



REPORT

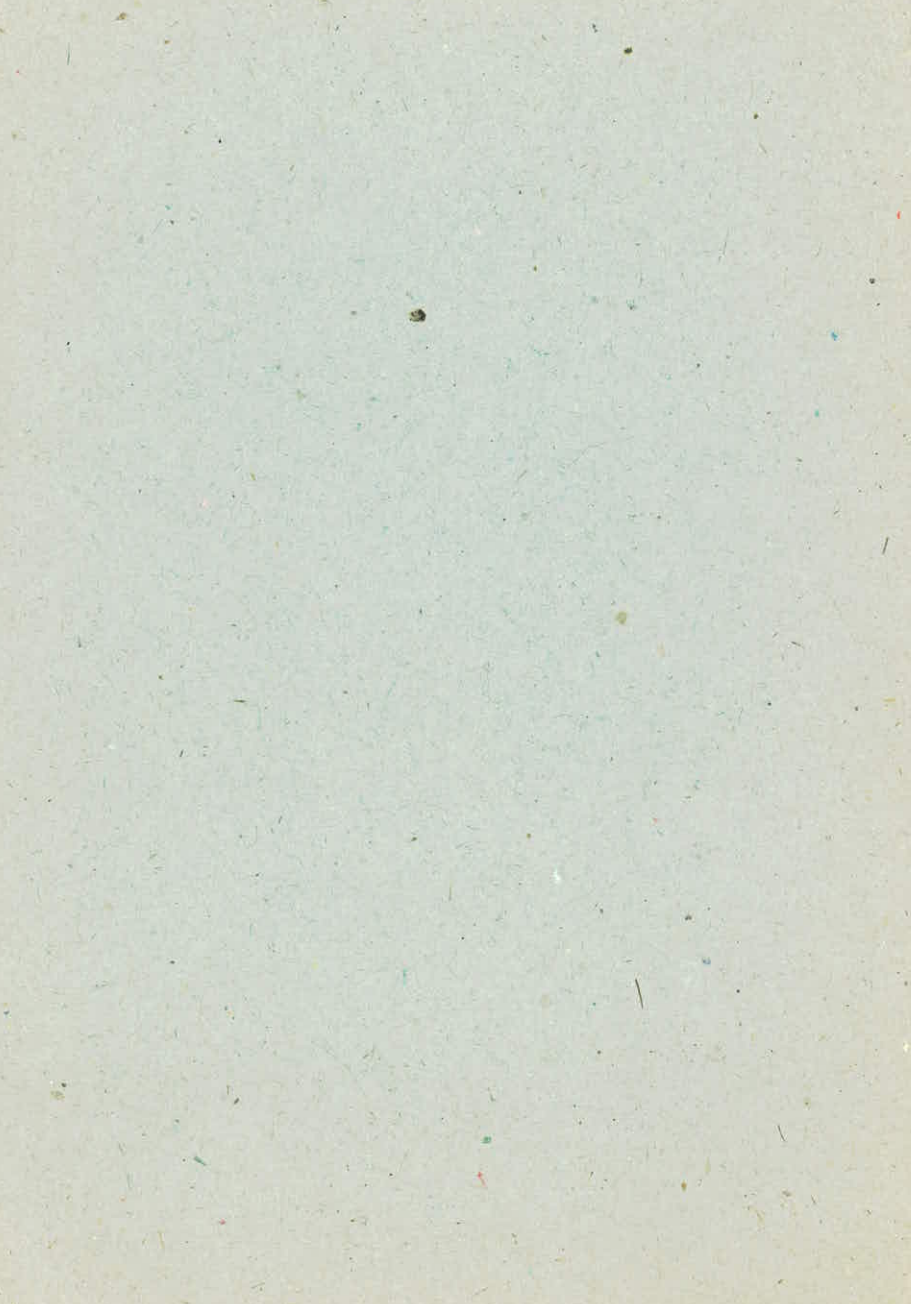
OF THE

**COMPTROLLER AND AUDITOR GENERAL
OF INDIA**

FOR

THE YEAR 1976-77

UNION GOVERNMENT (RAILWAYS)



ERRATA

<i>Sl. No.</i>	<i>Page No.</i>	<i>Line No.</i>	<i>For</i>	<i>Read</i>
1.	3	5	within	with in
2.	7	11	under charges	undercharges
3.	10	21	(Rs. 0.13 lakhs)	(Rs. 0.13 lakh)
4.	21	10	Delete comma (,) after 'such action'	
5.	26	line 12 from bottom	delete 'mainly'	
6.	38	9	(12.612 tonnes)	(12,612 tonnes)
7.	39	11	points	joint
8.	46	11	is use	in use
9.	58	1	on the 12th July	on 12th July
10.	80	17	1st August	15th January
11.	88	line 2 from bottom	'force majcure'	'force majeure'
12.	102	line 6 from bottom	Rs. 1,16,596	Rs. 1,16,599

S/21 C&AG/77



REPORT

OF THE

COMPTROLLER AND AUDITOR GENERAL
OF INDIA

FOR

THE YEAR 1976-77

UNION GOVERNMENT (RAILWAYS)

TABLE OF CONTENTS

	Paragraph Numbers	Page Numbers
PREFATORY REMARKS		(iii)
CHAPTER I		
Comments on Appropriation Accounts 1976-77 and connected documents	1—6	1—13
CHAPTER II		
Microwave communication system	7	14—22
CHAPTER III		
Restoration and construction of lines	8—9	23—34
CHAPTER IV		
Plant and Machinery	10—15	35—50
CHAPTER V		
Purchases and Stores	16—23	51—66
CHAPTER VI		
Works and losses	24—28	67—77
CHAPTER VII		
Earnings	29—31	78—87
CHAPTER VIII		
Other topics of interest	32—37	88—103
ANNEXURES		104—106

PREFATORY REMARKS

This Report relates mainly to matters arising from the Appropriation Accounts of Indian Government Railways for 1976-77 together with other points arising from audit of the financial transactions of the Railways.

2. The cases mentioned in this Report are among those which came to notice in the course of test audit during the year 1976-77 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 1976-77 have also been included, wherever considered necessary.

3. The points brought out in this Report are not intended to convey or to be understood as conveying any general reflection on financial administration by the Ministry of Railways.

CHAPTER I

COMMENTS ON APPROPRIATION ACCOUNTS 1976-77 AND CONNECTED DOCUMENTS

1. Financial Results

1.1 In the Railway budget presented in March 1976, a surplus of Rs. 8.98 crores was anticipated, which was proposed to be credited to Development Fund for financing the works chargeable to this fund. The actual surplus was Rs. 87.24 crores and was appropriated to Revenue Reserve Fund (Rs. 61.39 crores) and Development Fund (Rs. 25.85 crores).

1.2 The Revenue Reserve Fund had an opening balance of Rs. 2.07 crores. It was anticipated in the budget that in order to meet the liabilities of the Revenue Reserve Fund towards payment of instalments of loans taken in earlier years and payment of interest on outstanding loans, a loan of Rs. 159.72 crores would be required from the General Revenues. The actual borrowing was Rs. 146.95 crores which took into account a transfer of Rs. 10.98 crores from surplus (at the revised estimate stage) and the interest accruing to the fund. As against this, the transfer from surplus was Rs. 61.39 crores. The fund closed with a balance of Rs. 52.07 crores. At the end of the year the Fund owed Rs. 309.44 crores to General Revenues.

1.3 The Development Fund had a balance of Rs. 24 lakhs at the close of the previous year. It was anticipated that, after the appropriation of the surplus of Rs. 8.98 crores, there would be a shortfall of Rs. 16.74 crores for meeting the expenditure on works financed from this fund and the payment of interest on outstanding loans. The shortfall was proposed to be met by obtaining a loan from General Revenues. Such a loan was not taken in view of increase in the net surplus. An amount of Rs. 25.85 crores was credited to this fund from the net surplus of Rs. 87.24 crores. The withdrawals were Rs. 17.62 crores

for expenditure on works and Rs. 8.24 crores on payment of interest on outstanding loans. The fund closed with a balance of Rs. 14 lakhs. The fund owed Rs. 152.54 crores to the General Revenues, the same as at the end of previous year (1975-76).

1.4 The total liability of Railways in respect of loans obtained from General Revenues amounted to Rs. 461.99 crores at the end of the year. Besides, the deferred dividend on the new lines (that is, dividend accrued but not payable during construction and the five year moratorium period thereafter) outstanding at the end 1976-77 was Rs. 76.31 crores of which Rs. 41.87 crores were for new lines which had already completed the moratorium period.

1.5 There were net accretions to Depreciation Reserve Fund (Rs. 23.53 crores), Pension Fund (Rs. 9.70 crores) and Accident Compensation, Safety and Passenger Amenities Fund (Rs. 8.37 crores).

1.6 The anticipated and actual revenue receipts and expenditure for the year 1976-77 and the actuals for the preceding three years are shown below :—

	Actuals 1973-74	Actuals 1974-75	Actuals 1975-76	Budget 1976-77	Actuals 1976-77	Variation with reference to budget (crores of rupees)
1. Gross Revenue receipts	1138.19	1415.19	1775.51	1964.15	2045.69	+81.54
2. Revenue expenditure	1082.78	1341.55	1638.48	1747.57	1749.40	+1.83
3. Net revenue (1-2)	55.41	73.64	137.03	216.58	296.29	+79.71
4. Payment to General Revenues	170.92	187.47*	198.14	207.60	209.05	+1.45
Surplus (+)						
Deficit (-)						
(3-4)	-115.51	-113.83	-61.11	+8.98	+87.24	+78.26

*excludes Rs. 15.79 crores, liability of previous year discharged in 1974-75.

1.7 The net revenue before payment of dividend was Rs. 296.29 crores against the budget anticipation of Rs. 216.58 crores. The increase is attributable mainly to increase in passenger earnings offset by a marginal increase in expenditure. These have been dealt within paragraphs 2 and 3 below.

1.8 The operating ratio of the Railways (ratio of gross working expenses to gross earnings) was 84.42 *per cent* during 1976-77 against 89.32 *per cent* in 1975-76, 92.41 *per cent* in 1974-75, 93.39 *per cent* in 1973-74 and 84.87 *per cent* in 1972-73.

1.9 The payment to General Revenues during 1976-77 was made in accordance with the recommendations of the Railway Convention Committee, 1973 approved by Parliament in December 1974. The quantum of relief in payment of dividend works out to Rs. 36.11 crores for the year 1976-77 as against Rs. 22.06 crores in 1971-72, Rs. 24.01 crores in 1972-73, Rs. 25.17 crores in 1973-74, Rs. 29.46 crores in 1974-75 and Rs. 33.06 crores in 1975-76 as per the recommendations of the Railway Convention Committees, 1971 and 1973.

1.10 During the year 1976-77 the Railways had sought for exemption in payment of dividend on capital outlay of Rs. 63 crores in respect of 131 unremunerative branch lines involving an abatement of dividend of Rs. 3.47 crores. The Railways claimed this exemption though the capital outlay in respect of unremunerative branch lines is still to be assessed precisely in accordance with the recommendations of the Uneconomic Branch Lines Committee, 1969. The Railways had also informed the Railway Convention Committee, 1973 that pending such assessment the amount of Rs. 42.21 crores as assessed earlier would be adopted for purposes of computation of amount exempt from dividend liability. The abatement of dividend claimed on this additional outlay of Rs. 20.79 crores amounted to Rs. 1.15 crores [*vide* also paragraphs 1.8 and 1.9 of the Reports of the Comptroller and Auditor General of India for the years 1974-75 and 1975-76—Union Government (Railways) respectively].

1.11 The outlay on the annual Plan for the year 1976-77 was :—

	Budget	Actuals	Variation
	(crores of rupees)		
Capital	249.50	180.85	-68.65
Depreciation Reserve Fund	130.00	125.22	-4.78
Development Fund	17.50	17.62	+0.12
Open Line Works—Revenue	9.00	8.40	-0.60
Metropolitan Transport Projects	10.00	9.17	-0.83
Accident Compensation, Safety and Passengers Amenities Fund	1.81	1.39	-0.42
TOTAL	417.81	342.65	-75.16

There were savings under all the Plan heads except Development Fund.

1.12 The savings under Capital occurred under inventories (suspense). Against an outlay of Rs. 11 crores anticipated in the budget, actual outlay was Rs. (—) 68.79 crores mainly on account of clearances from the balances under Stores suspense, Workshop Manufacture suspense and Miscellaneous Advances Capital.

2. Revenue Receipts

The revenue receipts during 1976-77 were Rs. 2,045.69 crores which were more than the Budget estimates by Rs. 81.54 crores. The details are shown below :—

Particulars	Actuals 1975-76	Budget 1976-77	Actuals 1976-77	Variation with reference to Budget (crores of rupees)
Passenger earnings				
Upper Class	53.04	51.11	56.42	+5.31
Lower Class	461.09	466.90	512.87	+45.97
TOTAL	514.13	518.01	569.29	+51.28
Other Coaching earnings	89.42	87.18	86.88	-0.30
Goods earnings	1150.27	1327.63	1325.91	-1.72
Sundry earnings	50.04	43.00	53.29	+10.29
Suspense	(-)36.85	(-)20.00	0.74	+20.74
Gross Traffic receipts	1767.01	1955.82	2036.11	+80.29
Miscellaneous receipts	8.50	8.33	9.58	+1.25
Total Revenue receipts	1775.51	1964.15	2045.69	+81.54

In the budget presented in March 1976 passenger earnings were estimated at Rs. 518.01 crores anticipating an increase of 4 *per cent* in the passenger traffic over the previous year. The actual passenger earnings were more than the budget estimates by Rs. 51.28 crores. The passenger traffic in terms of originating passengers and passenger kilometres during 1976-77 were 3,300 millions and 1,63,836.2 millions respectively, an increase of 12.2 *per cent* and 10.02 *per cent* respectively over the level of previous year. During 1975-76, the passenger traffic in terms of originating passengers had increased by 21.28 *per cent* over the level of 1974-75.

In the budget the goods earnings were estimated at Rs. 1,327.63 crores taking into account the additional traffic and the full year's effect of changes in classification of freight rates effected during 1975-76 and levy of supplementary charges and on the assumption that the Railways would carry an additional revenue-earning freight traffic of 12 million tonnes over the traffic forecasts in the Revised Estimates for 1975-76, that is, a total of 202 million tonnes of revenue-earning traffic. The actual traffic carried was 212.6 million tonnes that is an increase of 10.6 million tonnes over the budget anticipation. In terms of net tonne kilometres the increase in revenue-earning traffic was 6.79 *per cent* over the previous year. The overall average lead was 656 kilometres as against 664 kilometres in 1975-76, 683 kilometres in 1974-75, 662 kilometres in 1973-74 and 678 kilometres in 1972-73. The actual goods earnings were, however, short of the budget estimate by Rs. 1.72 crores.

3. Revenue Expenditure

The revenue expenditure during 1976-77 was Rs. 1,749.40 crores which was more than the budget estimates by Rs. 1.83

crores. The details are shown below :—

	Actuals 1975-76	Budget 1976-77	Actuals 1976-77	Variation from Budget
	(crores of rupees)			
1. Working Expenses				
(i) Administration, staff welfare and operating staff	520.82	534.60	519.13	-15.47
(ii) Repairs and Maintenance	557.62	600.06	595.61	-4.45
(iii) Fuel	254.52	282.67	288.31	+5.64
(iv) Miscellaneous expenses including operation other than staff and fuel, payments to worked lines and suspense	137.41	134.26	146.11	+11.85
(v) Appropriation to Depreciation Reserve Fund	115.00	135.00	135.00	..
(vi) Appropriation to Pension Fund	24.25	29.50	34.40	+4.90
(vii) Appropriation to Accident Compensation, Safety and Passenger Amenities Fund	7.90	8.06	8.98	+0.92
2. Miscellaneous expenditure such as cost of Railway Board and its attached offices, Surveys, Audit and Subsidy paid to branch line companies—	13.35	14.42	13.46	-0.96
3. Open Line Works-Revenue	7.61	9.00	8.40	-0.60
TOTAL	1638.48	1747.57	1749.40	+1.83

The increase in expenditure over that of the previous year was Rs. 110.92 crores.

The increase of Rs. 1.83 crores over the budget estimate reflects the net effect of increase in expenditure of Rs. 61.77 crores and savings of Rs. 59.94 crores.

The increase in expenditure was mainly on account of increased consumption of diesel oil and electricity for carrying additional traffic (Rs. 12.17 crores), stores, clothing, etc., (Rs. 9.76 crores), revision of electricity tariff by State Electricity Boards (Rs. 8.39 crores), disbursement of pension charges (Rs. 4.90 crores), adjustment under 'Suspense' (Rs. 4.62 crores), payment of overtime, honorarium and night duty allowance (Rs. 4.60 crores), adjustment of under charges and over-charges on cost (Rs. 4.11 crores), expenditure on flood damages and flood protection works (Rs. 3.53 crores), non-receipt of subsidy on sea-borne coal (Rs. 3.46 crores), adjustment in respect of Stock Adjustment Account (Rs. 2.82 crores), freight on materials (Rs. 1.38 crores) and aggregate of minor variations (Rs. 2.03 crores).

The savings were mainly due to less expenditure on implementation of the award of Miabhoy Railway Labour Tribunal, observance of economy measures, non-filling of posts, etc. (Rs. 21.45 crores), less consumption of coal for steam traction because of substitution by diesel and electric traction (Rs. 13.00 crores), less shed and shop repairs to rolling stock, machinery, etc. (Rs. 11.64 crores), saving as a result of modification in the rate of dearness allowance from 1st October 1976 (Rs. 8.77 crores), less expenditure on maintenance of track, bridges, residential and service buildings etc. (Rs. 3.23 crores), and less payment of compensation claims for goods lost or damaged (Rs. 1.85 crores).

4. Budgetary Control

The number of demands voted for the year was 22 aggregating Rs. 3,388.58 crores. During the year thirteen supplementary grants were obtained for Rs. 104.41 crores.

The number of charged appropriations for the year was twelve for a total sum of Rs. 3.16 crores. During the year seven supplementary appropriations for Rs. 1.09 crores were obtained.

The disbursement during the year showed a saving of Rs. 17.18 crores over the total grants and appropriations as shown below :—

Particulars	Voted Grants	Charged Appropriation	Total
			(crores of rupees)
1. Original	3,388.58	3.16	3,391.74
2. Supplementary	104.41	1.09	105.50
3. Total	3,492.99	4.25	3,497.24
4. Total disbursement	3,477.25	2.81	3,480.06
5. Saving	15.74	1.44	17.18
6. Percentage of net saving to total grant/appropriation	0.45	34.00	0.49
7. Percentage of net excess(+) saving(-) in the previous year (1975-76)	+1.8	-26.2	+1.8

5. Savings in Grants and Appropriations

A. Savings in Voted Grants

The net shortfall of Rs. 15.74 crores as mentioned in paragraph 4 is made up of shortfalls under 15 Grants (Rs. 83.40 crores) and excess under 6 grants (Rs. 67.66 crores).

There were no variations in two grants voted for appropriation to Depreciation Reserve Fund and Pension Fund.

The works grants, namely, Grant No. 13-Open Line Works-Revenue, Grant No. 14-Construction of New Lines and Grant No. 15-Open Line Works-Capital, Depreciation Reserve Fund and Development Fund, accounted for a saving of Rs. 54.96 crores. A supplementary grant of Rs. 43.17 crores was obtained in March 1977 under grant No. 15 for meeting the increased expenditure on Rolling Stock (Rs. 29.13 crores) mainly due to revision of transfer prices of locomotives, capitalisation of loco spares, Stores Suspense (Rs. 18.09 crores) to cover more purchases of stores and Manufacture Operations (Rs. 4.59 crores) due to increased activities in workshops and other increases (Rs. 3.83 crores) partly off-set by savings under

Miscellaneous Advance (Rs. 12.46 crores). The savings occurred on account of more issues of stores, clearance of balances under suspense, etc. The entire amount of Rs. 43.17 crores obtained through supplementary grant in March 1977 was excessive and remained unutilised. The savings under other works *viz.*, Grants 13 and 14 were due to slow progress of works.

