47	13.09	13.09	9.62	20.98	7.01	13.97	96.72	10.78	99.91	9.62	9.6	9.62		
				May 1986 to June 1987	15.06	..	85.70	100.76	(-)	1.00	8.83	8.83	(+)	7.83	22.04	7.31	14.73	93.83	11.14	97.42	7.83	7.8	8.0	
46.	Uttar Pradesh Chal-chitra Nigam Limited	Institutional Finance	10th September 1975	1985-86	616.87	..	162.65	779.52	(-)	97.94	13.59	13.59	(-)	84.35	581.39	206.43	374.96	113.16	166.75	321.37	(-)	84.35	..	..
47.	Uttar Pradesh Textile printing Corporation Limited (Subsidiary of Uttar Pradesh State Handloom Corporation Limited)	Rural and Small Industries	5th December 1975	1980-81	16.00	3.85	..	19.85	(-)	2.71	..	..	2.71	5.57	1.01	4.56	66.56	51.45	19.67	2.71	13.7	13.8		
48.	Uttar Pradesh Tyres and Tubes Limited (Subsidiary of Uttar Pradesh State Industrial Development Corporation Limited)	Industries	14th January 1976	1989-90	183.13	58.49	492.95	734.57	(-)	144.45	52.75	52.75	(-)	91.72	285.54	183.50	102.04	89.19	102.79	88.44	(-)	91.70	..	..
49.	Lucknow Mandaliya Vikas Nigam Limited	Area Development	31st January 1976	1980-81	50.00	4.26	..	54.26	(-)	0.29	..	..	(-)	0.29	7.96	4.18	3.78	80.42	35.52	48.68	(-)	0.29	..	..
50.	Allahabad Mandal Vikas Nigam Limited	Area Development	31st January 1976	1982-83	60.00	..	1.70	61.70	(-)	6.94	4.35	..	(-)	6.94	38.38	6.82	31.56	128.69	51.82	108.43	(-)	2.59	..	..
				1983-84	60.00	..	0.53	60.53	(-)	4.76	7.45	..	(-)	4.76	43.16	8.13	35.03	137.80	58.52	114.31	(+)	2.69	..	2.4
51.	Agra Mandal Vikas Nigam Limited	Area Development	31st March 1976	1986-87	100.00	9.96	..	109.96	(+)	11.24	1.24	..	11.24	51.43	14.31	37.12	122.99	77.25	82.86	12.48	10.2	15		
52.	Gorakhpur Mandal Vikas Nigam Limited	Area Development	1st March 1976	1983-84	122.03	2.01	29.03	153.07	(-)	21.73	1.24	1.24	(-)	20.49	65.26	18.07	47.19	44.54	56.03	35.70	(-)	20.49	..	..
53.	Garhwal Mandal Vikas Nigam Limited	Hill Development	31st March 1976	1982-83	245.00	12.53	256.21	513.34	(-)	8.24	2.38	..	8.24	133.94	64.30	69.64	452.08	107.12	414.60	(-)	10.62	..	..
54.	Varanasi Mandal Vikas Nigam Limited	Area Development	31st March 1976	1985-86	70.00	4.18	9.86	84.04	(-)	2.47	4.68	1.72	(-)	10.75	51.96	18.13	33.83	85.25	37.31	81.77	2.21	..	2	
55.	Meerut Mandal Vikas Nigam Limited	Area Development	31st March 1976	1986-87	100.00	2.85	..	102.85	(-)	11.94	0.70	..	(-)	11.94	28.22	10.19	18.03	65.25	20.04	63.24	(-)	11.24	..	..
56.	UPSIC Potteries Limited (Subsidiary of Uttar Pradesh Small Industries Corporation Limited)	Rural and Small Industries	27th April 1976	1982-83	59.26	..	22.92	82.18	(-)	4.19	0.38	..	(-)	4.19	.29	2.20	2.09	26.19	2.59	25.69	(-)	3.81	..	..