The saving of Rs. 22.67 crores occurred under Working Expenses *viz.*, Grants No. 4—Administration, No. 5—Repairs and Maintenance, No. 6—Operating Staff, No. 8—Operation other than staff and fuel and No. 10—Staff Welfare. The saving was mainly due to less expenditure on the implementation of recommendations of the Third Pay Commission, observance of economy measures, etc. (Rs. 17.34 crores), modification in the rates of dearness allowance from 1st October, 1976 (Rs. 8.77 crores), expenditure on implementation of Miabhoy Railway Labour Tribunal Award (Rs. 2.89 crores), less expenditure on payment of compensation and adjustment in respect of missing coal wagons (Rs. 1.77 crores) and aggregate of minor variations (Rs. 0.77 crore) partly off-set by increase due to expenditure on stores, clothing, etc. (Rs. 5.34 crores) and more repairs of flood damages to track, etc. (Rs. 3.53 crores).

The supplementary grant of Rs. 79 lakhs was obtained in March 1977 under grant No. 10—Staff Welfare. This proved to be entirely unnecessary as the final savings under this grant were to the tune of Rs. 1.43 crores.

The Revenue Grants No. 1—Railway Board, No. 2—Miscellaneous Expenditure and No. 3—Payments to Worked lines and others accounted for a saving of Rs. 1.17 crores which was made up of variations of minor nature. Grant No. 12—Dividend to General Revenues and Contribution for grants to States in lieu of Passenger Tax, accounted for a saving of Rs. 2.25 crores. The saving was due to less payment of dividend owing to less capital outlay than anticipated. The supplementary grant of Rs. 3.70 crores obtained in March 1977 was found to be excessive to the extent of Rs. 2.25 crores.

Miscellaneous Grants, namely, Grant No. 17—Repayment of loans and Interest thereon—Development Fund, Grant No. 20—Repayment of Loans and Interest thereon—Revenue Reserve Fund and Grant No. 22—Accident Compensation, Safety and Passenger Amenities Fund accounted for a saving of Rs. 2.35 crores. The saving was mainly under the sub-head—Accident Compensation.

B. Savings in Appropriations

A net saving of Rs. 143.83 lakhs occurred in 12 charged appropriations. The significant savings were under Appropriation No. 7—Working Expenses—Operation (Fuel) (Rs. 37.27 lakhs), Appropriation No. 6—Working Expenses—Operation Staff (Rs. 30.31 lakhs), Appropriation No. 22—Accident Compensation, Safety and Passenger Amenities Fund (Rs. 26.11 lakhs), Appropriation No. 8—Working Expenses—Operation other than staff and Fuel (Rs. 17.99 lakhs), Appropriation No. 5—Working Expenses—Repairs and Maintenance (Rs. 12.43 lakhs), and Appropriation No. 15—Open Lines Works—Capital, Depreciation Reserve Fund and Development Fund (Rs. 7.37 lakhs). The balance of savings was under six appropriations, off-set by excess of (Rs. 0.13 lakhs) under Appropriation No. 2.

6. Excess Over Grants and Appropriations

During the year under report excesses occurred under six grants and one appropriation aggregating Rs. 67.67 crores. The details of excesses during 1976-77 which require to be regularised under Article 115 of the Constitution of India are as under:—

A. Voted Grants

Grant	Final Grant	Actual Expenditure	Excess	Percentage
Grant No. 7				
Working Expenses Operation (Fuel)	2,97,35,72,000	3,03,89,93,264	6,54,21,264	2.2

The final grant includes Rs. 2.88 crores obtained through supplementary grant in March 1977 for meeting expenditure due to increased consumption of diesel oil and electricity for moving

additional traffic and increase on account of revision of electricity tariff by State Electricity Boards.

The excess of Rs. 6.54 crores occurred mainly due to less credits on account of subsidy in respect of freight on sea borne coal and throw forward debits for sea freight (Rs. 3.65 crores), more consumption of high speed diesel oil (Rs. 2.82 crores) more payment of handling and freight charges on fuel (0.30 crore) increase in statutory prices and average rate of coal (Rs. 0.26 crore) fluctuation in adjustment of losses on fuel (0.15 crore) partly off-set by less consumption of coal consequent upon substitution of steam Traction by electric traction (Rs. 0.43 crore) and aggregate of minor variations (Rs. 0.21 crore).

Grant No. 9

Working Expenses—				
Miscellaneous Expenses	59,86,35,000	66,59,95,612	6,73,60,612	11.25

The final grant includes supplementary grant of Rs. 2.01 crores obtained in March 1977 to meet increased expenditure under this grant on account of adjustment of arrear debits from State Government towards security measures, more expenditure on catering stores, etc. The excess occurred mainly under suspense because of transferring certain debits to the head 'Miscellaneous Advances' at the end of the year and less adjustment of re liabilities under 'Demands Payable'. There was also increase due to more expenditure in Catering department (Rs. 0.16 crore), more payment for Deposit Linked Insurance Scheme (Rs. 0.12 crore).

Grant No. 16

Pensionary Charges—				
Pension Fund	37,83,14,000	40,55,90,881	2,72,76,881	7.21

The excess occurred on all Railways except Northeast Frontier Railway and the Production Units and in Miscellaneous Establishments. A supplementary grant of Rs. 12.64 crores was obtained in March, 1977. It proved to be inadequate.

The excess of Rs. 2.73 crores occurred mainly due to receipt of more debits from Civil Accounts Offices (Rs. 1.75 crores),

settlement of more cases of death-cum-retirement gratuity than anticipated (Rs. 0.47 crore) and superannuation pension (Rs. 0.42 crore) and minor variations (Rs. 0.09 crore).

Grant No. 18

Appropriation from surplus— Appropriation to Development Fund	24,69,28,000	25,85,63,983	1,16,35,983	4.71
---	--------------	--------------	-------------	------

The final grant includes a supplementary grant of Rs. 15.71 crores obtained in March, 1977 for meeting increased appropriation to this fund. This proved to be inadequate.

The excess of Rs. 1.16 crores occurred mainly due to the surplus exceeding anticipations as a result of improvement in gross traffic receipts.

Grant No. 19

Revenue— Appropriation to Revenue Reserve Fund	10,97,70,000	61,38,82,954	50,41,12,954	459.24
---	--------------	--------------	--------------	--------

There was no original grant as the surplus of Rs. 8.98 crores anticipated in the budget was proposed to be appropriated to the Development Fund. The provision in the final grant was made through a supplementary grant obtained in March 1977, when it was proposed that Rs. 10.98 crores would be appropriated from the anticipated revenue surplus of Rs. 35.67 crores. The actual revenue surplus was 87.24 crores on account of increase in passenger earnings, out of which Rs. 61.39 crores were credited to the Revenue Reserve Fund resulting in excess over the grant.

Grant No. 21—

Appropriation to Accident Compensation, Safety and Passenger Amenities Fund	8,89,35,000	8,97,73,878	8,38,878	0.94
--	-------------	-------------	----------	------

The excess was mainly due to increase in the number of originating passenger traffic than anticipated during the year. A supplementary grant of Rs. 0.83 crore was obtained in March 1977.

B. Charged Appropriations

2. Revenue—				
Miscellaneous				
Expenditure	3,00,000	3,13,500	13,500	4.5

The excess was due to more decretal payments.

CHAPTER II

MICROWAVE COMMUNICATION SYSTEM

7. New Delhi—Mughalsarai Microwave communication system

7.1 Since 1964-65, the zonal Railways have been implementing a number of schemes for microwave communication links to provide reliable means of communication to meet their needs. Under this system, messages are converted into microwave signals which are relayed from antenna erected on one tower to antenna erected on another, the series of towers being located about 25 miles/40 kilometres apart. Provision of such networks of communication system on the Southern, South Eastern, Central, North Eastern and Northern Railways for a total length of 8 thousand route kilometres was programmed and sanctioned by the Railway Board between 1964-65 and 1967-68.

Provision of standby equipment

7.2 As early as 1965 the Railway Board had circulated to all the Railways the "norms for microwave systems". According to these norms, standby for radio equipment (receiver, transmitter, etc.) was to be provided at all stations when the system loading reached 24 channels or above.

7.3 In November 1967, the Railway Board sanctioned an abstract estimate for Rs. 83.68 lakhs (with a foreign exchange content of Rs. 35.94 lakhs) for the work of provision of 24 channel microwave link between New Delhi and Mughalsarai.

7.4 The global tenders invited by the Northern Railway Administration in January 1968 on a turn-key basis for multi-channel microwave system envisaged provision of 22 repeater stations between two terminals *i.e.*, New Delhi and Mughalsarai and involved 23 hops between the two terminals. The invitation

to tenders indicated that the radio equipment was required for an ultimate capacity of 120 channels. It also envisaged provision of standby equipment at the terminals as well as at the repeater stations to obtain a high degree of reliability.

7.5 The lowest tender was that of a firm in Belgium which provided for complete standby arrangements (using frequency diversity to cope both with failure or outages of radio equipment as well as to overcome fading through diversity reception) at the 23 hops on the New Delhi—Mughalsarai microwave link. Taking into account the lowest tendered rates, the cost of work was estimated as Rs. 88.87 lakhs with a foreign exchange content of Rs. 53.50 lakhs.

7.6 In July 1968 when the tenders were under consideration, the Railway Board decided to link various Railways' 'Microwave Communication Systems' to form an all Railway communication system. The New Delhi—Mughalsarai microwave link formed part of this integrated network. Accordingly, on 30th July 1968 the Railway Board issued certain guidelines to the Research, Designs and Standards Organisation and the Railways for the future planning of the systems. These guidelines contemplated, *inter alia*, provision of basic standbys with automatic change-over facilities to meet equipment outages (failures) with a view to reaching a reliability figure of 99 *per cent*. These also envisaged provision of frequency diversity arrangements to overcome severe fading of the main equipment for hops over 55 kilometres. However, while according its approval in December 1968, to the placement of the order on the lowest tenderer (firm in Belgium), the Railway Board fixed the total value of the contract at Rs. 47.15 lakhs—*c.i.f.*, and Rs. 80.91 lakhs—*f.o.r.*, with a view to ensuring that there was no further revision of the estimate. The provision of standby radio channel was restricted to stations separated by hops of distance of 55 kilometres or over. In other words, only 10 hops as against 23 hops were to be provided with standby arrangements over and above the working channels. The remaining 13 hops were to be provided with working channels only; standby arrangements were not to be provided at these hops.

7.7 The advance letter of acceptance was issued by the Northern Railway Administration in December 1968. The contract was executed in February, 1970. The prices stipulated in the contract were also to apply to any additional equipment/materials ordered by 6th April 1970; orders placed after this date were subject to escalation.

7.8 In 1972, the Northern Railway Administration felt that to obtain the maximum benefit of the reliability for which New Delhi-Mughalsarai microwave system had been planned, standby equipment would have to be provided in the remaining 13 hops situated between 30 kilometres and 55 kilometres which had been deliberately left out in the contract concluded in February 1970. This was approved by the Railway Board in July—October 1972. Since the original equipment for this microwave system had been supplied by the firm in Belgium, the additional equipment had also to be procured from the same firm on grounds of technical and physical compatibility. Accordingly, in November 1973, a supplementary agreement was executed with the firm in Belgium for the supply of additional standby equipment at a cost of Rs. 23.43 lakhs. The procurement of additional standby equipment and accessories entailed an additional expenditure of Rs. 10.28 lakhs because of the escalation in prices since the execution of the principal agreement in February 1970.

7.9 The Railway Board maintained in March 1976 that the norms prescribed by it in 1965 were rough guidelines and only in February 1972 the specifications for a microwave system were finalised by the Research, Designs and Standards Organisation. It also maintained that the foreign exchange position was difficult in 1968 when the order was placed and necessitated the value of imported equipment being kept at the barest minimum.

7.10 It may, however, be mentioned that the specifications incorporated in other global tenders floated by the Railway Board in January 1969 for radio equipment and accessories for seven microwave links on Western, Northern, North Eastern,

South Central and South Eastern Railways stipulated provision of basic standby at all stations *i.e.*, terminals as well as repeater stations and orders were placed on a Japanese firm in December 1969 on this basis. Similarly, another contract was placed in December 1970 with another Japanese firm for supply of radio equipment for five microwave links on Central, South Central and North Eastern Railways in which also provision was made for a basic standby at every hop in each of the five links. It is also worth mentioning that the "specification" of February 1972 did not specify anything on the provision of standby.

7.11 As regards difficult foreign exchange position, there is no indication that in December 1968 or at any time before April 1970 the Railway Board ascertained from the Ministry of Finance the possibility of release of additional foreign exchange for import of additional standby equipment. On the other hand, in October 1969 at the request of the Railway Board, the Ministry of Finance authorised an additional allocation of Rs. 5 lakhs in foreign exchange out of Belgian Credit for purchase of additional channelling equipment on this system from Moradabad to Bareilly but the same was surrendered in March 1970 as the extension of the microwave link from Moradabad to Bareilly was given up for the time being.

Collapse of microwave towers

7.12 The agreement included provision of 24 microwave towers by the firm. The contractor was at liberty to engage sub-contractors. The firm in Belgium was entirely responsible for the satisfactory performance of the entire system as well as of the performance of the towers. It had indemnified the Railways against defective materials or workmanship for work done by its sub-contractors or manufacturer of towers. The agreement further stipulated that the firm was responsible to supply, free of cost, all replacements for materials which were found to be defective either due to the design or workmanship or faulty installation or anything whatever attributable to the contractor or the sub-contractor or the manufacturer of the towers during

the warranty period of 12 months commencing from the date of satisfactory commissioning of the entire installation.

7.13 The agreement laid down the following specifications for the fabrication and erection of towers :—

- (i) towers twist not to exceed $\frac{1}{2}^{\circ}$ at the antenna for a mean minute wind velocity of 53 miles per hour corresponding to a maximum expected wind velocity of 80 miles per hour ;
- (ii) lateral deflection not to exceed $\frac{1}{3}^{\circ}$; and
- (iii) tower must withstand a wind loading of 200 kilometres per hour.

7.14 The contractor was fully responsible for tower design and system performance. The agreement further provided that since the entire responsibility for the design and guarantee of the performance of the towers rested with the contractor, there should be no need for the Railways to approve the contractor's designs. The detailed designs of the towers were to be submitted to Northern Railway only for information and record. Again as per the contract, towers were to be inspected at the manufacturer's works by the Railway's representative, who in this case was the Director General, Supplies and Disposals. The towers in their completely assembled form at site were to be subjected to inspection by the Railway's Engineers.

7.15 In July 1969, the Research, Designs and Standards Organisation had also evolved designs for such microwave towers. It appeared that the design of the towers as submitted by the firm in Belgium for the microwave link from New Delhi to Mughalsarai was lighter than what had been designed by the Research, Designs and Standards Organisation. However, in the meeting held in September 1969 between the officers of Northern Railway and the representatives of the firm, the latter stated that the design of towers had been made taking into account all the factors of the standard engineering practices and the conditions envisaged in the

contract. Considering that the design of the towers was the entire responsibility of the firm in Belgium and the performance of the entire microwave system was guaranteed by it, the Northern Railway Administration felt that "there should not be any need to check the correctness of the design by the Railway".

7.16 The 24 towers on the entire route between New Delhi and Mughalsarai were fabricated and erected during 1971 and 1972 and accepted by the Northern Railway Administration, which issued the necessary certificate of completion of all the works to the contractors on 25th September 1973 showing the date of completion as 15th January 1973. The New Delhi—Mughalsarai microwave installation was commissioned on 1st February 1973. The warranty period expired on 1st February 1974.

7.17 On 20th May 1976 one of the working towers (90 metre high) at Khurja City collapsed owing to heavy wind, disrupting the microwave communication between New Delhi and stations on Allahabad and Lucknow Divisions. The Northern Railway Administration requested the contractor to take necessary remedial measures including provision of a new tower at Khurja city to a modified design and to arrange for re-inforcements to other towers of the system. The contractor informed the Northern Railway Administration on 26th May 1976 that it would assist the Railway in the assessment of the situation resulting from the collapse of the tower at Khurja but disowned its responsibility for the collapse of the tower, etc., which, it maintained, would have to be determined after a thorough investigation of all facts and that the cost of its assistance would have to be reimbursed in case the collapse/damage was beyond its control.

7.18 A quick check of the other 23 towers on the link by the Northern Railway Administration revealed signs of distress in three other towers at Mughalsarai, Gajraula and Hapur. In July and August 1976, conditions of distress and deformations were noticed in the towers at Mirzapur, Meja Road, Allahabad,

Shujatpur, Tundla, Kaurara, Hathras, Aligarh, Moradabad and New Delhi. The joints in the main leg members were lapping instead of butting causing eccentricity at the joints. To reduce stress on the members of the distressed towers, the dishes and reflectors were removed from some of the towers.

7.19 Meanwhile, in June 1976, the Railway Administration, in consultation with the Railway Board, referred the contractor's design and drawings for 90 metre and 85 metre towers to the Structural Engineering Research Centre, Roorkee, for checking up the adequacy of the design of the towers and suggesting modifications required for strengthening the towers if the design was found to be inadequate.

7.20 The Research Centre made the following observations (in July 1976) amongst others :

- (i) In the design wind loading on reflectors had been taken at 180 kilometres per hour instead of at 200 kilometres per hour.
- (ii) Fifty per cent increase in permissible stresses allowed only for buildings had wrongly been used for the design for the tower.
- (iii) The normal practice of not using angles smaller than 45 mm x 45 mm x 5 mm and bolts less than 16 mm diameter, had not been followed in the design.
- (iv) The tower was not well braced in plan at levels 10, 20, 30, 90 or 95 metres.
- (v) Joints in the legs of the existing towers were lap joints "which are not normally used in towers".

7.21 The Northern Railway Administration, in consultation with the Research, Designs and Standards Organisation and the Railway Board initiated action in August 1976 for replacement or strengthening of the towers, advising the firm that as a result of the scrutiny of the firm's design made by the Structural Engineering Research Centre, Roorkee, it had been established

that the design of the towers supplied and erected by it was weak and did not conform to the specifications to which the towers were to be designed as stipulated in the contract. It was requested to take all necessary remedial measures free of cost without further loss of time to restore the microwave system and to meet all the requirements of the contract.

7.22 In September 1976 the firm was advised that if it failed to take remedial measures acceptable to the Railway to strengthen/replace the towers, the Railway would deem itself free to take such action, as was considered necessary to do the needful at the firm's risk and cost. It was further mentioned that this cost would also include all the expenditure incurred in providing the necessary interim communication requirements referred to above. According to an assessment made by the Northern Railway Administration and reported to the Railway Board in September 1976, a sum of Rs. 13.10 lakhs would be required for erecting new towers in replacement at four stations and a further sum of Rs. 31.10 lakhs would be required for rectification, repairs and other miscellaneous expenditure, etc., on other towers making a total of Rs. 44.20 lakhs.

7.23 In November 1976, the firm declined the claim of the Railway on the plea that all contractual terms as stipulated in the contract agreement dated 5th February 1970, had been fulfilled and that, in particular, with respect to the towers, all clauses regarding inspection at the manufacturer's works and inspection at the site after erection had been duly carried out by the Northern Railway Administration to its satisfaction. The firm further stated that in the inspection of the towers by the inspectors of the Director General, Supplies and Disposals and the Railway only minor defects in fabrication and erection were pointed out and that the warranty period of 12 months commencing from the date of completion of the installation, namely, 15th January 1973 expired on 15th January 1974 and that during this warranty period no further defects or any non-conformity with specifications or claims had been raised whatsoever in relation to the towers.

7.24 The Northern Railway Administration incurred an expenditure of about Rs. 73 thousand in restoring the communication system temporarily. The Railway had also to hire additional speech and teleprinter channels from the Posts and Telegraphs department at an annual rental of Rs. 4 lakhs. This provided only 40 per cent of the circuits lost due to disruption of microwave communication.

7.25 The Railway Board sanctioned (upto March 1977) rectification works costing Rs. 14.09 lakhs and directed the Northern Railway Administration that the question of recovery of this cost from the contractor should be processed.

7.26 Meanwhile, the question of recovery of the losses from the firm's dues had been under consideration of the Northern Railway Administration and the Railway Board since August 1976. At the end of July 1977, Rs. 45.67 lakhs were to be paid to the firm under the terms of the contract and security deposit of Rs. 2.87 lakhs in the form of bank guarantee was held by the Railways.

7.27 The Northern Railway worked out a claim of Rs. 1.65 crores against the firm on account of the expenditure already incurred and still to be incurred for rectification of towers and restoration of the performance of the microwave system to normal.