1.	2(a)	2(b)	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
57.	Uttar Pradesh Milk- koop Nigam Limited	Irrigation	26th May 1976	1988-89	490.00	24.32	30.00	544.32	(-) 38.22	38.70	38.70	0.48	1333.41	253.36	1080.05	2370.00	1968.97	1481.08	0.48	0.09	0.03
58.	Handloom Intensive Development Corporation (Gorakhpur and Basti) Limited (Subsidiary of Uttar Pradesh State Handloom Corporation Limited)	Rural and Small Industries	26th May 1976	1981-82	3.00	28.24	91.50	122.74	(+) 7.52	6.36	6.33	13.85	11.37	2.74	8.63	355.10	200.05	163.68	13.88	11.3	8.0
59.	Dhadechi Woollens Limited (Subsidiary of Uttar Pradesh State Textile Corporation Limited)	Industries	16th June 1976	1990-91	375.54	8.24	..	383.78	(-) 145.62	66.03	..	(-) 145.62	190.44	147.08	43.36	263.86	89.57	217.65	(-) 79.59	..	..
60.	Harijan Eram Nirpal Varg Avam Nigam Limited	Harijan and Social Welfare	25th June 1976	1990-91	15.00	715.19	1610.74	2340.93	(+) 57.70	..	..	57.70	567.26	404.40	162.86	20091.94	17946.80	2308.00	57.70	2.5	2.5
61.	Handloom Intensive Development Project (Bijnore) Limited (Subsidiary of Uttar Pradesh Handloom Corporation Limited)	Rural and Small Industries	13th September 1976	1978-79	2.00	..	190.66	192.66	(-) 0.23	9.22	9.20	8.97	562.75	385.75	267.01	145.02	222.77	189.26	8.99	4.6	4.0
62.	Uttar Pradesh Paschimi Kshetriya Vikas Nigam Limited	Area Development	31st January 1976	1982-83	100.00	4.896	..	104.86	(-) 173.74	2.59	..	(-) 173.74	31.62	14.84	16.78	235.65	35.34	7.09	(-) 171.15	..	..
63.	Uttar Pradesh Deve- lopment Systems Corporation Limited	Planning	15th March 1977	1988-89	100.00	2.23	..	102.24	12.49	..	..	12.49	15.62	10.84	4.78	398.35	300.89	102.24	12.49	12.21	12.22
64.	Uttar Pradesh State Horticultural Produce Marketing and Proce- ssing Corporation Limited	Agriculture	6th April 1977	1984-85	190.76	1.26	54.00	246.02	(-) 66.57	10.67	7.61	(-) 58.96	-58.07	27.00	31.07	103.92	54.27	80.72	(-) 55.9	..	..
65.	UPAI Limited	Hill Development	20th April 1977	1981-82	17.00	..	..	17.00	(-) 0.20	..	..	(-) 0.20	0.56	0.30	0.26	1.94	3.26	(-) 1.06	(-) 0.20	..	..
66.	Uptron Powertronics Limited (Subsidiary of Uttar Pradesh Electronics Corpo- ration Limited)	Electronics	30th April 1977	1990-91	22.00	10.34	..	32.34	(+) 1.83	39.69	..	(+) 1.83	102.02	63.68	38.34	442.08	220.23	260.19	41.52	5.7	16
67.	Uptron Seapack Limited (Subsidiary of Uttar Pradesh Electronics Corporation Limited)	Electronics	23rd May 1977	1979-80	2.55	..	..	2.55	(-) 0.78	0.42	..	(-) 0.78	0.79	0.16	0.63	1.90	0.67	1.86	(-) 0.36	..	..

1.	2(a)	2(b)	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
68.	Uttar Pradesh Digital Industries Limited (Subsidiary of Uttar Pradesh State Industrial Development Corporation Limited)	Industries	8th March 1978	1988-89	35.20	7.07	65.68	107.95	(-) 21.37	1.81	1.81	(-) 19.56	81.92	18.83	63.09	29.80	55.74	37.15	(-) 19.56	..	..
69.	Moradabad Mandal Vikas Nigam Limited	Area Development	30th March 1978	1983-84	20.00	2.22	..	22.22	(+) 1.00	..	..	1.00	4.95	2.42	2.53	31.11	11.64	22.00	1.00	4.5	4.5
70.	Uttar Pradesh Bhumi Sudhar Nigam Limited	Agriculture	30th March 1978	1985-86	130.00	1.241	..	131.24	(+) 1.47			1.47	19.94	11.40	8.54	125.93	30.47	104.00	1.47	1.1	1.4
71.	Uptron Components Limited (Subsidiary of Uttar Pradesh Electronics Corporation Limited)	Electronics	31st March 1978	Accounts not finalised since inception																	
72.	Uttar Pradesh Carbide and Chemical Limited (Subsidiary of Uttar Pradesh State Mineral Development Corporation Limited)	Industries	23rd April 1979	1987-88	497.36	25.00	967.96	1490.32	(-) 167.64	179.69	157.59	(-) 10.07	1384.70	80.51	1304.19	699.96	686.36	1317.79	12.05	..	0.9
73.	Uptron India Limited (Subsidiary of Uttar Pradesh Electronics Corporation Limited)	Electronics	18th October 1979	1987-88 (ending June 1988)	1782.15	595.31	2296.36	4673.82	(+) 86.74	139.09	139.09	207.83	2318.82	528.93	1789.89	9794.32	3960.92	7623.29	207.83	4.4	2.7
74.	Uttar Pradesh Matsya Vikas Nigam Limited	Fisheries	27th October 1979	1986-87	100.00	154.29	83.33	337.62	(-) 24.94	12.49	12.49	(-) 13.45	303.28	78.98	224.30	294.48	225.30	293.47	(-) 13.45	..	..
75.	Uttar Pradesh Rajya Vidyut Utpadan Nigam Limited	Energy	22nd August 1980	1988-89	3183.00	..	45428.00	48611.00	Under construction				1349.46	279.96	1069.80	2791.29	16664.93	(-) 112803.84	..	..	..
76.	Uttar Pradesh Alp Sanghyak Vittiya Evam Vikas Nigam Limited	Industry	17th November 1984	1987-88	255.00	19.11	10.42	284.53	(-) 1.04	..	..	(-) 1.04	6.04	2.45	3.59	274.57	7.01	271.15	(-) 1.04	..	..
77.	Uttar Pradesh Laghu Jal Vidyut Nigam Limited (Successors of Uttar Pradesh Alparthak Evam Laghu Jal Vidyut Nigam Limited)	Energy	15th April 1985	1987-88	20.00	577.00	..	597.00	Under construction				68.93	10.41	58.52	660.90	34.72	684.7	..	..	..
78.	Uttar Pradesh Hill Electronics Corporation Limited	Hill Development	26th June 1985	1989-90	494.03	1.00	..	495.03	(-) 3.11	..	..	(-) 3.11	21.31	3.03	18.28	398.77	141.14	275.91	(-) 3.11	..	..

[illegible]

[illegible]

ANNEXURE - 4

Statement showing summarised financial results of Statutory Corporation for the latest year for which Annual Accounts have been prepared
(Referred to in paragraph 1.3.4. page)

Serial number	Name of the Corporation	Name of administrative department	Year of incorporation	Years of accounts	Total capital invested	Profit(+)/ Loss(-)	Interest on long term loans	Total return on capital invested	Total return on capital employed	Capital employed	Percentage of total return to capital invested	Percentage of total return to capital employed
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1.	U.P. State Electricity Board	Power	April 1959	1989-90 (Provisional)	6095.58	(-) 129.93	589.03	459.10	459.10	4092.23	7.5	11.2
2.	U.P. Financial Corporation	Industries	1954	1990-91	793.89	(+) 1.30	56.61	57.91	57.91	744.44	7.3	7.8
3.	U.P. State Warehousing Corporation	Co-operative	1958	1988-89 (Provisional)	26.18	(-) 0.05	0.82	0.77	0.77	26.13	2.94	2.95
4.	U.P. State Road Transport Corporation	Transport	1972	1990-91 (Provisional)	279.25	(-) 40.41	20.96	(-) 19.45	(-) 19.45	109.39	(-) 7.0	(-) 17.8

Note: 1. Capital invested represents mean of the aggregate of opening and closing balances of paid-up capital plus long term loans plus free reserves.
2. Capital employed represents net fixed assets plus working capital.

ANNEXURE-5

[Paragraph 3C.5.5. (ii)]

Statement showing value of excess heat consumed in Harduaganj Thermal Power Station

<u>'A' POWER HOUSE</u>		1986-87	1987-88	1988-89	1989-90	1990-91
S.N.	Particulars					
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	Stipulated heat rate (K.Cal/Kwh)	3276	3276	3276	3276	3276
2.	Actual heat rate (K.Cal/Kwh)	6829.59	7636.06	7439	7232	7349
3.	Excess heat consumed (K.Cal/Kwh)	3553.59	4360.06	4163	3956	4073
4.	Units generated (MU)	117.345	106.346	74.279	52.876	34.724
5.	Average calorific value (k.Cal/Kwh)	5486	5750	5542	5681	4999
6.	Excess heat consumed in terms of coal (tonnes)	76010.10	80639.12	55796.37	36820.53	26291.83
7.	Average cost of coal (Rupees/tonne)	644.79	691.72	830.78	973.70	1068.98
8.	value of excess heat consumed (Rupees in lakhs)	490.11	557.80	463.54	354.84	308.09