CHAPTER III

RESTORATION AND CONSTRUCTION OF LINES

8. North Eastern Railway—Restoration of Chhitauni—Bagaha rail link

8.1 Chhitauni and Bagaha are terminal stations on Captainganj—Chhitauni (Uttar Pradesh) and Narkatiaganj—Bagaha (Bihar) sections respectively of North Eastern Railway situated on the western and eastern banks respectively of the Gandak river. The two terminal stations had been linked by a railway bridge across the river in the year 1912. One of the piers of the bridge was washed away in 1924 and thereafter the bridge was abandoned. Since the river had been changing its course and had a tendency of shifting towards west, the construction of a barrage over the river at Valmikinagar (about 40 kms on the upstream side of Chhitauni) and the construction of bunds by the Government of Uttar Pradesh along the western bank of the river near Chhitauni tended to stabilise the course of the river. The river had, however, been causing damage to the bunds and flooding the adjoining areas from time to time.

8.2 In 1971 a High Level Technical Committee was constituted by the erstwhile Ministry of Irrigation and Power, in consultation with the Governments of Uttar Pradesh and Bihar, to go into the problem of stabilisation of the river. The Committee, which included the representatives of the two State Governments also, recommended the establishment of control points along the course of the river so that it could be forced to flow along its existing course at these points. The control points were to have approach banks and guide bunds. One such control point was proposed to be located at Chhitauni-ghat. The Committee suggested that this control point might be used for construction of a railway bridge. It felt that the cost of the

two guide bunds including the eastern afflux bund and their protection works might be included in the estimate of the flood control scheme and that of approach embankments on both sides of guide bunds for taking a railway line over the bridge including the cost of protection works be provided in the estimate of the Railway. The erstwhile Ministry of Irrigation and Power suggested to the Ministry of Railways in May 1973 that advantage might be taken of the control point at Chhitauni-ghat for the construction of a railway bridge across the Gandak river.

8.3 The Railway Board directed the Railway Administration in June 1973 to carry out urgently a survey for the restoration of Chhitauni-Bagaha rail link. In July 1973 the Railway Administration submitted to the Railway Board an estimate amounting to Rs. 6.74 crores representing the cost of the railway bridges, the rail link, stations and buildings, residential quarters, etc., entirely chargeable to the Railways. It did not include the cost of guide bunds and their armour and left afflux bund and its armour which were necessary for training the course of the river and protection of the bridge. These works were estimated to cost about Rs. 6 crores.

8.4 The Ministry of Railways advised the Railway Administration in August 1973 that the Gandak High Level Committee constituted by the Central Government had recommended that the cost of all river training works including the guide bunds was to be borne by the State Governments of Uttar Pradesh and Bihar for the portions falling in their jurisdictions and that the actual construction of guide bunds might be done by the Railways at the cost of the State Governments. The Administration was directed to obtain formal acceptance of the State Governments to this arrangement. The Ministry of Railways also pointed out to the erstwhile Ministry of Irrigation and Power in September 1973 that the Railways were proposing to construct the bridge at Chhitauni only in view of the fact that the river training works would be constructed in any case as a flood control measure and would also be maintained as such in

future and the Railways would have no liability for their construction and maintenance. The Governments of Uttar Pradesh and Bihar were also simultaneously requested to convey their acceptance to bear the initial costs and the maintenance of all training works falling in their respective territories. The concurrence of the Planning Commission in taking up the work of restoration of line between Chhitauni and Bagaha and allotment of necessary funds for the same was also sought on 17th October 1973.

8.5 The Governments of Bihar and Uttar Pradesh expressed their inability (on 19th October 1973 and 21st November 1973 respectively) to bear the financial burden of the initial cost and maintenance of all river training works. The Planning Commission advised the Ministry of Railways on 20th October 1973 that the restoration of rail link including the bridge across river Gandak was inter-linked with the river training works, and, therefore, it would be necessary to ascertain whether the two State Governments had agreed to take up these works so that the entire project could be examined in an integrated manner. The Planning Commission also observed that it had, in the past also, urged that an overall view should be taken of the proposed restoration of disrupted line to identify high priority schemes. In the absence of such an exercise it found it difficult to take a definite view on the scheme under consideration.

8.6 Even though the Planning Commission had not given its clearance to the scheme and the State Governments had expressed their inability to bear the expenditure on river training works, the Ministry of Railways communicated (on 9th November 1973) the sanction to the estimate of Rs. 6.74 crores for the restoration of Chhitauni-Bagaha metre gauge rail link including construction of a railway bridge across the Gandak river. The work was considered to be very important for the development of backward areas of eastern Uttar Pradesh and Bihar "which are at present having very unsatisfactory communication and are cut off from each other". The Railway Administration was advised by the Railway Board on 9th

November 1973 that the execution of the project should wait till model studies and necessary investigations in regard to river training works were completed and the report submitted to the Board for approval. A token amount of rupees one thousand was withdrawn from the Contingency Fund of India for making a start on this line in the year 1973-74 itself.

8.7 On 20th November 1973, the Railway Administration was authorised by the Railway Board to enter into commitments and to incur expenditure upto Rs. 75 lakhs during the year 1973-74 on all restoration works and conversion of metre gauge line into broad gauge sanctioned or likely to be sanctioned for this Railway. Out of this, Rs. 15 lakhs were allocated to this project for that year.

8.8 For the construction of the bridge sanctioned in the estimate the Railway Administration requested the Railway Board in July 1975 to allot funds. The Railway Board advised the Railway Administration in September 1975 that until a clear position emerged about the sharing of cost of guide bunds and protection works with the Uttar Pradesh Government, processing of tenders for the bridge work would be premature.

8.9 Provision of Rs. 1.43 crores was made in the budget (final estimates) during 1974-75 to 1976-77. By the end of March 1977 the expenditure booked was Rs. 1.49 crores and physical progress was to the extent of 6.5 *per cent*. The expenditure incurred till the end of March 1977 mainly pertained to acquisition of permanent way materials (Rs. 27.54 lakhs) machinery and plant, vehicles, motor launch, etc. (Rs. 24.06 lakhs), construction of staff quarters, service buildings, etc. (Rs. 14.45 lakhs), construction of railway link between Madanpur and Bagaha—9.14 kms (Rs. 67.69 lakhs), staff (Rs. 7.58 lakhs) and miscellaneous expenditure on Chhitauni side for siding line, labour charges, land, etc., (Rs. 7.24 lakhs).

8.10 In this connection the following aspects deserve special mention :—

- (i) The circumstances under which the Railway Board commenced the construction work without getting the

consent of the State Governments to their bearing the expenditure on river training and protection works and without obtaining prior clearance from the Planning Commission and in fact ignoring the advice of October 1973 of the Planning Commission and ignoring the fact that the State Governments had expressed their inability to bear the cost of these works are not known.

In July 1976 the Government of Uttar Pradesh agreed to bear the expenditure on river training works in its jurisdiction only to the extent of 25 per cent of the cost of guide bunds and protection works subject to a maximum of Rs. 1.5 crores. It deposited Rs. 80 lakhs with the Railways in April 1977.

The Government of Bihar has not agreed to accept the initial and maintenance cost of river training works so far (January 1978).

- (ii) In February 1977, the Planning Commission agreed to place this project in the category of "project/traffic oriented lines". It also agreed to an "additional provision" of rupees one crore for this line subject to the problem of sharing the cost of river training works being satisfactorily resolved and till this was done no further expenditure was to be incurred on this line. The matter relating to sharing of cost is still (January 1978) to be resolved.
- (iii) The construction of railway link from Bagaha to Madanpur (about 9.14 kms out of a total of 22.28 kms) was taken up on priority basis in December 1973 on the grounds that construction materials required for the project and the boulders required for the approach/guide bunds and afflux bunds could be brought closer to the site of consumption. This was completed in March 1976 (except ballasting of the line) at a cost of Rs. 67.69 lakhs. The construction of this portion of the link

was undertaken even before any decision was taken on the execution of the river training works and the railway bridge for which alone the boulders were required. The operation of the section was not considered economical as it was estimated in 1976 that annual earnings from goods and passenger traffic would be only Rs. 0.54 lakh as against the annual expenditure of Rs. 1.59 lakhs on the station staff, repairs and maintenance of track and operating expenditure.

- (iv) Residential quarters (19 units type II and 23 units type I) have been lying vacant since September 1976.

The construction of the Railway bridge and the approaches has not been taken up so far (January 1978) because of the delay in undertaking of construction of river training works, guide bunds, afflux bunds and their armour at the cost of the State Governments. As a consequence restoration of the rail link between Chhitauni and Bagaha will be delayed.

8.11 The Railway Board stated (January 1978) that it was decided (September 1973) at the highest level that the project would be "inaugurated by the Prime Minister on 22nd October 1973". This "left no alternative with the Railways but to sanction the project without waiting for the concurrence of the two State Governments and the Planning Commission". It also stated that the link from Bagaha to Madanpur (now named as Valmiki Nagar Road) "is being worked as an outlying siding of Bagaha station on and from 28th December 1976" for loading forest products. The Railway Board expected this investment "to be productive and profitable". Out of 19 units type II and 23 units type I quarters, 12 units type II and 18 units type I quarters have since been under occupation.

9. North Eastern Railway—Construction of a metre gauge branch line from Jhanjharpur to Laukahabazar

9.1 In May 1973, the Railway Administration submitted an abstract estimate for Rs. 2.28 crores to the Railway Board for the construction of a new metre gauge branch line from Jhanjharpur to Laukahabazar (42.55 kms.) in Samastipur Division of North Eastern Railway. The Railway Board advised the Railway Administration in June 1973 to carry out a final location survey and to submit the survey report with detailed estimates by the middle of July 1973. The survey report and the estimate were sent to the Railway Board on 28th July 1973 showing the estimated cost of the project as Rs. 2.93 crores (inclusive of the cost of land and rolling stock) and the length of the line as 42.3 kms. The project was considered to be unremunerative as the return on the investment was expected to be 2.1 per cent (based on discounted cash flow method). However, keeping in view what was regarded as the urgent need for the development of the backward area to be served by this line the construction estimate for Rs. 2.59 crores approximately (excluding Rs. 34.93 lakhs for rolling stock) chargeable to Capital was sanctioned in June 1974 and the work commenced during the same month.

Acquisition of land and earthwork

9.2 In November 1974 and June 1975, the State Government of Bihar was requested by the Ministry of Railways (Railway Board) to bear the cost of land (Rs. 62.13 lakhs) and earthwork on the grounds that in the case of unremunerative branch lines sanctioned for construction during the past two years, the State Governments gave land free of cost or contributed in some other ways towards the cost of construction. In June 1976, the State Government agreed to give a grant of Rs. 62.13 lakhs for the acquisition of land for the project. Pending finalisation of acquisition proceedings and payment of compensation, physical possession of 568.55 acres of land was taken in July 1974 on grounds of urgency. The State Government of Bihar took upon it the disbursement of the amount of compensation for the

land acquired for the project ; only Rs. 4.57 lakhs were disbursed by the end of December 1977.

9.3 As per detailed estimates the total quantity of earthwork in formation was assessed at 7 lakh cum for original work and 0.70 lakh cum for 'maintenance' at an estimated cost of Rs. 21.86 lakhs. The work was got done departmentally by local labour and was completed by April 1976. In July 1976 the Railway Administration informed Audit that the total quantity of earthwork actually done was nearly 9 lakh cum (accounting for an increase of about 28.6 *per cent* over the estimated quantity) though the measurement of work done by the labour employed on muster rolls had not been completed till June 1977. The expenditure booked till the end of August 1977 was Rs. 72.91 lakhs, the increase being 234 *per cent* over the estimated cost.

9.4 The increase in the quantity of earthwork was attributed by the Railway Administration mainly to the increase in the length of track by about one kilometre, provision of higher embankment at certain stretches keeping in view the local flood conditions, making good damages due to rains and unprecedented floods of 1975 and 1976 monsoons and initial packing done with earth at most of the places.

9.5 The Railway Administration stated (January 1978) that "the total quantity of earthwork in formation as executed is 7.78 lakh cum" and that the booked expenditure of Rs. 72.91 lakhs included an expenditure of Rs. 23.01 lakhs on earthwork done in level crossings, platforms, approach roads, packing of lines, etc., which should not have been classified under 'earthwork in formation'. Excluding this amount of Rs. 23.01 lakhs and the expenditure of Rs. 2.93 lakhs incurred on repairs of flood damages and heavy rain cuts during the monsoons of 1975 and 1976, the expenditure actually incurred on earthwork in formation amounted to Rs. 46.97 lakhs (accounting for an increase of about 115 *per cent* over the estimated cost). It further stated that variation between the rates provided for in the estimate for earthwork and actuals was mainly on account of increase in the

rate of casual labour from Rs. 3 to Rs. 3.50 per day with effect from 1st December 1973, getting the work executed by local labourers who "are not regular earthwork labourers and, therefore, their output would be less than that of normal earthwork labourers" and deterioration of law and order situation which affected their output.

9.6 The rules in the Indian Railway Code for Engineering Department provide that no material modification in a work or a scheme as sanctioned should be permitted or undertaken without the prior approval of the authority who sanctioned the estimate. In the case of estimates sanctioned by the Railway Board or a higher authority in respect of line under construction, any change in the alignment likely to increase or decrease the length of the line by over 800 metres constitutes material modification and prior sanction of the Railway Board is necessary.

9.7 The total length of the projected line along the alignment indicated in the final location survey was 42.3 kms. and the project was sanctioned by the Railway Board on that basis. During the execution of the project, the alignment was modified, without prior approval of the Railway Board, between kilometres 20 and 22, the effect of which was that the length of the alignment increased by one kilometre entailing increase in estimated cost by Rs. 5.35 lakhs. When this material modification was pointed out by Audit in May 1975, the Railway Administration approached the Railway Board in February 1976 for its sanction to the modification. It was then reported to the Railway Board that the alignment proposed during survey was passing through two villages between kilometres 20 and 22 which was not a desirable feature as it restricted planned expansion of the villages, which were growing, as well as the expansion of the station yard in future. The Railway Board sanctioned the modification *ex post facto* in June 1976.

Laying of track

9.8 As per final location survey and traffic appreciation report, the metre gauge track from Jhanjharpur to Laukahabazar was to be laid with 60 lbs. second hand rails. As the work on

the project was started in June 1974 and the target for opening of the section from Jhanjharpur to Andhrathari (subsequently named as Vachaspati Nagar) to goods traffic was February 1975 and that for the whole section June 1975, the Railway Administration used non-standard 50 lbs. rails for a length of 11.5 kms. because of non-availability of 60 lbs. rails. The Administration notified on 23rd January 1975 that the section from Jhanjharpur to Andhrathari was proposed to be opened to goods traffic by the middle of February 1975 and the concerned departments on the open line of the railway were requested to take over the section from the date of its opening. The line was put to use for transport of construction materials. However, records for working out freight value of the material carried over the line from 24th February 1975 had not been maintained. The non-standard rails laid earlier were replaced by second hand 60 lbs. rails during July 1975 to November 1975 resulting in avoidable expenditure of Rs. 39 thousand on account of labour charges alone.

9.9 The sanctioned estimate did not provide for road decking on the rail bridge on the Kamla-Balan River between Lohna Road and Jhanjharpur (which falls on the open line section between Dharbhanga Junction and Jhanjharpur). However, on 1st June 1974, the General Manager sanctioned an estimate for Rs. 2.89 lakhs for providing temporary road decking over the bridge chargeable to this project. The road decking over the bridge was considered necessary for transportation of construction materials and quarry products by road from Barauni and Bhikhnathoree side required for the projected line. The work of road decking was scheduled to be completed by September 1974 but was actually completed and opened for traffic as late as 25th June 1975. By that time, the work on the projected line from Jhanjharpur to Andhrathari (now Vachaspati Nagar) had already been completed and most of the materials including quarry products was carried by rail over this bridge. The purpose for which road decking was provided on the rail bridge was not achieved.

Purchase of shingles

9.10 Tenders for supply of 2,500 cum of screened shingles of 40 mm size and 100 cum of 19 mm size were invited and were opened on 16th September 1974 though, on an average, monthly stocks of 8,819 cum of shingles of 38 mm size and 681 cum of 19 mm size were available in the quarries of the construction organisation at Balbal and of 102 cum shingles of 19 mm size in open line quarries nearby at Bhikhnathoree, during the period September 1974 to December 1975. The departmental cost for supply and transportation had been worked out as Rs. 22.34 per cum (contractor's rate for supply of shingles at Railway's Balbal quarry was Rs. 15.50 per cum including loading charges of Rs. 2.50 per cum).

9.11 However, after negotiations on 29th October 1974 with the two tenderers, the Tender Committee, on 5th December 1974 accepted the tender for supply at Jhanjharpur Railway Station of 2,500 cum of screened shingles of 40 mm size at Rs. 110 per cum (Rs. 26 per cum cost plus Rs. 84 for transportation) and 100 cum of screened shingles of 19 mm size at Rs. 123 per cum (Rs. 39 per cum cost plus Rs. 84 for transportation) by the end of February 1975. Contract Agreement was executed on 1st February 1975 without specifying separately the rates for transportation by rail and road.

9.12 The contractor supplied only 1,414.43 cum of unscreened shingles (1,368.57 cum of 40 mm size and 45.86 cum of 19 mm size) and the entire supply was made from Bhikhnathoree in railway wagons provided during 19th January to 26th March 1975. On account payment for 1,300 cum (Rs. 1.43 lakhs) was made in February 1975.

9.13 Departmental transportation of the quantity of 1,414.43 cum (38 mm against 40 mm to be supplied by the contractor) by the Construction Organisation from Balbal quarry would have cost only Rs. 31,598. Even after taking into account the fact that the freight paid at public tariff rate by the contractor (Rs. 71,993) was received by the Railway Administration itself,

the Administration incurred extra cost of Rs. 52 thousand on the amount (Rs. 1.56 lakhs) payable to the contractor for the entire supply.

Opening of the line

9.14 The new metre gauge line was targeted for opening in two stages—the section from Jhanjharpur to Andhrathari (Vachaspati Nagar) (21 kms.) by the end of February 1975 and the remaining portion upto Laukahabazar by the end of June 1975, but the entire section was actually opened for passenger traffic from 10th November 1976. In March and June 1976 the Railway Administration informed the Railway Board that the section between Jhanjharpur-Vachaspati Nagar (21 kms.) had been lying ready in all respects since January 1976 but due to meagre allotment of funds and non-settlement of compensation claims it was not possible to push through the works to open the line upto Laukahabazar. The delay in opening the section upto Vachaspati Nagar entailed avoidable expenditure of Rs. 2.50 lakhs on field establishment during January to October 1976.

9.15 Against the sanctioned estimate of Rs. 2.59 crores (including cost of land amounting to Rs. 62.13 lakhs), the expenditure booked upto the end of June 1977 was Rs. 2.50 crores (excluding estimated cost of land—Rs. 62.13 lakhs).

9.16 The Administration stated (July 1976) that the targets for opening had to be revised due to the problems arising out of delayed land acquisition, non-availability of critical materials and of budget allotment, etc. It is, however, observed from the records that the completion of line upto Laukahabazar and the running of train services on the section already completed had also been hampered due to hindrances in construction on account of non-payment of compensation to land owners and non-settlement of the incidence of the cost of land with the State Government.

CHAPTER IV

PLANT AND MACHINERY

10. Welding of rail joints

Welding of rail joints increases the life of rails as well as that of wheels of rolling stock that run over it and facilitates comfortable and noiseless ride. The rails are welded generally by the thermit process or the flash butt process. Under the former, welding of rails is done at the site itself. Under the latter, rails are welded with automatic flash butt machines at places where these machines have been installed and the welded rail panels are transported to sites of work for laying on the track. Rail joints welded by the flash butt process are universally recognised as stronger and sounder than those welded by the thermit process.

Welding by flash butt machines is done departmentally whereas welding by thermit process is done mostly by contractors and to a limited extent departmentally.

Upto certain leads welding of rail joints by the flash butt process in workshops is cheaper than that by the thermit process at site. According to the information furnished by the Railway Board to the Public Accounts Committee (1971-72) in March 1972 the cost of welding a joint by the thermit process ranged between Rs. 36.58 and Rs. 55.50 and by the flash butt process between Rs. 21.57 and Rs. 40.04 [excluding transportation cost which ranged between Rs. 5.14 (on South Central Railway) and Rs. 12.61 (on the Northern Railway) for a lead of 400 kms. at rates applicable to the transportation of railway materials].

By the end of 1970-71, nine flash butt welding machines had been installed on the Zonal Railways (except North Eastern and Northeast Frontier Railways). Taking into consideration the

working conditions, the outturn capacity of a flash butt welding machine has been assessed at 12,500 joints per shift (of eight hours working) per year as per information furnished by the Railway Board to the Public Accounts Committee (1971-72) in March 1972. The following table shows the details of output of the flash butt welding machines in terms of rail joints welded per shift per year :—

Railway	Station where machine has been installed	Number	1972-73	1973-74	1974-75	1975-76	1976-77
Central	Kalyan	1	4418	4349	2474	3347	2732
	Chalisgaon	1	2515	9598	9109	8163	5269
Eastern	Bandel	1	2682	7484	5340	6384	3350
	Mughalsarai	1	7701	3166	4328	6240	5541
Northern	Meerut	1	@12054	@13600	14910	13328	12385
Southern	Arkonam	1	12790	7314	7086	7612	5791
South-Central	Maula Ali	*1	13290	6400	transferred to Kalyan and installed there in October 1974.		
South-Eastern	Jharsuguda Junction	1	11164	11264	3788	4920	5121
Western	Sabarmati	1	17911	16321	9863	14643	12217

The output of the machine installed at Meerut (Northern Railway) was more than the capacity of 12,500 joints during the years 1973-74, 1974-75 and 1975-76 and marginally less in the years 1972-73 and 1976-77. Similarly, the output of the machine at Sabarmati (Western Railway) was more than the capacity of 12,500 joints during the years 1972-73, 1973-74 and 1975-76. However, the output of the machine installed at other stations [except those at Maula Ali (South Central Railway) and Arkonam (Southern Railway) during the year 1972-73] was less than the outturn capacity during the years 1972-73 to 1976-77; the annual outturn was generally less than

@The Northern Railway machine worked double shift with actual outturn of 24107 joints in 1972-73 and 27200 joints in 1973-74; 50 per cent of these figures have been adopted for single shift working for comparison purposes.

*This machine was transferred to Central Railway in April 1974 and re-commissioned in October 1974 at Kalyan in place of the machine proposed for condemnation.

50 per cent of the capacity indicating under-utilisation of the machines. It is also significant to note that the output of the machine which was transferred from Maula Ali to Kalyan and was commissioned at the latter station in October 1974, had come down from 13,290 joints during 1972-73 to 3,347 and 2,732 joints during the years 1975-76 and 1976-77 respectively.

According to the Central Railway Administration, the output of the machine installed and commissioned at Kalyan in October 1974 was low during 1975-76 and 1976-77 as it was utilised for welding of joints of rails required for Bombay Division only; the welding of rail joints in respect of rails required by Jhansi, Jabalpur and Nagpur Divisions was not being taken up at Kalyan as it would not have been economical in view of very long leads. The shortfall in the output of the machine installed at Chalisgaon was attributed, amongst other factors, to the age of the machine (it is stated to be 18 years old), inadequate space available for an efficient layout for unloading, stacking, sorting, machining and processing of the rails for welding and also for loading and despatch of welded panels as well as to adverse weather conditions.

The Eastern Railway Administration has attributed the shortfall in outturn to less availability of funds for track renewals and shortfall in supply of rails against the Railway Board's allotment for 90 lbs. rails during the years 1970-71 to 1973-74 and consequent reduction in the number of rails to be welded, and the age of the machine which was installed at Bandel in the year 1958.

The shortfall in the output of the machine installed at Arko-nam (Southern Railway) was mainly due to erratic and meagre supply of 60 lbs. rails.

A review of the performance of the flash butt welding plant at Jharsuguda Junction (South Eastern Railway) during 1974-75 disclosed that the output was negligible during April, May and August 1974 and there was no production during June, July, September to November 1974 due to severe congestion both in

the loading and unloading ramps of the plant on account of bulk receipt of new rails in rake-loads from the Steel Plants and poor despatch of welded rails from the welding plant. Interruption in power supply, repairs to the plant, irregular supply of rails for welding and of empty BFR type wagons for despatch of welded rail panels were also stated to be reasons for shortfall in the outturn of the machine.

Due to bulk receipt of new rails during August to October 1974 (12,612 tonnes) from the Steel Plants and poor despatch of welded rail panels from the flash butt welding plant at Jharsuguda Junction, 3,695 tonnes of new rails which had been despatched to the plant depot for welding had to be re-booked to various Engineering divisions/sub-divisions of the Railway without being welded. This entailed an avoidable expenditure of about Rs. 5 lakhs on account of handling charges and Rs. 5,790 as additional haulage cost due to cross movements.

For replacing the 44.5 kg. rails laid during 1959—62 in Gudur-Nellore section of Vijayawada Division which were manifesting signs of premature fatigue cracks and fractures, the South Central Railway Administration, in February 1975, requested Southern Railway to undertake welding of rail joints of 4,000 tonnes of 52 kg. rails at its flash butt welding plant at Arkonam.

The Southern Railway Administration agreed in May 1975 to take up the work from the middle of December 1975 and to complete it by 31st March 1976 provided South Central Railway undertook the responsibility of arranging BFR type wagons for the carriage of welded rails. The South Central Railway Administration, however, dropped (May 1975) the proposal of getting the work done at Arkonam in view of transport bottleneck.

Simultaneously, in April 1975 the South Central Railway Administration informed the Railway Board about the signs of premature fatigue cracks and fractures in the track of this section and stated that it was drawing up a programme to replace

all these rails before the end of the Fifth Five Year Plan and that it would need a flash butt welding plant in 1976-77. The plant was likely to have continuous work for some years. The Railway Board advised (June 1975) that the work of welding rails of the Railway might be got done by the flash butt welding plants installed on Central and Southern Railways.

The track in Gudur-Nellore section was relaid with unwelded rails. Due to the inability of South Central and Southern Railways to arrange for transport of welded panels, the former subsequently had to conclude a contract in May 1976 for the thermit welding of 5,348 rail points at the rate of Rs. 55 per joint (total value of contract Rs. 2.94 lakhs) excluding departmental expenditure on labour and materials. The flash butt welding machine at Arkonam (Southern Railway) was not utilised to that extent.

11. **Northeast Frontier Railway—Under-utilisation of an adzing and boring machine**

In paragraph 37 of Audit Report, Railways, 1968 the under-utilisation of an imported adzing and boring machine installed at the Sleeper Treatment Plant, Naharkatia (Assam) in December 1968, was mentioned.

A review of the performance of this machine during the period 1968 to 1976 disclosed that :

- (i) The machine had been used for boring work only.
- (ii) During the period from 1968 to 1972, its daily output (average) per shift of eight hours was about 500 sleepers against the capacity of 960 sleepers.
- (iii) The machine went out of order in September 1972 and due to non-availability of certain spare parts it was repaired and recommissioned as late as February 1975.

- (iv) The daily output (average) per shift during 1975 and 1976 was about 500 and 675 sleepers respectively.

As the daily output of sleepers treated by the Sleeper Treatment Plant was more than the full capacity of the adzing and boring machine and the outturn of this machine was less than its capacity, contract labour had to be engaged for the boring work. During the period 1968-69 to 1971-72 and 1975-76, boring of 7.79 lakh sleepers was done on the machine and 10.62 lakhs manually by contractors' labour. The Railway Administration informed the Railway Board in February 1977 that in spite of the fact that the performance of the machine could be improved to about 700 sleepers per shift, it was uneconomical to continue to work this machine.

The cost of staff engaged on the machine and the expenditure on its repair, maintenance and operation for the period from 1968-69 to 1975-76 had been assessed at Rs. 4.16 lakhs (excluding the cost of staff during the period the machine was idle). If the work of boring of sleepers done on this machine had been entrusted to the contractors, the cost would have been only Rs. 63 thousand.

The Railway Administration stated (November 1977) that boring by machine was of superior quality as compared to manual boring and had the important advantages of ensuring longer life of sleepers, better maintenance of track and consequent greater safety of train running.

12. Northern Railway—Purchase of defective plant and machinery

(i) *Surface traverser*

For the replacement of existing traverser in the Railway's workshop at Alambagh (Lucknow), which had been installed in the year 1924 and had outlived its normal life, the Railway Administration procured through the Director General, Supplies and Disposals one surface traverser of 45 tonne capacity in September 1974 at a cost of Rs. 5.13 lakhs. The machine was

found to have design defects and could not work properly. Certain modifications were carried out by the Railway in August 1975 at the instance of the representative of the firm but despite this the traverser did not work satisfactorily. The traverser, though of 45 tonne capacity, could hardly traverse one empty wagon weighing 22 tonnes at a time. Further it had a number of defects such as tongs being weak, rope pulleys breaking, rope getting off from the grooves, etc.

On receipt of an adverse report on the performance of the traverser from the Northern Railway, the Director General, Supplies and Disposals, on 18th November 1976, informed the Controller of Accounts, Madras, to withhold payment to the firm equivalent to the payment made for the defective supplies. Thereupon, the firm's representative again attended to the machine and in January 1977 the firm sent certain parts for its rectification which reached the workshop in April 1977 only. The firm's representative, who visited the workshop in August 1977 failed to set right the defects. The machine has been lying in defective condition.

(ii) *E.O.T. Crane*

One 25 ton E.O.T. crane was procured in March 1973 through the Director General, Supplies and Disposals at a cost of Rs. 3.62 lakhs for installation in the crane repair section of the workshop at Jagadhri. The crane was considered essential for handling of boilers, superstructures, underframes, etc.

The crane was inspected by the Director of Inspection in the firm's premises and 90 per cent advance payment was made to the firm in January 1973 on proof of inspection and despatch. The erection of the crane was completed by the Engineering department of the Railway in May 1974 and electrical connection was provided in September 1974. The crane could not be commissioned as the final inspection, as provided in the contract, was not carried out by the Director of Inspection in spite of requests made by the Railway Administration in June, September

and October 1975 and lastly in August 1976. In December 1976 when a joint inspection was conducted by the representatives of the Director of Inspection and the firm, certain discrepancies and deficiencies were noticed. These are still (December 1977) to be made good.

Besides, spare parts and accessories costing Rs. 28,778 sent along with the machine had not been received by the Jagadhri workshop, and a claim preferred on the Central Railway in May 1973 for transit loss is stated to be still (December 1977) pending.

Due to delay in commissioning of the crane, the economy in recurring expenditure of Rs. 13,932 per annum by reduction in the number of unskilled staff as envisaged in the financial justification for the crane was not achieved.

The Railway Board stated (January 1978) that the crane was commissioned in December 1976 and had been functioning since then. The work of repairs for which it was acquired was transferred to Amritsar workshop but the crane was being used at Jagadhri for handling steel body coaches affected by corrosion.

(iii) *Milling Machine*

One milling machine ordered on the Hindustan Machine Tools Limited at a cost of Rs. 1.67 lakhs for replacement of the existing machine in the Railway's workshop at Alambagh for stamping dies, punching, etc., was received in the workshop in August 1973 in damaged condition. The representative of the firm, who inspected the machine in October 1973, found that certain parts were either missing or had broken in transit. The machine could not be commissioned as the missing parts could not be replaced locally. Subsequently, in August 1974 when the firm's representative visited the workshop to attend to some other machine it was noticed by him that four parts of the machine had got damaged due to exposure to rain water and had been rendered unserviceable. While three parts were supplied

in July 1975, the fourth was supplied in July 1976 only. These were fitted to the machine in October 1976. The machine is stated to be working since then.

(iv) *Maxicut Gear Shaper*

One Maxicut Gear Shaper was procured by the Railway in May 1971 at a cost of Rs. 72,600 and installed at the Railway workshop at Alambagh for cutting different types of gears. After installation of the machine, it was noticed that the cutters required for machining of various types of gears had not been supplied by the firm along with the machine. Accordingly, a requisition for eight different types of cutters was placed on the Stores department in 1972, against which only 3 cutters were received and 5 are still (January 1978) awaited.

The machine was transferred to Charbagh workshop (Lucknow) in May 1977. It was intended to be used for mass gear cutting purpose. It was installed and commissioned in this workshop in November 1977. The scope of the utilisation of the machine is restricted due to the non-availability of the five types of cutters.

(v) *Vertical spindle surface grinder*

A vertical spindle surface grinder, required for grinding plates, gauges, dies, blocks, jigs, etc., valued at Rs. 50 thousand was received on 12th October 1973 at Jodhpur workshop, duly inspected by the Director of Inspection. The indicating lamp, electric wiring diagram and the manual of operation and maintenance had not been supplied by the firm. The firm's representative who visited the shop on 6th January 1975 could not give the demonstration of the machine, as the single phase preventor was found to be defective. The firm replaced the single phase preventor in December 1975, but did not supply the remaining items. The Service Engineer of the firm did not visit the workshop for the demonstration of the machine in spite of repeated reminders to the firm.

Audit was informed by the Railway Board (January 1978) that the deficiencies in the machine were brought to the notice of the Director General, Supplies and Disposals in September 1976. According to the Director General, Supplies and Disposals the defects/short supply came to his notice through a communication received from the Railway in June 1977. The Controller of Accounts was asked by the Director General, Supplies and Disposals in September 1977 to recover the cost of deficient items from the pending bills of the firm. The machine has not so far (January 1978) been commissioned.

13. Central Railway—Defective cranes

The Director General, Supplies and Disposals placed an order in January 1972 on a firm of Madras for four electrically operated overhead travelling cranes each of 25.4 tonnes capacity with accessories and equipment at a total cost of Rs. 13.83 lakhs for supply to the Carriage and Wagon Workshops, Central Railway, Matunga (Bombay).

As per terms of the order, supply was to be completed within 10 months from the date of the order (that is, by 30th November 1972) and 90 *per cent* payment of the cost of the equipment was to be made on proof of despatch after initial inspection by the Director of Inspection, Madras at the firm's works and balance 10 *per cent* after their erection and commissioning and final testing by the Director of Inspection, Bombay.

The date of delivery of the cranes was extended by the Director General, Supplies and Disposals from time to time and lastly upto 31st December 1976 subject to recovery of liquidated damages. The cranes, duly inspected by the Director of Inspection, Madras, were supplied by the firm during June-July 1973. However, accessories and components like lifting beams and bolts essential for commissioning of the cranes were supplied as late as July 1975 and January 1976. Advance payments amounting to Rs. 12.14 lakhs were made to the firm between May 1973 and January 1976.

All the four cranes were erected and one was offered for inspection in August 1975 and the other three in July 1976. The Director of Inspection, Bombay who carried out the inspection of two cranes, pointed out several defects which were immediately brought to the notice of the firm. The firm's representative visited the workshop in December 1975, May 1976 and September 1976 and set right the defects in the two cranes in September 1976. When the cranes were put to use they again developed defects within a short period of 10 days. It was found that the 'magna creep arrangement' in both the cranes continued to be defective and the drum controller springs had lost tension owing to overheating. These defects were reported to the firm in November 1976 but had not yet (December 1977) been rectified.

The other two cranes, though erected in July 1976, could not be put on trial owing to their defective drum controllers and main contactors. These defects were brought to the notice of the firm in November 1976. One of these two cranes was inspected by the Director of Inspection, Bombay in August 1977 and the defects pointed out by him were communicated to the firm in September 1977. The defects have not been rectified so far (December 1977).

The Railway Administration proposed to the Director General, Supplies and Disposals in June 1977 that the existing drum controllers might be replaced by superior ones and the magna creep breaking circuit by hydraulic thruster type breaking arrangements at an estimated cost of Rs. 99,807 through another agency at the risk and cost of the firm. Final decision is yet (December 1977) to be taken.

The Director General, Supplies and Disposals had intimated the Railway Administration in April 1977 that the firm had not submitted any bills for payment and, therefore, he could not withhold any amount from the dues of the firm. All the four defective cranes (for which Rs. 12.14 lakhs had already been paid) have been lying idle with the Railway Administration for

more than four years, occupying valuable covered crange space without any addition to lifting capacity.

14. South Central Railway—Loading of coal by cranes with grabs

The loading of coal on the tender of steam locomotive is done manually or by cranes using buckets or grabs of different capacities.

The Work Study Branch of the Railway Administration headed by the Efficiency Officer recommended in 1970 that provision of grabs of one tonne capacity (in replacement of buckets then in use) on the cranes which were being used in the locomotive shed, Kazipet (Secunderabad Division) would result in the reduction of man-power from 79 to 16 men and of a net saving of Rs. 1 lakh per annum. Accordingly, with the approval of the Deputy Chief Mechanical Engineer, Lallaguda workshop, arrangements were made in September 1970 with Railway workshop, Parel (Central Railway), for manufacture and supply of six grabs. However, action was not taken simultaneously to procure chains which are essential for working the grabs.

During the period from May 1971 to April 1972 six grabs costing Rs. 31,120 were received from the workshop.

In early 1974, the Senior Divisional Mechanical Engineer observed that efforts would have to be made to put the grabs into use by procuring necessary chains from the Central Railway and arranging training of staff on that Railway. Against a requisition for the chains placed on the Stores Branch in May 1974, purchase orders were issued in March and May 1975. Five chains were received in May and September 1975. The staff were deputed for training to Bhusaval during 4th to 6th August 1975. Trials were conducted in October 1975 and January 1976 and loading by grabs instead of buckets was introduced from March 1976. However, only 25 posts of yard khalasis were surrendered in March 1976 as against 63 posts required to be surrendered as per the recommendations of Work Study Branch of

the Railway. Besides, the anticipated savings in expenditure amounting to Rs. 1 lakh per annum did not materialise due to delay in the implementation of the recommendation.

The Railway Administration stated in November 1977 that the loading of coal by grabs was finally given up from 31st March 1977 in view of difficulties experienced in its operation and maintenance. The difficulties reported were (i) cranes going out of commission for periods of long duration due to excessive wear and tear of the crane pivot and the gears caused by the grabs, (ii) unsatisfactory maintenance of the grabs in the Running sheds, (iii) inadequate depth of the coal stacks resulting in damage to the grab due to its striking the floor, and (iv) excessive production of coal dust due to the impact of the grab. However, the 25 posts of khalasis which were surrendered in March 1976 have not been revived.

It may be mentioned that the loading by grab was discontinued by the loco foreman and not with the prior approval of the authority which introduced the system of loading by grabs; that loading by crane with grabs is prevalent in two other locomotive sheds of Vijayawada Division and difficulties encountered in their working had been got over by appropriate remedial measures. It is not clear why similar remedial measures could not be taken in the case of loading of coal by grabs at the locomotive shed, Kazipet with a view to achieving economy in expenditure.

15. Northern Railway—Import of a lathe machine

Against an indent placed by the Railway Electrification Organisation on 4th September 1971 for the supply of a double-headed axle journal turning and burnishing lathe machine (motor driven) suitable for handling wheelsets of A.C. electric locomotives at the Locomotive Shed, Kanpur, the Director General, Supplies and Disposals invited tenders due for opening on 17th March 1972 (which was extended to 6th April 1972). Four tenders including one from the Heavy Engineering Corporation were received. The quotations of the other three firms were for imported lathes. The offer of firm 'A' of Bombay was the lowest.

Duplicate copies of these tenders were forwarded by the Director General, Supplies and Disposals to the indentor in April 1972 for scrutiny and comments stating, *inter alia*, that firm 'A' had quoted for a machine of Polish make and had confirmed that the machine offered by it was suitable for handling wheelsets as per drawings furnished to the firm with the tender enquiry but, for final confirmation, the firm would require the fully dimensioned drawings of the wheelsets to be handled.

Though the machine offered by the Heavy Engineering Corporation was considered suitable by the Administration, its purchase was not recommended because of long delivery period of 30 months against required delivery period of six months. The offer of firm 'A' with the earliest delivery among all the offers (8 to 10 months from issue of import licence) was accepted by the Administration. Accordingly, the Director General, Supplies and Disposals entered into a contract with firm 'A' in January 1973 for the supply of the machine as per required drawings at a total cost of Rs. 3.32 lakhs (excluding sea freight, customs duty, transit insurance and railway freight etc). As per conditions of contract, the "Principals are to commission the machine and give free demonstration of the machine to demonstrate the maximum working capacity at consignee's place after its erection at site and guarantee for the satisfactory performance of the machine from any and/or manufacturing defects for a period of 12 months from the date of satisfactory commissioning of the machine". Full f.o.b. cost was to be paid against documents of despatch to the supplier's principals in Poland in non-convertible Indian rupees under Indo-Polish Trade Plan. For this purpose, foreign exchange amounting to Rs. 3.36 lakhs was released by the Ministry of Finance in December 1972.

In June 1973, firm 'A' requested the Director General, Supplies and Disposals to supply once again the drawings for the wheelsets required to be handled by the machine. These were supplied to it by the Administration in July 1973. When the firm pointed out in September 1973 that detailed dimensions of axle journals had not been shown in the drawings, it was

advised by the Administration on 22nd October 1973 to specify discrepancies after studying them. The firm reiterated that the drawings did not indicate the detailed dimensions of axles and wheelsets and again asked for the detailed drawings. The Engineer-in-Chief, Railway Electrification was informed by the firm on 5th November 1973 that its principals had already manufactured the machine but were unable to complete the toolings in the absence of the drawings for axle journal with the dimensions and tolerances. After repeated requests, clear prints of the same drawings as had been supplied earlier were given to the representative of the firm on 23rd November 1973.