Total Rs. 2174.38 lakhs

<u>'B' Power house Russian Sets Unit 1 and 2</u>						
1.	Stipulated heat rate (K.Cal/Kwh)	2332	2332	2332	2332	2332
2.	Actual heat rate (K.Cal/Kwh)	4912.876	4959	4893.03	4921	4921.25
3.	Excess heat consumed (K.Cal/Kwh)	2580.876	2727	2651.03	2589	2589.25
4.	Units generated (MU)	378.839	422.61	153.34	115.106	6.960
<u>BHEL-Machine 3 and 4</u>						
i)	Stipulated heat rate (K.Cal/Kwh)	2372	2372	2372	2372	2372
ii)	Actual heat rate (K.Cal/Kwh)	4912.876	4949	4983.03	4951.64	4952.75
iii)	Excess heat consumed (K.Cal/Kwh)	2540.876	2587	2611.03	2579.64	2580.75
iv)	Units generated (MU)	359.112	246.411	267.256	309.997	24.036
5.	Average Calorific value of Coal (K.Cal/Kg)	5410	5398	5417	3611	3613

(280)

(1)	(2)	(3)	(4)	(5)	(6)	(7)
6.	Excess heat consumed in terms of coal (tonne):					
	Russian Set Unit 1 and 2	180727.63	205668.09	75043.186	85528.23	4987.87
	BHEL Set Unit 3 and 4	168661.56	118092.85	128819.16	221456.84	17168.81
	Total	349389.19	323760.94	203862.34	306985.07	22156.68
7.	Average cost of coal (Rupees/tonne)	554.36	612.38	710.49	777.27	854.90
8.	Value of excess heat consumed (Rupees in lakhs)	1936.87	1982.65	1448.42	2386.10	1894.17

Total Rs. 9648.21 lakhs

ANNEXURE -6

[Paragraph 3C.5.5. (11)]

Statement showing value of excess heat consumed in Panki Thermal Power Station

		<u>2x32 MW Units</u>					<u>2x110 MW Units</u>				
S.N. Particulars		1986-87	1987-88	1988-89	1989-90	1990-91	1986-87	1987-88	1988-89	1989-90	1990-91
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1.	Stipulated heat rate (K.Cal/Kwh)	3276	3276	3276	3276	3276	2153	2153	2153	2153	2153
2.	Actual heat rate (K.Cal/Kwh)	3047.31	..	3573.64	3125.93	3646.25	3668.00	3642.80	3841.85	3533.54	3642.32
3.	Excess heat consumed (K.Cal/Kwh)	..	..	297.64	..	370.25	1718.00	1389.00	1688.85	1330.54	1699.32
4.	Units generated (MU)	86.441	NIL	97.946	154.961	86.302	1096.518	391.356	1143.798	803.637	440.064
5.	Average Calorific Value (K.Cal/Kg)	4837	..	5659	4865	4440	4837	4437	4754	4952	3828
6.	Excess heat consumed in terms of Coal (tonnes)	NIL	NIL	5151.55	NIL	7196.69	389142.58	122584.3	406321.51	224041.39	194315.92
7.	Average cost of Coal (Rs./tonne)	566.81	603.04	740.15	830.03	919.84	418.04	469.40	612.21	657.46	702.69
8.	Value of excess heat consumed (Rupees in lakhs)	NIL	NIL	38.13	NIL	66.20	1618.40	577.36	2485.57	1472.71	1363.22

	<u>2x32 MW</u>	<u>2x110 MW</u>	
Excess heat consumed in 5 years in terms of coal (tonnes)	12348.24	+	133640.60 = 13.49 lakh tonnes
Value of excess heat consumed in 5 years (Rupees in lakhs)	104.33	+	7517.26 = Rs. 7621.59 lakhs

ANNEXURE-7

(Referred to in Para 4B.4)

Statement showing realisable amount of security from consumers and loss of interest thereon.

Name of Division	Number of consumers	Realisable amount (Rs. in lakhs)	Loss of interest per month @ 4% p.a. (in Rs.)	Period	Total loss of interest up to December 1991 (Rs. in lakhs)
AESU, Allahabad	2	2.30	767	May 1989 to December 1991 (32 months)	0.25
EDD, Akbarpur	11	2.46	820	-do-	0.26
EDD, Farrukhabad	6	2.46	820	-do-	0.26
EDD-I, Badaun	4	2.07	690	-do-	0.22
EDD, Pilibhit	9	2.15	717	-do-	0.23
EDD, Almora	4	2.00	667	-do-	0.21
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Total	36	13.44	4481		1.43
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