The lathe machine arrived at Kanpur in July 1974. The foundation work for the machine was undertaken and completed in October-November 1974 and the lathe machine was installed in December 1974. The representatives of the principals who visited the Loco Shed, Kanpur for commissioning the machine in September 1975 (nine months after the installation of the machine) expressed doubts about the suitability of the machine for electric loco wheelsets. The firm's engineer, who inspected the machine in October 1975 promised to consult the principals in Poland regarding the suitability of the machine. The firm informed the Administration in November 1975 that according to its principals it would be possible for them to modify the machine to suit the electric loco wheelsets provided further detailed drawings of the wheelsets to be mounted on the journal turning and burnishing machine were supplied. The required drawings were supplied between December 1975 and March 1976. The firm advised the Administration in May 1977 to get the modification devices, as suggested by its principals, manufactured in its own workshop or in any other suitable workshop in Kanpur. The Administration did not agree to undertake the work and informed the firm accordingly in May 1977. Since the firm failed to commission the machine, the Director General, Supplies and Disposals issued instructions in June 1977 to the Controller of Accounts, Calcutta to withhold the entire amount paid to the firm and its principals from the firm's pending bills.

The Department of Supply advised the Railway Board on 5th January 1978 that Rs. 1,37,155 had been withheld from the pending bills of the firm. The Railway Board stated (January 1978) that the modification to the lathe had been completed on 16th December 1977 and turning and burnishing of journals had been demonstrated by the firm's representative and the operation of the machine was under observation. The firm was advised on 16th December 1977 that fresh warranty clause would be applicable in this case since the machine could not be commissioned as per terms of the contract. The reaction of the firm is awaited (January 1978).

CHAPTER V

PURCHASES AND STORES

16. Southern Railway—Import of solid wheels

Procurement of solid wheels

In April 1972, Southern Railway placed an indent on the Railway Board for procurement of one thousand solid wheels during 1973-74 to meet the requirements of changing wheels of BCX/BOX type wagons placed on line between 1963 and 1968. Subsequently, it procured 242 wheels from Central Railway and advised the Railway Board in August 1973 that its requirement would be 758 wheels only.

The Railway Board placed an order for 758 wheels on a French firm on 30th October 1973 at a cost of Rs. 19.86 lakhs (foreign exchange content Rs. 12.72 lakhs). These wheels were received by the Railway between September 1974 and August 1975.

The following points are worth mentioning :—

- (i) In October 1973 the Railway Board enquired of the Southern Railway Administration why solid wheels for BCX/BOX wagons were required inasmuch as the wheels did not require replacement during the life of the wagons. The Railway Administration informed the Railway Board on 17th October 1973 that one thousand wheels for BOX wagons as asked for had been correctly estimated on the basis of its holdings of such wagons.
- (ii) On 27th October 1973, the Research, Designs and Standards Organisation also informed the Railway Administration, with reference to its indent on the

Railway Board, that the wheels should last the lifetime of the wagons and that the question of condemning such wheels within a period of 15 years should arise only in solitary cases and that as per the data regarding the wear of solid wheels furnished to it by the Railway Administration during March 1968 and July 1972, the average life of a solid wheel would work out to 40 years.

- (iii) On 8th November 1973 the Mechanical department of the Railway asked the Stores department to cancel the indent on the ground "that the assessment was made by mistake". The Railway Board was also moved in November 1973 and January 1974 for cancellation of the order or reduction in quantity but this could not be done as a firm contract had been concluded on 30th October 1973.

Disposal of solid wheels

As a consequence, in November/December 1974 the Railway Administration assessed that 625 wheels were surplus to its requirements and offered them to other railways. In assessing its requirements the Railway Administration envisaged replacement at the rate of 100 wheels per annum and covered its requirements over a period of 28 months. The actual consumption of solid wheels during 1974-75 to 1976-77 was as mentioned below :—

Period	Number of solid wheels used
From September 1974 to August 1975	10
From September 1975 to August 1976	47
From September 1976 to August 1977	178

Of the 625 wheels declared surplus, 50 numbers were sent to Northern Railway in October 1975 and 400 numbers to South Eastern Railway in March 1976 against latter's allotment for 1975-76 for which procurement had been earlier planned by the Railway Board to be made from indigenous sources.

In March 1976 the Southern Railway Administration advised the Railway Board that as a result of further review 282 imported wheels were surplus and requested that these might be disposed of against the programme indents of the Railways for the year 1977-78. The Railway Board, in August 1976, asked South Eastern Railway to accept the excess stock and correspondingly reduce its order on the indigenous sources.

The South Eastern Railway advised the Railway Board in September 1976 that its order on the Hindustan Steel Limited had been cancelled as it had an overstock of more than 600 wheels. In March 1977 the South Eastern Railway declared a surplus of 572 wheels.

Earlier in September 1976 Southern Railway transferred 12 wheels to Central Railway (which was already holding a surplus stock) and 13 wheels to Western Railway. The wheels so transferred are lying unused (December 1977).

The Railway Board issued instructions to the Railways in January 1978 to make wheelsets of these wheels for use in the manufacture of BCX/BOX type wagons and to procure axles for this purpose.

17. Northeast Frontier Railway—Excessive procurement of spring steel flats

Spring steel is procured by the Railway Board annually after ascertaining the requirements of the zonal Railways. In May 1975 the Railway Board requested all the zonal Railways to communicate their requirements for the year 1976-77 duly vetted by their Finance Branch. The Northeast Frontier Railway Administration communicated on 3rd July 1975 its requirements as 1,476 tonnes of spring steel flats, without getting the same vetted by its Finance Branch.

While forwarding the schedule of consolidated requirements to all the zonal Railways, the Railway Board advised them, in August 1975, to scrutinise the items pertaining to them and confirm the correctness or otherwise of the same. In September

1975, the Railway Administrations were again asked to confirm that the specifications, sizes and quantities were in order.

The Northeast Frontier Railway Administration advised the Railway Board on 28th November 1975 that its requirements of 1,469 tonnes as included in the schedule was in order. On 5th December 1975, the Railway Board sought confirmation of the Railways by 25th December 1975 to the correctness of the quantities, sizes and specification mentioned in the tender schedule and that their procurement was inescapable. It also enquired about the availability of funds. No reply was sent by the Railway Administration before the stipulated date of 25th December 1975.

The requirements of spring steel flats were reassessed by the Railway Administration (in consultation with its Finance Branch) and the Railway Board was advised in March 1976 of a reduction of 657 tonnes in its requirement. This communication was, however, not received by the Railway Board which concluded on 3rd April 1976 a contract with a firm in Calcutta for supply of 3,391 tonnes of spring steel flats and rounds inclusive of the requirements of 1,479 tonnes of Northeast Frontier Railway.

Although the copy of Railway Board's contract endorsed to the Financial Adviser and Chief Accounts Officer was received on 19th April 1976 the Stores department received the copy only on 16th July 1976. On receipt of an intimation from the Stores Depot on 14th July 1976 that supplies against the above mentioned contract had been received, the Railway Administration advised the Railway Board on 29th July 1976 of further reduction in its requirements—this being only 62.3 tonnes as against 1,479 tonnes contracted for. The efforts made by the Railway Board to reduce the quantity did not materialise as it was found that the firm had already rolled the material against almost all the items except 50 tonnes of one item which was thereafter cancelled.

In February 1977 the Railway Administration informed the Railway Board that out of 1,465 tonnes of spring steel flats received by it, 1,399 tonnes were overstock. The Railway Board

directed the other Railways to draw their requirements from Northeast Frontier Railway. Consequently, 831 tonnes of spring steel flats were transferred (upto November 1977) to Central, Eastern, Northern and Western Railways and the Chittaranjan Locomotive Works. The Railway Administration expects (January 1978) that a further quantity of 119 tonnes would be transferred to other Railways.

The assessment of the requirements of spring steel flats at 1,476 tonnes was on the high side as the two depots which stock these items had advised their requirements as 119 tonnes. The actual consumption of these items for the last three years were :—

Year	tonnes
1974-75	89.2
1975-76	195.5
1976-77	216.8

The quantity of 1,465 tonnes received during 1976-77 thus represented the requirement of about seven years. The cost of 1,399 tonnes of spring steel flats procured in excess of the requirement was Rs. 35.04 lakhs excluding freight charges which amounted to Rs. 2.39 lakhs.

The General Manager directed in November 1976 that a detailed enquiry should be held by a Committee of three senior administrative grade officers for fixation of responsibility for increasing the quantity. The Committee found, amongst other things, that the estimated monthly requirements on which the provision was based had been worked out in the Mechanical Branch of the Railway purely on theoretical basis and that it would have been prudent to have exercised a recheck whether the number of flats requiring replacement was assessed correctly, when the past consumption was much lower. Action against the officers found responsible is still (December 1977) to be taken.

The Railway Administration stated (January 1978) that after off-setting the quantity transferred/expected to be transferred

to other Railways and taking into account its requirement upto the end of March 1979 plus buffer stock for three months, the excess quantity would be 143 tonnes.

18. Eastern Railway—Replacement of ignitron type rectifiers by silicon type rectifiers in WAM-2 electric locomotives

The Railway Administration invited open tenders in February 1973 for replacement of ignitron type rectifiers by silicon type rectifiers in twenty WAM-2 electric locomotives. The tenders were due to be opened on 14th June 1973 but the date was extended upto 12th July 1973. Tenders were received from five firms including the Bharat Heavy Electricals Limited, Bhopal, and were opened on 12th July 1973. Certain firms offered various alternatives. These were sent to the Research, Designs and Standards Organisation in August 1973 for technical scrutiny and recommendations. The Research, Designs and Standards Organisation sent its preliminary recommendations on 12th October 1973 and final recommendations on 26th November 1973 indicating, *inter alia*, the technical suitability in the following order :—

	Types of Diodes
(i) Firm 'A'	S-22 BR 500/D (Diffused junction)
(ii) Firm 'A'	S-18 FN 350 (Alloyed junction)
(iii) Firm 'B'	321 UMR 200 (Diffused junction)
(iv) The Bharat Heavy Electricals Limited, Bhopal.	S-18 FN 350 (Special) (Alloyed junction)

The rates quoted by firms 'A' and 'B' were valid upto 11th November 1973 and that of the Bharat Heavy Electricals Limited, Bhopal, upto 11th September 1973. The firms were requested on 19th November 1973 to extend the validity of their offer upto 31st January 1974. While firm 'B' and the Bharat Heavy Electricals Limited agreed to extend the validity of their offers upto 31st January 1974 without any increase in rates, firm 'A' extended the validity of its offer subject to increase in its rates.

The Chief Electrical Engineer proposed on 27th November 1973 the appointment of a high powered committee to examine the tenders. The General Manager approved the constitution of a tender committee consisting of the Chief Electrical Engineer, the Chief Engineer (Construction) and the Financial Adviser and Chief Accounts Officer, on 11th January 1974. The members of the tender committee were informed of their nomination on 7th February 1974 only.

As the Tender Committee had not been constituted till 7th February 1974, the tenders could not be considered within the extended validity date, namely, 31st January 1974. These firms were again requested on 4th February 1974 to extend the validity of their offers upto 18th March 1974. Firm 'B' agreed to the extension of the date with stipulation that the Railway should supply 5.52 tonnes of scrap electrolytic copper and 4.72 tonnes of scrap aluminium f.o.r. Bombay and that the contract would be activated after receipt of such scrap materials. It further indicated that the quantity discount offered originally should be treated as withdrawn.

The tender committee recommended in February 1974 that negotiations should be conducted with these three firms for obtaining clarifications on certain technical and financial aspects. Accordingly, these firms were requested on 3rd April 1974 (after more than a month) to attend a meeting to be held on 17th April 1974. They were also requested to extend the validity of their offers by a further period of one month to enable finalisation of the tenders. The meeting was, however, postponed from time to time on the requests of the firms (made on 10th April 1974) and on account of Railway strike of May 1974, and was ultimately held on 5th August 1974. The firms, while agreeing to keep their offers open, requested for increase in rates due to steep rise in the cost of raw materials and labour. After considering the relative advantages and disadvantages of the respective offers, and taking into account the special terms and conditions, the contract was awarded to firm 'B' at a total cost of Rs. 24,61,404 as against its original offer of Rs. 19,21,000.

The original tender of firm 'B' opened on the 12th July 1973 and valid upto 31st January 1974 was subject to price variation ; "any abnormal increase in the price of loco components, raw material beyond $7\frac{1}{2}$ per cent will be to the account of the railway". The final revised offer, however, was firm.

The estimated cost of the original tender with reference to the price variation clause has been worked out in Audit as Rs. 21.91 lakhs. The extra expenditure due to delay in the finalisation of the tenders works out to Rs. 2.71 lakhs.

The Railway Administration stated (April 1977) that if the escalation charges were taken into account, the value of original offer of the firm would have been Rs. 24.50 lakhs. It may be mentioned that the stipulation in the original offer was for escalation in the price of "loco components, raw material". However, while working out the notional escalated cost of the original offer the Railway Administration has taken into account the escalation for labour as well as material even though the original offer was not subject to wage escalation.

19. Western Railway—Non-utilisation of axle boxes

The Railway Administration placed an order on the Chittaranjan Locomotive Works in December 1967 for the supply of 2,390 axle boxes ; the quantity was reduced to 1,450 numbers in February 1969. However, the Administration agreed to accept unmachined castings for the axle boxes as the Chittaranjan Locomotive Works did not have spare machining capacity. These castings were to be machined in the Railway's workshop at Kota.

Against the revised order for 1,450 numbers, 1,120 unmachined castings were received during 1969 to 1973 at the three Stores Depots (Kota, Parel and Pratap Nagar). In the absence of records, the receipt and whereabouts of remaining 330 castings of the value of Rs. 0.43 lakh are not ascertainable.

As these castings could not be machined for want of machining capacity in the Railway's workshops, 892 castings were offered to Southern Railway in November 1970. When this did

not materialise, the castings were offered to other Railways on transfer basis but there was no response from them.

In July 1973 an order was placed on a firm of Bombay for machining these castings at the rate of Rs. 48 each. The firm machined 13 castings and the order for the balance quantity was cancelled as there was no prospect of its completing the work.

In January 1976, efforts were again made to get the machining done in Railway's workshop at Kota but it could not be done for want of machining capacity. It was then decided to get the work done in the Railway's workshop at Bhavnagar. The first lot of 380 castings was sent to that workshop in February 1976; but only five axle boxes duly machined were returned in July 1976 and thereafter the work was suspended for the reasons that these axle boxes did not have machining allowance as per drawing due to defects in casting. Further, the cost of machining was estimated to be Rs. 308 each casting, which was considered to be high.

During April-May 1976, one hundred castings were sent to the Railway workshop, Junagarh and six to Ajmer for machining, but these could not be machined.

The castings of axle boxes valued at Rs. 1.47 lakhs had been lying unused for a period of over seven years. Another order has been placed in July 1977 on a firm of Jaipur for the machining of these castings at the rate of Rs. 145 each. The first instalment of 200 castings was delivered to the firm in December 1977 for machining.

20. North Eastern Railway—Procurement of lead acid stationary cells

In pursuance of the decision of the Railway Board that the work of inspection of signalling equipment should be transferred to the Research, Designs and Standards Organisation from 1st June 1968, the Director General of that Organisation advised the Railways in August 1968 that the inspection of all electrical signalling equipment would be done by his inspecting officers at Madras, Calcutta and Bombay irrespective of the fact whether

the orders were placed directly by the Railways or through the Director General, Supplies and Disposals. In April 1973 the Director General, Research, Designs and Standards Organisation advised the Railways that in the purchase orders for stationary lead acid batteries for use in the Signal and Telecommunication installations provision should be made for (i) resistance to over-charge test and (ii) life test in addition to the tests already mentioned in the Indian Standards Specifications in order to ensure quality control and protect the Railways against poor quality supplies.

The Controller of Stores, North Eastern Railway, placed two indents on the Director General, Supplies and Disposals one in July 1974 for 130 numbers cells lead acid secondary closed top stationary type in hard rubber container 500 AH capacity, etc., to IS 1651—1970 and the other one in March 1976 for 240 numbers lead acid stationary cells each cell of 2 volts 120 AH capacity, etc., to IS 1651—1970 amended upto date. The instructions about the additional tests to be carried out had not been mentioned in these indents. Besides, the Director of Inspection of the organisation of the Director General, Supplies and Disposals was indicated therein as the inspecting authority instead of the inspecting officers of the Research, Designs and Standards Organisation.

The Director General, Supplies and Disposals placed an order on firm 'A' in July 1975 for supply of 130 lead acid stationary cells, type DIOS, 2 V 500 AH capacity in hard rubber single cell containers at the rate of Rs. 956.25 each plus central sales tax (supply to be completed by 31st December 1975 later extended upto 6th August 1976 with token liquidated damages) and two orders in June 1976 on firms 'A' and 'B' for supply of 120 numbers lead acid stationary cells by each of the firms at the rate of Rs. 348 each plus central sales tax. The supply was to be completed in August-September 1976. The supplies against the order placed in July 1975 were received by the Railway from firm 'A' in August 1976 and those against the orders placed in June 1976 were received in November-December 1976.

The supplies from firm 'A' were rejected by the consignees in June 1977. All the 247 cells received from firm 'A' (130 against the order placed in July 1975 and 117 against that placed in July 1976) have been lying unutilised with the Signal Inspector (Construction) as they could not be put in service because they did not conform to the external measurement and the rated capacity as per specifications. These cells had been inspected and passed by the Director of Inspection (of the organisation of the Director General, Supplies and Disposals). As these cells have not yet (January 1978) been subjected to additional tests it is not known whether they would stand (i) resistance to overcharge test and (ii) life test. A sum of Rs. 1,64,080 was paid to firm 'A' in July-November 1976 towards 95 *per cent* cost of the cells supplied by it. Besides, an expenditure of Rs. 2,414 was incurred as freight charges.

The Railway Administration stated (August 1977) that the Deputy Controller of Accounts, Department of Supply, Madras, had been requested in July-August 1977 to effect recovery of advance payment made to firm 'A' including Railway freight and to withhold payment of 5 *per cent* of bill of the supplier. It also explained that the Research, Designs and Standards Organisation's letter of August 1968 stipulating inspection by that Organisation instead of by the Director of Inspection of the Director General, Supplies and Disposals had not been received in the Signal and Telecommunication and the Stores departments of the Railway. It further stated that the Research, Designs and Standards Organisation's letter of April 1973 prescribing additional tests, namely, resistance to overcharge test and life test, had not been received in the Stores department. It was, however, received in the Signal and Telecommunication department which placed the requisition.

The circumstances in which the lead acid cells had been found as not conforming to the specifications stipulated in the contract even though these had been passed after inspection by the Director of Inspection of the Director General, Supplies and Disposals and in which the Railway Administration failed to prescribe the additional tests are still to be investigated.

21. Northeast Frontier Railway—Purchase of coupling hooks

The Director General, Supplies and Disposals placed an order on 7th May 1970 on firm 'A' for supply of 408 numbers of coupling hooks (Metre Gauge) complete with bush to the Assistant Controller of Stores, Northeast Frontier Railway, New Bongaigaon at the rate of Rs. 74 per piece. The delivery was to be completed within 4 to 6 weeks.

The stores put up for inspection by firm 'A' were rejected by the Director of Inspection, Bombay on 9th June 1970 on the ground that they were rusty. The stores offered for reinspection on the 29th June 1970 after cleaning the rust were again rejected by the Director of Inspection on 9th July 1970 on the ground that they did not conform to the drawing.

On 12th December 1973, that is, after the lapse of a period of over three years from the stipulated period of completion of the supply, the Controller of Stores enquired of the firm and the Director General, Supplies and Disposals the position of supply. The firm stated that though it had offered the stores for reinspection on 29th June 1970, there was no response from the Director of Inspection and it had, therefore, scrapped the stores. In fact, the stores offered for reinspection on 29th June 1970 had been rejected as stated earlier.

With reference to the enquiry made by the Controller of Stores in December 1973, the Director General, Supplies and Disposals served a notice-cum-extension letter on the firm on 20th March 1974 for completion of the supplies by 15th May 1974 even though the contract had expired in 1970 and had not been kept alive by extension thereafter. As firm 'A' did not supply the stores the contract was cancelled on 20th June 1974 at its risk and cost.

After inviting fresh tenders, the Director General, Supplies and Disposals placed an order on the 19th October 1974 on firm 'B' at the rate of Rs. 260 per piece resulting in an extra expenditure of Rs. 75,888. The stores were supplied by firm 'B' on 23rd January 1975.

The extra expenditure of Rs. 75,888 could not be recovered from firm 'A' as the risk purchase was not effected within six months from the date of breach of contract, namely, 20th June 1970. The general damages were not claimed from firm 'A'.

It may be mentioned that firm 'B' on which orders were placed in October 1974 was formerly known by the name of firm 'A'.

22. Northern Railway—Blowers driven by electric motors

The Controller of Stores, Northern Railway placed an order on a firm of Delhi in January 1973 for the supply of ten blowers driven by 10 horse-power electric motor at the rate of Rs. 3,080 each. One blower was required to be supplied to the consignee, namely, the Deputy Chief Mechanical Engineer, Jagadhri workshop, for approval before despatch of the remaining nine blowers. The blower supplied in March 1973, when put on trial, was found not upto the mark. The ball bearing fitted thereto broke within one week's service. The firm replaced the broken ball bearing in June 1973.

The Deputy Chief Mechanical Engineer informed the firm in July 1973 that the blower did not give any trouble after the replacement of the ball bearing cage and asked the firm to despatch the remaining nine blowers as soon as possible. These were supplied by the firm in August 1973 and installed at Jagadhri/Kalka workshops. The motor of one of the blowers got burnt in a short spell of time and the firm was advised of it in December 1973. The motors fitted to seven blowers got burnt and were damaged shortly after their commissioning. These were sent to the firm during April to July 1975 for rectification. The first lot of five blowers was received back in June 1975; the second lot of two blowers is stated to have been received back from the firm in June 1977. Even after repairs, the blowers were reported to be not functioning satisfactorily.

In the meantime, three orders (one each in March and August 1974 and the third one in January 1975) valued at Rs. 1,38,780 were placed by the Controller of Stores on the same firm (after inviting limited tenders) for the supply of ten blowers, electric motor driven, five of 10 horse-power each and five of 25 horse-power each. Before these orders were placed, the performance of the earlier supplies was not ascertained. One blower was received by the Works Manager, Kalka workshop in August 1974 and nine blowers were received by the Deputy Chief Mechanical Engineer, Jagadhri workshop, in January and March 1975. These blowers also failed to function as they also suffered from the same defects as the previous supply of ten blowers driven by 10 horse-power motors.

On opening the motors it was found by the Deputy Chief Mechanical Engineer, Jagadhri workshop that the aluminium squirrel cage provided on the rotors had melted out and was damaged, which caused the burning out of motor windings. The aluminium casting was stated to be "absolutely useless" and the squirrel cage was short circuited at a number of places through the laminations. The motor winding was not upto the mark; impellers were made in a shabby manner. In some cases motor shafts got bent due to weak design. The motors were reported to be "irreparable". The blower as a whole had not been statically or dynamically balanced. Consequently, it vibrated very violently and tended to even break the body. In August 1976, the Works Manager, Jagadhri workshop, informed the Chief Workshop Engineer that all the blowers supplied by the firm were defective and were not functioning at all.

Full cost of ten blowers, driven by 10 horse-power motors (ordered in 1973), amounting to Rs. 31,724 was paid to the firm in September 1973. A sum of Rs. 1,28,648 representing 90 per cent payment was also made to the firm on proof of inspection and despatch of the other ten blowers (ordered in 1974 and 1975). In March 1976, the Controller of Stores was advised by the Mechanical department to take up the matter with the firm and to withhold all payments due to it. As sufficient

dues of the firm were not outstanding with the Railway, the Accounts departments of other Railways were addressed in August-September 1976 and May 1977 to withhold payments to this firm. Since the firm neither rectified the defects nor replaced the defective blowers, its name was struck by the Controller of Stores in June 1976 off the list of registered suppliers.

The Railway Board stated (January 1978) that the firm subsequently repaired ten motors and they were working.

23. Central Railway—Purchase of gear rims for D.C. electric locomotives

D.C. electric locomotives (64 numbers including 23 numbers EA/1 type locomotives for passenger services) which were in use in Bombay-Igatpuri and Bombay-Pune sections of Central Railway had become due for replacement in 1963-64. During the year 1969-70 three EA/1 type locomotives had been replaced leaving 20 such locomotives then in service.

A passenger train hauled by an EA/1 D.C. electric locomotive was derailed on 3rd March 1970 between Malavli and Kamshet stations on the Lonavla-Pune section. The derailment was attributed to the breakage of the gear rim of the trailing driving wheel of the locomotive. In the provisional findings the Additional Commissioner, Railway Safety, Western Circle, *inter alia*, recommended in March 1970 that the gear rims of the driving wheels of all the locomotives of this type should be subjected to a crack-detection examination on an urgent basis and any rim in which fatigue cracks might have started should be replaced at once.

The Central Railway Administration, without conducting the crack-detection examination on the gear rims of 20 such locomotives which were then in service, approached the Railway Board on 24th March 1970 to sanction purchase of 35 gear rims (*ad hoc* assessment) and to release foreign exchange amounting to Rs. 4.21 lakhs for importing gear rims from the United Kingdom. On receipt of approval to the release of foreign

exchange, the Railway Administration placed an express indent on 29th May 1970 on the India Supply Mission, London which in turn placed an order on a British firm on 24th September 1970 for supply of 28 gear rims at a cost of £ 7,794 (about Rs. 1.40 lakhs) f.o.b. Liverpool/Birkenhead.

The crack-detection test on the gear rims of 19 locomotives (one locomotive had been condemned by then) had been completed by end of August 1970 and no crack was noticed on the rims of any of the locomotives. Out of 28 gear rims which were received from the firm in February 1972, only 11 rims were utilised upto February 1974. The remaining 17 gear rims valued at Rs. 1.21 lakhs have been lying unused as all the EA/1 D.C. electric locomotives had been withdrawn from service by October 1974.

Meanwhile, orders for 57 WCG-2 D.C. electric locomotives were placed on the Chittaranjan Locomotive Works during 1964-68 and an outturn of 25/27 locomotives was to be reached by March 1970. However, 38 locomotives were received by October 1974. These new locomotives do not require gear rims already acquired.

The Railway Administration stated (August 1977) that the procurement of 28 gear rims was based on the mileage rendered by the existing gear rims, the class of steel used in manufacturing these gears and the minimum number of locomotives (which was taken to be nine) that would have to be kept on main line service and that the requirements could not have been worked out based only on the results of the non-sophisticated crack-detector tests. It further stated (January 1978) that the delivery schedule of WCG-2 locomotives was not known and even the prototype of these locomotives had not been received when the gear rims were ordered in 1970. However, the possible utilisation/manner of disposal of 17 gear rims, at present lying unused, was receiving active consideration.

CHAPTER VI

WORKS AND LOSSES

24. **Northeast Frontier Railway—Acceptance of supplies of shingle boulders instead of 'boulders one man rock'**

According to the Standard Specifications of the Railway 'boulders one man rock' should be broken to angular shape with sharp edges and naturally rounded edges should be eliminated by breaking the boulder. Only one weathered surface should be allowed. The weight of each boulder should be not less than 30 kg. and not more than 55 kg. As against this, shingle boulder is required to be collected from approved quality of stone to angular shape and/or of size such that each piece of stone does not pass through a ring of 15 cm. dia and shall have its maximum dimensions not less than 23 cm. The weight of each shingle boulder is required to be not less than 12 kg. and not more than 55 kg. 'Boulder one man rock' true to specifications can be supplied only from quarries where rock is blasted whereas shingle boulders are collected from river beds or banks. As per the Schedule of Rates of Northeast Frontier Railway, the rates of 'boulders one man rock' are higher than those of shingle boulders, by percentages ranging between 16.66 and 57.00.

In January 1973 the Railway Administration entered into a contract for the supply of 15 thousand cubic metres of 'boulders one man rock' at the rate of Rs. 15 per cum at a station in Alipurduar Division. The contractor supplied 8,650 cum shingle boulders, instead of 'boulders one man rock'. The supply was accepted by the Administration and paid for at the rate stipulated in the contract for 'boulders one man rock'. Audit pointed out in June 1974 that the acceptance of supply which did not conform to the specifications for 'boulders one man rock' had resulted in an overpayment to the contractor.

Besides, the Vigilance Department of the Railway found in the course of preventive checks of supply of quarry products at a number of stations that boulders with all edges rounded, collected from river beds were being accepted by the Engineers against contracts for 'boulder one man rock'. On the Chief Vigilance Officer pointing out in January 1974 that the supplies did not fulfil the requirements of the specifications and acceptance of these supplies appeared to extend certain unintended benefit to the contractors, the Divisional Superintendent, Alipurduar was advised by the Administration in March 1974 to work out, with the concurrence of the Divisional Accounts Officer, a special rate suitable for the material which had actually been accepted and recover the overpayment made, if any. Accordingly, in November 1974, a special rate of Rs. 12.86 per cubic metre was proposed for 12,227 cubic metres of shingle boulders which had been supplied by three contractors and paid for at higher rate of Rs. 15 per cum applicable for 'boulders one man rock'.

In January 1975, a Committee of three Additional Chief Engineers reviewed the matter and recommended that—

- (i) as there were very few quarries where blasting was done there was no objection to obtain shingle boulders 30 to 55 kg in the place of 'boulders one man rock' ;
- (ii) as shingle boulders 30 to 55 kg had been collected instead of 'boulders one man rock' in good faith and the rates quoted were with this understanding, the past transactions need not be re-opened, and the current contracts may be regularised by taking shingle boulders 30 to 55 kg ; and
- (iii) in future contracts, only shingle boulders should be specified instead of 'boulders one man rock'.

The Administration accepted the recommendations and issued orders accordingly in February 1975 mentioning, *inter alia*, that in future, tenders for 'boulders one man rock' should not

be called for where it is not possible to collect these boulders, and only shingle boulders weighing 30 to 55 kg should be included in the tender schedules.

Audit was informed by the Administration in March 1977 that it was the practice on this Railway to call for tenders for the supply of 'boulders one man rock' but shingle boulders had to be accepted by the Railway, owing to non-availability of 'boulders one man rock'. The source of boulders, required for protection works in most cases is only the river beds, where 'boulder one man rock' was not available and 'shingle boulder' was available. The Administration further stated that technically shingle boulders served the same purpose as 'boulders one man rock' as certified by the Engineer and no overpayment to the contractors was involved nor was any loss sustained by the Railway.

The following points are worth mentioning :—

- (i) A number of contracts for supply of 'boulders one man rock' were entered into from time to time in Alipurduar Division of this Railway. In respect of eight contracts and nineteen Work Orders placed during the period from 1970 to 1974 for which records were readily available, it was noticed that 39,692 cum of boulders were collected from riverine quarries and supplied as 'boulders one man rock'. With reference to the special rate of Rs. 12.86 per cum worked out by the Divisional Superintendent, Alipurduar in November 1974, the amount excess paid works out to about Rs. 71,000. The special rate that would have been admissible for these supplies at the time they were obtained could not probably be worked out.
- (ii) The Committee of Additional Chief Engineers had stated that when the contractors were quoting a rate for 'boulders one man rock', they were having in mind only shingle boulders. The conditions of

tender, however, provide that the tenderer agrees to abide by the General and Special Conditions of Contract and to carry out the work according to the specifications for materials and works laid down by the Railway. The tenderer is further deemed to have satisfied himself by actual inspection of the site and locality of the works about all the conditions and the adequacy of the rates he quotes.

- (iii) The Committee had further stated that the practice in the past was to collect shingle boulders 30 to 55 kg and supply them in lieu of 'boulders one man rock' 30 to 55 kg. In the three contracts of Alipurduar Division (against which 12,227 cubic metres of shingle boulders had been supplied) the Divisional Superintendent (Works) had stated in November 1974 that the contractors supplied shingle boulders as per standard specifications for shingle boulders namely, minimum weight 12 kg and maximum weight 55 kg. This shows that the supplies accepted in the past were of weights ranging between 12 kg and 55 kg and not between 30 to 55 kg, as reported by the Committee.
- (iv) A test check by Audit showed that the supplies were described in the measurement books as 'boulders one man rock' without specifying the weight, though as per the report of the Committee of Additional Chief Engineers the supply was actually of shingle boulders not in conformity with the specifications prescribed.
- (v) The Administration had stated that technically, shingle boulders 30 to 55 kg served the same purpose as 'boulders one man rock'. It is not understood why, in the past, tenders had been invited and contracts concluded for the supply of 'boulders one man rock' involving extra expenditure.

25. Eastern Railway—Misappropriation of cash

In Paragraph 41 of the Report of the Comptroller and Auditor General of India for the year 1975-76, Union Government (Railways), it was mentioned that the Yard Master (Station Master), Jhajha (Danapur Division), had not been remitting the station earnings since 2nd March 1974 due to alleged want of cash bags and travelling cash safes in the scheduled trains. The Yard Master absented himself from 30th March 1974 and when his cash safe was opened on 7th April 1974, it was found that Rs. 77,117.72 were missing out of Rs. 90,336.52 collected during 2nd March to 30th March 1974. Details of another case of misappropriation of Rs. 88,628.05 representing the earnings from coaching traffic at Bhagalpur station of Danapur Division are given below :

On receipt of information from the Chief Cashier, Eastern Railway, on 29th March 1974, that coaching earnings of Bhagalpur station from 25th February to 1st March 1974 had not been received in the cash office, one Assistant Commercial Officer along with a Travelling Inspector of Accounts visited that station on 31st March 1974 for investigation. As a result of scrutiny of records, it was found that the coaching earnings of Eastern Railway for the period 25th February to 1st March 1974 amounting to Rs. 81,161.95 had not been remitted by the station to Cash office of Eastern Railway.

The Chief Cashier, North Eastern Railway, also reported to the Eastern Railway Administration on 3rd April 1974 that coaching earnings pertaining to his Railway for the period from 23rd to 28th February 1974 had not been received from Bhagalpur station. A scrutiny disclosed that Rs. 7,466.10 representing earnings for that period had not been remitted by the station to the Chief Cashier, North Eastern Railway. The total amount misappropriated worked out to Rs. 88,628.05.

A fact finding committee of two Senior Scale Officers was constituted in November 1974. The Committee started the enquiry in July 1975, finalised its report in September 1976 and submitted the same in November 1976. The report of the committee disclosed that the coaching earnings of the station had not been remitted regularly during July 1972 because of shortage of leather cash bags or there being no travelling cash safes in the scheduled trains or safes being sealed at the previous stations or the same being defective. At one stage collections of about 18 days had accumulated at that station in July 1972 and the Assistant Chief Cashier had to go to that station with 40 cash bags and two empty safes to bring the coaching earnings. Thereafter, the then Chief Booking Clerk continued remitting the earnings after detaining them for 7 or 8 days on account of alleged shortage of cash bags. This could not, however, be vouched by the committee as no register showing the movement of cash bags was maintained at that station. From 21st September 1972 the Chief Booking Clerk started withholding remittance of cash earnings for 4 or 5 days by manipulation and interpolation of station records including cash remittance notes. He succeeded in showing nine additional cash bags as having been despatched to the Cash office during 21st to 23rd September 1972 through the guard's signature book for cash bags though they were not actually despatched. By such practices the total cash earnings for 5 days were systematically withheld by the Chief Booking Clerk.

When the Chief Booking Clerk made over charge on 3rd March 1974, he handed over cash of 2nd March 1974 to his successor. It was found that the cash held back from remittance eventually amounted to Rs. 7,466.10 for the period 23rd February to 28th February 1974 for North Eastern

Railway, Rs. 81,161.95 for the period 25th February to 1st March 1974 for Eastern Railway.

The Chief Booking Clerk who was held responsible had expired on 22nd June 1974. The settlement dues amounting to Rs. 15,343 are stated to have been withheld and arrangements are being made to forfeit the entire death-cum-retirement gratuity payable to the Chief Booking Clerk.

According to the rules in the Indian Railway Commercial Manual, at important stations where Chief/Head Booking Clerks deal with the remittance of cash, the Station Master of such stations, should personally check at least once a week that the remittances are correctly made. The report of the fact finding committee does not bring out whether the requirement of the rules was complied with by the Station Master. The extent of failure, if any, of the guards of the scheduled trains carrying travelling cash safes for fictitious cash bag numbers quoted in the guard's signature book for cash bags has also not been indicated in the report of the fact finding committee. Further, the absence of the register of movement of cash bag at Bhagalpur Station was pointed out by the Travelling Inspector of Accounts who inspected the station during September 1972. It is not clear how the committee has arrived at the conclusion that fraud of this nature could not be detected during local inspections by them and could only have been detected by Cash Office but for the arrears in shroffing of cash and posting of cash registers in the Accounts office during the relevant periods. The fact finding committee pointed out that although Audit (North Eastern Railway) had drawn attention of the Financial Adviser and Chief Accounts Officer (North Eastern

Railway) in August 1973 to the fact that the Chief Booking Clerk, Bhagalpur, was detaining the cash for 6 or 7 days on the pretext of non-availability of the cash bags which could not be verified due to non-production of cash bag movement register, the Railway Administration did not take all reasonable precautions and steps to safeguard the Railway's interests.

The misappropriation of cash came to notice of the Railway Administration in March 1974, but the preliminary report was sent to the Railway Board in March 1976 after a delay of about two years.

The Railway Administration stated (July 1977) that the loopholes pointed out by the fact finding committee were under examination and would be rectified wherever found necessary.

26. Western Railway—Loss of cash deposited in a travelling cash safe

Rules provide that travelling cash safes should be locked to a permanently fixed ring in the brakevan with a strong chain, where such facility exists, the key remaining in personal custody of the guard of the train who is personally responsible for the safe transit of the travelling cash safe and delivery thereof at the destination station. The security staff escorting travelling cash safes are to be invariably accommodated along with train guard so as to be available for action in case of an attack on the luggage van carrying safes.

At Baroda Station a travelling cash safe carrying the station earnings of Ahmedabad-Baroda section for different dates from 10th January to 15th January 1976 was loaded on 16th January 1976 in the luggage and brakevan bogie of Dehradun Express (bound for Bombay Central). The cash safe was under the charge of the guard of the train and three rakshaks who were on escort duty. The safe did not reach Bombay Central Station on 17th January 1976 morning. On 19th January 1976 the safe was found lying in a field between Itola and Miyagaon stations. An amount of Rs. 5,96,956.40 made up of Rs. 49,551.04

in cash and Rs. 5,47,405.36 in credit notes/vouchers kept in 19 leather cash bags in the safe was missing. A case of theft was registered by the Government Railway Police on 19th January 1976.

The Departmental Enquiry Committee held the guard, the luggage clerk of Bombay Central station and the Railway Protection Force staff on escort duty responsible for the loss. The guard was found totally negligent in his duties and had even failed to lock up the cash safe with the safety chains which, according to the Enquiry Committee, had been provided in the luggage portion of the bogie. The luggage clerk, Bombay Central did not issue any message to the authorities concerned (like the Chief Cashier, the Chief Commercial Superintendent, the Financial Adviser and Chief Accounts Officer, the Chief Security Officer, Government Railway Police Station Officer, etc.) about the missing cash safe as required under the orders notified in the year 1958. The Railway Protection Force escorts were travelling in a separate compartment where accommodation was reserved for them whereas they were required to be accommodated with the train guard.

On the basis of the conclusions of the Departmental Enquiry Committee, action under the Discipline and Appeal Rules is stated to have been initiated against the guard of the train for the penalty of stoppage of increment for two years without future effect, the luggage clerk, Bombay Central for the penalty of censure and the three Rakshaks who had escorted the train, for removal from service. The final loss (cash Rs. 49,551.04 and voucher Rs. 2,134.28) is yet (December 1977) to be regularised.

The case was investigated by the Government Railway Police and closed (in May 1976) with the remarks 'true but not detected'.

27. Chittaranjan Locomotive Works—Loss of tools

Tools required for manufacturing operations at the Chittaranjan Locomotive Works are partly manufactured in its Tool Room and partly procured by the Stores Department. Theft of tools from the Tool Room was reported on 15th January 1973. The

matter was investigated by an Officer of the Railway Protection Force during 15th January 1973 to 24th March 1973 who reported that either the theft was brought up to make up the shortage by the Tool Room staff themselves or the material reported to have been lost might have been mislaid. The findings of the officer were not accepted by the Administration as these were considered as inconclusive. The special stock verification of the tools carried out by the Stock verifiers of the Accounts department during October 1973 to January 1974, disclosed shortages of tools valued at Rs. 11.78 lakhs (including imported tools costing Rs. 2.53 lakhs) in respect of 1,545 items and excesses of tools valued at Rs. 7.23 lakhs in respect of 886 items.

The Railway Administration did not accept these shortages and excesses on the grounds that neither the stock had been properly arranged nor the books were complete in all respects due to the prevalent atmosphere of indiscipline during the material time of stock verification.

A special stock verification was again undertaken in August/September 1976 and out of 2,431 items involved, only 349 items were subjected to stock verification. Against net shortage of Rs. 4.62 lakhs (shortages valued at Rs. 6.09 lakhs and excesses Rs. 1.47 lakhs) found in the stock verification of these items held during October 1973 to January 1974, net shortage of only Rs. 0.76 lakh (shortages valued at Rs. 0.99 lakh and excesses Rs. 0.23 lakh) was noticed. It was also noted during the second stock verification that "heavy adjustments have been made without preparation of any vouchers..... to set off the discrepancies detected in the earlier Accounts Stock Verification". The reasons for exclusion of 2,082 items accounting for shortages valued at Rs. 5.69 lakhs and excesses Rs. 5.76 lakhs is still to be explained.

The Railway Board stated (December 1977) that a limited stock verification was carried out in 1976 and it was confined to stores of high value and excluded those items of stores where there was a net excess. It explained that the shortages occurred when the law and order situation in the region was difficult.

It further stated that the adjustments made in the stores records would be investigated to verify whether there had been any deliberate manipulation of records.

28. Eastern Railway—Loss of safety equipments

Up to the end of year 1972-73 all up passenger trains starting from Howrah station were provided with emergency tool boxes, first-aid boxes and fire extinguisher boxes. Thereafter, such trains are being provided with only first-aid boxes (upto May 1974) and fire extinguisher boxes. These boxes are handed over to the guards of the trains originating from Howrah station and are required to be returned by the guards of the corresponding down trains terminating at that station. Up to the end of 31st December 1972, 246 emergency tool boxes, 165 first-aid boxes and 455 fire extinguisher boxes costing Rs. 84 thousand had not been returned by the guards of these trains. In reply to an enquiry made by Audit in February 1973, the Railway Administration stated that the Railways to which these safety equipment boxes had been temporarily made over were asked either to return them or to accept debits for the same. Excepting the Northeast Frontier Railway Administration, which accepted the debit for Rs. 60 in respect of one fire extinguisher box, other Railways did not confirm that the equipment boxes not returned by the guards to Howrah station were in use on their Railways. A further review undertaken by Audit in January 1977 indicated that 237 emergency tool boxes (issued prior to 1972-73) and 188 first-aid boxes (issued prior to May 1974) and 852 fire extinguisher boxes (issued during 1968 to May 1976) costing Rs. 1.34 lakhs, had not been returned to the originating station (Howrah) till 30th November, 1976.

The Railway Administration stated (June 1977) that movement of fire extinguisher boxes had since been confined within the jurisdiction of each Railway in order to avoid recurrence of such losses and that action was being taken to write off all such equipment boxes as were reported missing upto 31st March, 1976. The number of missing safety equipment boxes was, however, not indicated. The sanction of the competent authority to the write off is still (January 1978) awaited.

CHAPTER VII

EARNINGS

29. Northern Railway—Haulage of empty wagons on private account

On the request of the Beas Sutlej Link Project Authority the Northern Railway Administration approached the Railway Board in May 1967 for its approval to the transportation of cement in bulk from Surajpur to Talwara Dam site siding (served from Mukerian Station) in hopper wagons owned by the Project and also to the levy of freight charges on loaded wagons at the ordinary public tariff rates. For return trips of the hopper wagons the Railway Administration proposed that empty haulage charges need not be levied on the basis of the precedent of 1956 of free empty haulage in the case of cement transported in bulk for the Bhakra project. The Railway Board decided, in November 1967, that freight should be levied at the normal tariff rates on the carrying capacity of the hopper wagons owned by the project and used for the carriage of its traffic and that for return journey empty haulage charges at the rate of Rs. 1.68 per hopper wagon (or at the rate of 56 paise per four-wheeled wagon) should be levied. The Board further directed that a rebate on account of interest, maintenance and depreciation charges should be allowed to the party since the hopper wagons were owned by it.

To an enquiry made by the Railway Board in January 1968, the Railway Administration advised the Board in February 1968 that there was no likelihood of movement of cement traffic of the Beas Sutlej Link Project Authority from Surajpur to Nangal Dam. However, this traffic started moving from Surajpur with effect from 17th July 1968. The Railway Administration neither apprised the Railway Board of this fact nor did it seek its clarification about levy of freight and empty haulage charges for cement traffic of this project carried in its hopper wagons. The

Railway on its own levied only freight charges on loaded wagons moved from Surajpur to Nangal Dam. Empty haulage charges on the analogy of such charges leviable according to Railway Board's instructions of November 1967, were not levied on return trip of empty wagons.

In April 1970 the Railway Board notified *ad hoc* charges to be levied for the haulage of empty wagons on private account. These rates were revised from time to time and lastly in January 1975. Although the Railway Administration issued instructions in general terms to the stations to levy the empty haulage charges, the Project Authority was not advised of the same. Consequently, these charges were not levied on hopper wagons used for the movement of bulk cement from Surajpur to Nangal Dam. In the year 1975 when the Project Authority was requested to pay haulage charges on empty wagons on their return from Nangal Dam to Surajpur with effect from 1968, it refused to pay the same referring to the Railway Board's directive issued in 1956 at the time of construction of Bhakra Dam according to which no haulage charges were to be levied on empty wagons running from Nangal Dam to Surajpur. In November 1975, the Railway Administration brought this position to the notice of the Railway Board and sought its instructions in the matter.

In reply the Railway Board, in May 1976, invited the attention of the Railway Administration to its decision of November 1967 in the case of bulk movement of cement from Surajpur to Talwara in hopper wagons owned by the Beas Sutlej Link Project Authority and directed that immediate action should be taken to recover empty haulage charges for the traffic from Surajpur to Nangal Dam since 1968.

The empty haulage charges for the period from 17th July 1968 to 30th April 1975 has been assessed at Rs. 27.06 lakhs. The amount is still (December 1977) to be recovered from the Beas Sutlej Link Project Authority.

The Railway Administration stated (December 1977) that the matter was being pursued with the Beas Sutlej Link Project Authority.

30. North Eastern and Northeast Frontier Railways—Delay in finalisation of application for revision of the decision of the Railway Rates Tribunal

In the thirties, a Railway Company owning metre gauge system west of Katihar (Bihar) upto Kanpur, introduced concessional rates for jute being booked to a Jute mill at Kanpur from stations in North Bihar area *via* Katihar in order to attract such traffic moving earlier from that area to Calcutta and from there to Kanpur over another company Railway. Such concessional rates were also granted for traffic booked to another Jute mill at Sahjanwa (near Gorakhpur).

These concessional rates continued with alterations till the nationalisation of all the arterial Indian Railway system and re-organisation of Railway system resulting in formation of North Eastern Railway in 1952 (bifurcated into two zones North Eastern and Northeast Frontier Railways with effect from 1st August 1958). At the end of June 1955 concessional rates at 40 *per cent* below the class rates were applicable to jute traffic originating from 15 stations in North Bihar area and one station in West Bengal to Kanpur and from 4 stations in North Bihar to Sahjanwa.

When the station-to-station rates to Kanpur were further revised and fixed at 25 *per cent* below the class rates with effect from 1st July 1955, the Jute mill of Kanpur filed a complaint before the Railway Rates Tribunal which decided on 24th July 1956, that station-to-station rates for the conveyance of raw jute be granted from 22 stations in North Bihar (15 on the present Northeast Frontier Railway and 7 on the present North Eastern Railway) to Kanpur at 30 *per cent* below the class rates applicable with effect from 1st July 1955; terminal and transhipment charges were to be added and other conditions were to remain unchanged.

In September 1958, the Railway Board invited attention of all Railways to a new section (section 41-A) inserted in the

Indian Railways Act enabling a Railway Administration to make an application to the Railway Rates Tribunal for revision of any of its order after expiry of one year if it 'considers that since the order was made, there has been a material change in the circumstances on which it was based' and desired that all rates quoted under orders of the Tribunal should be reviewed and an application for revision filed, where warranted, after obtaining the orders of the Board.

At the time of the earlier order passed by the Tribunal in July 1956, there was no wagon-load scale or wagon-load rates for jute and there was a common class rate applicable to both wagon-loads and smalls traffic. From 1st October 1958, a new freight structure was introduced which provided reduced rates for wagon-load traffic in jute as compared to smalls traffic. No separate terminal and transshipment charges were provided in that freight structure.

In view of this development the North Eastern Railway Administration drafted (in 1962) and finalised in July 1964 an application to be filed for the decision of the Railway Rates Tribunal, in consultation with the Northeast Frontier Railway and its Law Officer. But the Railway Board was approached in April 1972 for approval to the filing of the application for revising or revoking the earlier orders of the Tribunal on the grounds mentioned therein. The Railway Board communicated its approval in May 1972 and the application was filed on 21st October 1974. The points mentioned in the application were generally the same as in the application finalised in July 1964; no additional facts occurring after 1964 had been mentioned justifying the delay of about ten years. The Railway Rates Tribunal revoked its earlier order in its judgement delivered on 29th September 1975 observing, *inter alia*, that "material changes in circumstances occurred in 1958, but the learned counsel for applicant could not explain why the Railway waited for 16 years to file an application under section 41-A on this basis".

The normal tariff rates were introduced by the two Railways with effect from 29th September 1975. The loss on account of value of concessions on jute traffic booked to Kanpur from 7 stations on North Eastern Railway during 1970-71 to 1974-75 was assessed by the Railway Administration in March 1976 at Rs. 4.14 lakhs. In the absence of complete records, the total loss on account of the value of concessions allowed on the jute traffic booked from 15 stations of Northeast Frontier Railway and 7 stations of North Eastern Railway since 1964 due to delay in getting the tariff rates revised with the approval of the Railway Rates Tribunal cannot be precisely assessed now.

The North Eastern Railway Administration informed Audit (January 1978) that the two jute mills filed writ petitions in December 1975 and January 1976 in the High Court of Allahabad against the award of the Railway Rates Tribunal and the Court had stayed the operation of Tribunal's orders in the latter case.

31. **Central, Southern and Western Railways—Undercharges of freight**

Central Railway

The freight rates for over-dimensional consignments loaded in special type wagons and carried by special trains were notified by the Railway Board in December 1973, to be effective from 1st February 1974. These rates were increased by the Railway Board with effect from 1st February 1975.

A review conducted by Audit during March 1977 disclosed that in 38 cases freight on over-dimensional consignments of electrical transformers and generators booked by the Bharat Heavy Electricals, Bhopal, during the period February 1974 to January 1976 from its siding served by Nishatpura station to various stations and transported by special trains in well type wagons (broad gauge) of capacity 132/180 tonnes had not been levied correctly. In 34 cases freight charges had been levied at the rates in vogue prior to 1st February 1974 and in four

cases the distances had been incorrectly computed resulting in total undercharges of freight amounting to Rs. 7.52 lakhs out of which Rs. 6.68 lakhs are still (January 1978) to be recovered. Besides, in certain cases the wagons were hauled from base stations or other stabling stations to the loading point (Bhopal); empty haulage charges recoverable, if any, are under examination of the Railway Board.

The omission escaped detection in internal check organisation of the Accounts department.

The Railway Administration stated (August 1977) that non-adoption of revised rates could not be detected in internal check by Accounts Office as copies of the Railway Board's letters, though endorsed by the Commercial department to the Accounts Office, were not received by the latter and that such important circulars were generally notified in the Local Rate Advices/Through Rate Circulars/Railway Gazettes but in the instant case this was not done. It further stated that the other Railways had been addressed to check up whether the undercharges on these bookings were collected by the destination stations.

Similar cases of undercharges of freight on over-dimensional consignments carried in special type wagons, have been mentioned in paragraph 32 of the Report of the Comptroller and Auditor General of India for the year 1975-76—Union Government (Railways).

Southern Railway

(i) The freight rate for containers made from tin plates and black plates was increased as a result of upgradation of classification from class 105 to class 130 for 'smalls' and from class 85 to class 115 for 'wagon loads' with effect from 15th January 1972. The notification to this effect was issued by the Chief Commercial Superintendent on 3rd January 1972. With effect from 15th May 1975, the goods tariff classification for empties was also revised and empties (metallic) were classified at class 105 for 'smalls' and class 85 for 'wagon loads'

against class 85 for 'smalls' and class 70 for 'wagon loads'. The revised classification was notified to the stations on 1st April 1975.

A review undertaken by Audit at seven stations in June 1977 disclosed that freight on consignments of tin containers booked in wagon loads during February 1972 to December 1975 and empties (metallic) booked during May to November 1975 had not been charged at the enhanced rates resulting in undercharges of freight amounting to Rs. 80,273.

According to the Railway Administration out of the undercharges of freight of Rs. 80,273, a sum of Rs. 732 was collected by the stations at the time of delivery of consignments and Rs. 2,518 had already been detected in internal check. The review of past transactions to assess the amount of total undercharges is stated to be in progress (November 1977).

It is mentioned that all the invoices on which undercharges were detected by Audit were subject to internal check, *inter alia*, in regard to classification and rate but bulk of the undercharges remained undetected.

(ii) From 15th May 1974, the minimum weight for charging wagon load rates on consignments of benzene hexachloride (dust or powder) booked in a four-wheeled broad gauge wagon was raised from 150 to 220 quintals. The change in the weight condition was notified to stations in Olavakkot Division of the Railway on 2nd May 1974.

A test-check of the records of two stations of this Division for the period 15th May 1974 to 30th April 1976 disclosed that freight had not been levied for the enhanced minimum weight, resulting in short collection of freight amounting to Rs. 1,63,196. Debits for Rs. 3,935 had been raised during July 1977 against the destination stations on the Southern Railway and other zonal Railways were advised in September 1977 to recover Rs. 1,59,261 in respect of consignments booked to

stations on those Railways. These amounts are still (December 1977) to be recovered.

According to the Railway Administration, the irregularity escaped detection in internal check because in most of the cases the consignments were described in the invoices as 'BHC 50 per cent Insecticides', in some cases as 'BHC 50 per cent' and in a few cases as 'BHC'. The classification and weight condition of 'benzene hexachloride' and 'insecticides' were identical while the weight condition of benzene hexachloride alone was revised from 15th May 1974.

Western Railway

(i) From 1st October 1974, the minimum weight condition for charging freight on wagon load consignments of iron and steel angles, channels, joists, plates, etc., was raised from 205 and 130 quintals to 224 and 160 quintals per four-wheeled broad gauge and metre gauge wagon respectively. The minimum weight condition was further raised with effect from 15th October 1975 to carrying capacity of a wagon used, namely, marked carrying capacity of a wagon increased by two tonnes if that is a four-wheeled broad gauge wagon and one tonne if that is a four-wheeled metre gauge wagon. The freight rates of these commodities were also enhanced from 1st November 1975 due to upward revision of goods classification from class 70 to 80. From the same date the freight rate of iron or steel pipes booked in wagon loads was also revised from class 70 to 87.5.

A test check of the records of four stations of the Railway for different periods during October 1974 to June 1976 revealed that the enhanced minimum weight conditions and revised classifications for these commodities had not been taken into account by these stations resulting in short realisation of freight amounting to Rs. 76,895 (both in respect of outward and inward traffic).

On this being pointed out, the Accounts department re-assessed the undercharges of freight at Rs. 77,035 (which included Rs. 55,993 already defected in internal check) on consignments dealt with at these four stations during 1st October 1974 to 4th June 1976. Out of this amount, Rs. 55,790 are still (December 1977) to be recovered.

Besides, the review of the position in five Divisions of the Railway and Bombay Port Trust Railways disclosed that no cases of undercharges of freight occurred. In one Division Rs. 47,780 had been short realised by the stations. Out of this amount, Rs. 1,472 still remain to be recovered. The review in the remaining two Divisions is stated to be in progress.

(ii) According to Goods Tariff of the Indian Railway Conference Association, muriate of potash when intended for use as manure, is chargeable at class rates 65 for smalls and 45 for wagon load applicable to Chemical Manures—Division 'B'. Such consignments are to be charged at class rate 95 for smalls and 80 for wagon load, if booked for other purposes. With effect from 15th December 1973, the benefit of lower classification was allowed to consignments of muriate of potash booked to firms manufacturing manure mixtures.

A test check of the records of Kota, Kankaria and Baroda stations of this Railway for different periods between 28th January 1971 and 9th November 1973 disclosed that freight on wagon load consignments of muriate of potash booked to firms manufacturing manure mixtures had been charged at lower rates even prior to 15th December 1973, resulting in undercharges of freight of Rs. 1.41 lakhs. When this was pointed out by Audit in November 1974 and again in November 1975, the Railway Administration approached the Railway Board in December 1975 to give retrospective effect to the benefit of lower classification brought into force from 15th December 1973.

The Railway Board did not agree to give retrospective effect to the concession and directed the Railway Administration in

March 1976 to recover the amount of undercharges of freight. The Accounts department raised debits for Rs. 1.41 lakhs against the stations concerned during the period June 1976 to February 1977 but the amount is still (October 1977) to be recovered. A complete review of past transactions of the stations dealing with this traffic is yet to be undertaken by the Railway Administration. The circumstances in which the undercharges could not be detected in internal check have also to be investigated.

In the meantime, the Railway Administration again requested the Railway Board (in August 1977) to reconsider its decision of March 1976.

CHAPTER VIII

OTHER TOPICS OF INTEREST

32. Diesel Locomotive Works—Supply of oxygen and acetylene gases

The Diesel Locomotive Works Administration entered into a contract with a firm of Calcutta on 21st April 1965 for setting up a plant in its premises for production and supply of oxygen and acetylene gases. The contract was valid for a period of ten years from 1st January 1966 with an option reserving to the Administration the right to extend the currency of contract for a period not less than five years.

Claims under Arbitration

During the period of the contract certain disputes arose out of the claims of the firm which has led to five arbitration proceedings for a total claim of Rs. 67.10 lakhs. These are discussed below :—

- (i) As per the conditions of contract, the Administration was under obligation to purchase from the firm its entire requirement of oxygen and acetylene gases which should not be less than the minimum guaranteed monthly off-take as under :

Period	Oxygen (cubic metres)	Acetylene (cubic metres)
From 1st January 1966 to 31st December 1966	7,000	1,000
From 1st January 1967 to 31st December 1967	14,000	2,000
From 1st January 1968 and onwards	18,000	2,500

Payment was to be made to the firm for the specified minimum quantities of gases subject to *force majeure*, irrespective of whether such quantities were actually

lifted or not. In case the minimum guaranteed quantities were found to be in excess of the requirement of the Diesel Locomotive Works, the firm on receipt of advance information from the Administration was to assist it in selling the excess quantities on its account. If no ready customer was available, the firm would have the option to empty the cylinders on the Administration's account after advising it or dispose of them otherwise. The agreement also provided that all gases supplied by the firm were for the exclusive use of the Diesel Locomotive Works or its duly approved contractors for works inside the factory and were not to be made available to any other outside agency not connected with work of the Administration.

The minimum guaranteed off-take of gases was based on the anticipated production schedule of 54 locomotives in 1965-66, progressively increasing to 108 numbers in 1966-67 and 150 numbers in 1967-68 and onwards. For various reasons like erratic availability of foreign exchange, non-availability of materials and components in matching sets, power cuts, etc., the Administration had to drastically cut down the production schedule from year to year. Consequently, the minimum guaranteed quantities of gases could not be lifted throughout the contract period except in the year 1966.

In November 1966 itself the Administration advised the firm that due to restricted availability of foreign exchange for import of components and raw materials for production of locomotives, the Government had to cut down the production schedule drastically with the result that the guaranteed minimum quantities of gases effective from 1st January 1967 would not be required and that the supplies should be made at the guaranteed level for the year 1966.

Similar advice was sent to the firm every year in November/December intimating the reduced requirements for the succeeding year. However, the firm insisted that it was not concerned with the conditions prevailing at the Diesel Locomotive Works and the actual production of locomotives and that under the contract it was entitled to be paid for the guaranteed minimum quantities irrespective of whether such quantities were lifted by the Administration or not. The firm also informed the Administration regularly from 1967 and onwards that the Administration had not lifted the guaranteed minimum quantities of gases offered to the works and that the unlifted quantities of gases were emptied into the air on latter's account.

The Administration repeatedly disputed the firm's claims for unlifted gases, stating, *inter alia*, that it had not rendered the required assistance for selling the surplus gases to outsiders as provided in the agreement. The firm, however, denied that the Administration had ever sought its assistance for selling the surplus gases to outsiders and also disowned its obligation to act as a selling agent of the Administration for the excess quantities and locate buyers for the same. The firm claimed from the Administration a sum of Rs. 17.94 lakhs on this account. The Administration, however, made payments only for the actual quantities of gases lifted from year to year.

In 1972 when the Administration had on certain occasions diverted some quantities of surplus gases to the Railway workshops and depots at Gorakhpur and Mughalsarai, the firm claimed liquidated damages of rupees one lakh for breach of contract.

- (ii) The agreement provided for the supply of gases in cylinders of 3 cubic metre to 12 cubic metre capacity. The free time allowed was only 3 days for the return of empty cylinders. The rental payable for delayed

return of the cylinders was rupee one per cylinder per week or part thereof for the first four weeks and thereafter rupees three per cylinder per week or part thereof, counting the period from the date of delivery of the cylinders to the Administration. The empty gas cylinders had not been returned to the firm within the free time in many cases. The claim of the firm for the years 1966 to 1969 (Rs. 0.65 lakh) for rental charges was initially not admitted by the Administration.

- (iii) The agreement provided that the Administration should supply electric power of 175 KW capacity round the clock to the firm's factory and lighting etc., at 400/200 volts, three phase, 50 cycles at bulk rates charged by the Uttar Pradesh State Electricity Board from time to time including statutory duty, if any. Consequent on the levy of coal surcharge, fuel price variation, etc., by the Uttar Pradesh State Electricity Board for power supplied to the Diesel Locomotive Works, the Administration included these elements of charges in the bills preferred on the firm for power consumption and recovered the amount. The firm disputed the recovery of these charges and claimed refund of Rs. 5.26 lakhs.
- (iv) The firm also claimed from the Administration a sum of Rs. 8.48 lakhs towards damages caused to its plant and loss of production due to power fluctuations and failures.

The contractor, not being satisfied with the decisions of the Administration, sought arbitration on five occasions for a total claim of Rs. 67.10 lakhs as mentioned in the table below. These included claims for items like compensation for damages to cylinders, shortage of acetone, non-supply of power and water in time and round the clock, non-provision of approach roads, surface drainage facilities, etc., in

addition to the claims arising out of the items mentioned in sub-paragraphs (i) to (iv) above.

Period of claims	Amount of compensation claimed by the firm for		Position of settlement of the claims
	non-lifting the minimum guaranteed off-take of gases	other items	
	(Rupees in lakhs)		
First Arbitration 1966 and 1967	1.02	8.83	Rs. 1.99 lakhs awarded by the sole Arbitrator.
Second Arbitration 1968 and 1969	3.20	9.16	The claim for non-lifting of gases disallowed by the Umpire who awarded only Rs. 0.81 lakh for other items.
Third Arbitration 1970 to 1972	6.33	5.44	Arbitration in progress.
Fourth Arbitration	..	13.04	-do-
Fifth Arbitration 1973 to 1975	7.39	12.69*	-do-
TOTAL	17.94	49.16	
Rs.	67.10**		

* *Ad hoc* payment of Rs. 3.50 lakhs made towards escalation in prices of gases lifted during January 1973 to October 1975.

**Itemwise details of claims are contained in the Annexure.

Appointment of Arbitrator

For the first arbitration case, the firm appointed an Arbitrator from its side in March 1967 and requested the Administration to appoint its Arbitrator as per the terms of the agreement. The Administration, however, did not appoint its arbitrator within the stipulated time of 15 days as required under the Arbitration Act. Thereupon, the firm nominated its arbitrator as the sole arbitrator in April 1967. The Administration challenged this position and appointed its Arbitrator in May 1967. But this was not accepted by the firm. The petitions

filed by the Administration in Civil and High Courts for setting aside the appointment of the sole Arbitrator were dismissed in October 1968 and November 1969 by the respective Courts as the Administration could not show sufficient reasons for its failure to appoint its Arbitrator within the scheduled time. The firm's nominee, therefore, became the sole Arbitrator and gave an award of Rs. 1.99 lakhs in favour of the firm (which, *inter alia*, included Rs. 1.02 lakhs as compensation for not lifting the minimum guaranteed off-take) despite the Administration's plea that due to unforeseen circumstances the availability of foreign exchange had become erratic and production schedule had to be drastically curtailed under orders of the Railway Board, thereby attracting the *force majeure* clause.

The sole Arbitrator's award was made absolute and rule of the Court, as the Administration failed to file objections separately as directed by the Court in January 1972. The Administration's appeal for review was dismissed by the District Court and the High Court did not admit the appeal. The Administration, therefore, had to pay Rs. 2.01 lakhs towards this arbitration award and the cost of the suit.

In the second arbitration case (pertaining to the years 1968 and 1969) where the Administration appointed its Arbitrator in time, the decision was different. As the Arbitrators of both the parties could not come to an agreement an umpire was appointed by Calcutta High Court. The Umpire reduced the total claim of the firm from Rs. 12.36 lakhs to Rs. 0.81 lakh disallowing, *inter alia*, the firm's claim of Rs. 3.20 lakhs towards compensation for not lifting the minimum quantities of gases.

The awards in the third, fourth and fifth arbitration proceedings are awaited. The Administration has incurred so far (August 1977) an expenditure of Rs. 1.22 lakhs by way of legal expenses, Arbitrators' fees, etc., in dealing with the five arbitration cases filed by the firm.

In September 1970 the Diesel Locomotive Works Administration asked the firm to furnish statements of daily production of gases during 1966 and 1967, Gas Inspector's certificate about the production of gases and documents regarding sales to parties other than the Diesel Locomotive Works. The latter objected to the demand and did not produce these documents for verification. The claim of the firm about the quantity of gases discharged into air to empty the cylinders thus remained to be established.

Delay in return of empty gas cylinders

As mentioned earlier, the agreement provided for a free loan period of three days for the return of empty cylinders. Out of the free loan period of three days, the time available for consumption of gases in the shops is only two days excluding the date of receipt of the cylinders. The time actually taken by the shops for consumption of the gases in cylinders varies from 1 hour to 6 days depending on the nature of the gas (consumption of oxygen being faster than acetylene) and tempo of work at the consumption point and also on the size of the cylinder. As a result the return of empty cylinders to the firm was delayed entailing payment of rental charges of Rs. 1.56 lakhs (including Rs. 0.65 lakh claimed and awarded in the first two arbitration cases) during the period from 1966 to 1975.

Renewal of contract

After inviting tenders in April 1975 and taking into account the rates in the rate contract of the Director General, Supplies and Disposals operative from 1st May 1974 to 30th April 1976 for supply of these gases, the Administration after negotiations with this firm extended in May 1976, the April 1965 contract for a further period of 7 years beyond 31st December 1975. The monthly off-take was reduced to the level as currently estimated and the payment therefor was to be made at the rates

to be determined by the Chief Cost Accounts Officer, Ministry of Finance and these were to be applicable from 1st July 1976.

While extending the contract, opportunity was, however, not taken to modify certain terms and conditions of the existing contract which had led to disputes and arbitration, namely, liability for payment of statutory duty on electricity, coal surcharge, etc., on power supply, liability for damages caused to the plant and loss of production due to power fluctuations and failures.

About the failure to appoint its Arbitrator in the first arbitration case, the Diesel Locomotive Works Administration stated (October 1975) that an Arbitrator appointed either by the firm or by it would have acted more or less in a judicial capacity and was expected to take a balanced and dispassionate view of the issues involved. It also held that by reason of the award going against the interest of the Administration, it might not be fair to conclude that participation of the Arbitrator nominated by the Diesel Locomotive Works might have led to a different decision.

It further stated (October 1976) that it was not practicable to have fixed yardstick of per loco requirement of gases before arriving at the minimum off-take and that the supplier might not have gone in for installation of a plant, if the minimum off-take was fixed too low. It also stated that the stand of Diesel Locomotive Works had been that drawal of gases less than the minimum off-take was due to *force majeure* conditions and that it was not liable to pay for the unlifted quantities of gases.

The Administration further stated (November 1977) that (a) quite often contractors lodge claims and this was not an unusual feature in dealing with contracts particularly covering a long period and (b) the detention of cylinders beyond the free period of 3 days which was to be fixed for the shops as a whole, became unavoidable at times and considering the

number of cylinders in circulation in various consumption points on any day the average monthly rental of Rs. 1,300 might not be considered too high.

33. Chittaranjan Locomotive Works—Non-realisation of charges for monoblock manganese steel castings

In July 1970, a semi-government Company of Bombay (which became a Government Company with effect from 31st March 1973) approached the Railway Board and the Chittaranjan Locomotive Works Administration for manufacturing and supplying 40 monoblock manganese steel castings to enable the Company to comply with an export order as the firm on which it had originally placed the order had delayed supply due to prolonged strike in its works. At the instance of the Railway Board, the Chittaranjan Locomotive Works Administration accepted the order in August 1970. Subsequently, the Company increased the order to 240 monoblock castings.

The rules in the Indian Railway Code for the Mechanical department, *inter alia*, provide that works for any outside public or private bodies should not be undertaken in Railway workshops until the estimated cost of the job and other charges leviable under the rules have been deposited in advance by the party ordering the work. For determining the "estimated cost", preparation of an estimate is necessary. However, in order to utilise the available capacity in the Steel Foundry at Chittaranjan and thereby to reduce the cost of manufacture of castings, the Railway Board authorised the Administration, in August 1966, to accept orders from public sector undertakings and others subject, *inter alia*, to conditions that 'firm prices' were quoted for different types of castings and if the period of compliance of an order was expected to exceed six months a clause for escalation of price was included in the contract. In the instant case an estimate of cost was not prepared by the Administration so as to determine the 'firm price'. The representatives of the Company visited the Chittaranjan Locomotive Works in August 1970 to discuss the feasibility of execution of the order and they were

given to understand that the price would be about Rs. 8 per kg. but the price would be charged based on actual expenditure. This estimate was based on the Steel Foundry's past experience of manufacturing manganese steel castings (weight ranging from 435 kg. to 450 kg. each) for supply to zonal Railways and Bokaro Steel Plant. The weight of castings required by the Company ranged from 190 kg to 220 kg each.

After initial developmental work, 39 castings were supplied between October 1970 and January 1971 and on the basis of the expenditure incurred, the Company was advised telephonically in January 1971 that the actual price would be in the region of rupees four thousand each (or Rs. 18 per kg). This was confirmed in writing in April 1971. In July 1971 discussions were held with the representatives of the Company and they were again told that the price would be in the region of rupees 4 thousand each and that the price based on actual expenditure would be charged after completion of the contract. This was agreed to by the Company; it deposited Rs. 5 lakhs in two instalments in August 1970 and August 1971.

The supply of 240 monoblock castings was completed by February 1972 and the total cost recoverable from the Company worked out to Rs. 8.63 lakhs (as at the end of May 1974).

The Company represented to the Railway Board in February 1972 that prices being charged by the Administration were higher compared to what was being charged from the Railways and the Bokaro Steel Plant and the rates at which it had placed orders on the firm. The Railway Board, on examination, found that the computation of charges by Chittaranjan Locomotive Works was reasonable. The matter has been under protracted correspondence with the Company since then but no settlement about price has yet (December 1977) been reached and Rs. 3.63 lakhs remain unrealised from the firm.

At the instance of Audit, the Ministry of Railways (Railway Board) took up the matter with the Ministry of Heavy Industry in January 1977. The latter Ministry advised the Railway Board

in April 1977 that it would be reasonable to accept a 'cost' of Rs. 10.40 per kg (against the actual price of Rs. 18 per kg) and if this was not acceptable, the only feasible alternative would be to submit this issue to arbitration. Thereupon, in November 1977, the Railway Board suggested to the Ministry of Industry to advise the Company to settle the matter with the General Manager, Chittaranjan Locomotive Works. The reaction of the latter Ministry is awaited (December 1977).

34. Eastern and Northeast Frontier Railways—Routing of a foodgrains special train

Consignments of foodgrains were booked in 70½ wagon loads (in terms of four-wheelers) on 28th and 29th April 1975 from Sanahwal and Doraha stations (Delhi Division) of Northern Railway to Samastipur, Dalsingsarai and Narayanpur Anant stations on North Eastern Railway *via* Mughalsarai and Barauni. The wagons were carried from the originating stations by a foodgrains special train. The consignee was the Food Corporation of India, Muzaffarpur, Bihar.

The special train reached Mughalsarai yard on 2nd May 1975. On the same day the Liaison Officer of the Food Corporation of India at Calcutta requested the Eastern Railway Administration to divert the special train to Cuttack to tide over the temporary shortage of foodgrains there but the special train consisting of 68½ wagons (including 3 brakevans) reached Malda Town station on 5th May 1975. According to the vehicle guidance of the train received at Malda Town, the train had been diverted on 2nd May 1975 to New-Bongaigaon station on Northeast Frontier Railway by the Control Office, Eastern Railway, Howrah. The train was thereafter moved on 5th May 1975 from Malda Town to New-Bongaigaon after detaching 15 wagons on operational and technical grounds.

When the special train arrived at New-Bongaigaon on 16th May 1975 the wagons were placed for delivery. The local representatives of the Food Corporation of India did not accept the delivery on the ground that they had not received any intimation about the diversion of the special train to New-Bongai-

gaon. Thereafter, the train was moved on 18th May 1975 to its original booked destinations on the North Eastern Railway via Malda Town. The wagons which were earlier detached at Malda Town were also sent to the original booked destinations.

The wagons containing foodgrains which were required to be diverted to Cuttack in Orissa to tide over the shortage of foodgrains were thus misdespatched to New-Bongaigaon in Assam and thereafter sent to their original destinations in Bihar resulting in extra haulage of 53 wagons over a distance of 1,962 kms. (1,030 kms. on Northeast Frontier Railway and 932 kms. on Eastern Railway) and 15 wagons over a distance of 990 kms. (mostly on Eastern Railway). The cost of the extra haulages to the Railways amounted to Rs. 1.31 lakhs.

35. Central Railway—Payment of a time-barred claim

In November 1963, the Railway Administration awarded a contract for coal handling, domestic and engine cleaning work at Byculla, Kurla and Kalyan Loco sheds of Bombay Division for a period of three years from 1st December 1963. The contractor informed the Divisional Superintendent, Bombay Division on 16th January 1964 that he would withdraw labour from all the stations with effect from 18th January 1964 as he could not get an assurance that demurrage, demurrage and penalties etc., were likely to be waived. The Divisional Superintendent advised the contractor on 22nd January 1964 that he had committed a breach of contract by stopping the work voluntarily and the Administration was entitled to proceed further in the matter as provided in the contract and that alternative arrangements were being made for getting the work done at his risk and responsibility even though there was no provision in the contract for getting the work done at the risk and cost of the contractor. The Railway Administration appointed another contractor whose rates for the same work were higher, for a period of three years from 8th February 1964.

After adjusting Rs. 19,989 due to the previous contractor for work already done by him and security deposit (Rs. 5,000), a sum of Rs. 37,158 was found to be recoverable from him on

account of demurrage charges, penalty towards detention of engines, departmental labour engaged, etc. This amount was not recovered from the contractor as his whereabouts were not known.

In September 1970, the contractor was located with the assistance of the Commissioner of Police, Bombay and was asked on 17th January 1972 to pay to the Railway Rs. 37,158. On 29th January 1972, he was advised, after consultation with the Law Officer of the Railway, that in case he was not satisfied with the decision of the Administration he could ask for an arbitration. Thereupon, the contractor informed the Divisional Superintendent, Bombay on 10th February 1972 that the suggestion of the Administration was acceptable and the matter might be referred to arbitration.

In September 1973, the Operating department suggested that the case might be closed and amount written off as it was apprehended that the records for the period from December 1963 to February 1964 might not be available and some of the staff who might be called for evidence during arbitration proceedings would have retired, expired or even left the Railway service and the case might go against the Railway if it was referred to an arbitrator. However, since the Administration had already entered into correspondence with the contractor for settling the issue by arbitration, it constituted a Committee of three officers in June 1974 to amicably settle the matter with the contractor.

The Committee recommended in June 1975 that the contractor might be paid Rs. 19,378.03 in full and final settlement of all claims. The recommendation was accepted by the Administration and the amount was paid to the contractor in November 1975. The extra expenditure of Rs. 80,322 incurred by the Administration up to the 30th November 1966 due to the breach of the previous contract, was not included in the claim of the Railway as the contract did not provide for recovery of such expenditure.

The following aspects of the case are worth mentioning :—

- (i) According to the conditions of the contract the contractor was required to submit his bills for work

done within seven days after the last date of a month for which the claim related. This date in any case would not be later than 7th March 1964. As such all the bills and claims of the contractor became time-barred on 7th March 1967.

- (ii) It is not clear how the Committee of three officers arrived at the conclusion that the Railway's claim for Rs. 62,147 was not tenable and Rs. 19,378 were payable to the contractor when the records for the relevant periods were stated to be not available and some of the concerned staff whose evidence might have been necessary were stated to have retired, expired or even left the Railway service.

36. Eastern Railway—Outstanding dues against Government Railway Police on account of rent and electricity charges

According to extant procedure, the rent for the quarters occupied by the Government Railway Police personnel in West Bengal and Bihar is to be realised from the police personnel through their pay bills for adjustment through the Accountants General. For this purpose the Railway Administration raises debits against the State Government after acceptance of bills by the State Police authorities.

A review of the position of recovery of rent for the quarters occupied by the Government Railway Police personnel posted at various stations in the West Bengal and Bihar regions of Eastern Railway disclosed that out of rent amounting to Rs. 4.99 lakhs due for the period from 1968-69 to 1974-75, Rs. 3.39 lakhs had been outstanding (at the end of June 1977) against the Government Railway Police. In Danapur Division 17 consolidated bills for the period from 1st August 1969 to 31st March 1975 were preferred on Superintendent of Railway Police, Patna, as late as October 1974.

Where electric installations are provided in the quarters in the occupation of Government Railway Police personnel, electric current consumption charges are recoverable from such staff. In respect of Government Railway Police staff of Bihar area, till

September 1969, the amount was recovered through Government of Bihar. Debits for these charges were being raised against the Accountant General, Bihar after the bills preferred on the Superintendent, Police, Patna were accepted and the claims were settled by adjustments. As there were delays in acceptance of debits, this procedure was modified from 1st September 1969 enabling the Railway Administration to recover the charges directly from the Government Railway Police personnel, but this was not implemented because none of the occupants deposited the security money and executed agreements. However, the bills for the electricity charges were preferred by the Railway Administration on the individual Government Railway Police staff and were sent to the Superintendent, Railway Police, Patna for arranging recovery from the salary bills of such staff. There were delays ranging between two months and twenty-two months in preferring the bills. These bills had not been preferred correctly as proper records of Railway quarters under occupation of different individuals and other particulars like rate of pay, period of occupation etc., had not been maintained by the Railway Administration. Consequently, the bills were returned unaccepted on the grounds that the names of the incumbents of certain quarters did not tally, staff had already been transferred to other districts, etc.

In the case of stations in West Bengal area the electricity charges continue to be realised through the State Government and the Accountant General, West Bengal. The charges have been outstanding since 1969-70.

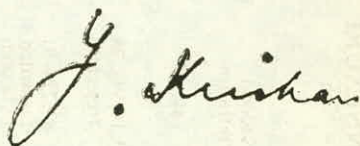
The outstanding electricity charges in respect of occupants of railway quarters in Bihar and West Bengal regions for the period from 1st September 1969 to 31st March 1975 worked out to Rs. 2.07 lakhs. (Rs. 90,192 in respect of the Government of Bihar and Rs. 1,16,596 in respect of the Government of West Bengal).

The Railway Administration stated (July 1976) that after protracted correspondence the Inspector General of Police, Bihar, agreed, in November 1975, to arrange for recovery of electric charges through salary bills of Government Railway Police staff

posted in Bihar region and that the Inspector General, Police, West Bengal had also issued directive, in June 1976, to the Superintendent, Railway Police, Howrah to accept the bills and adjust the debits. It further stated (April 1977) that the Railway Board had issued direction in July 1976 for the revival of the old procedure of getting the bills of electricity charges accepted by the State Governments and raising debits against them. This procedure has been implemented except in Darapur Division (September 1977).

37. Recoveries at the instance of audit

During the year 1976-77, Rs. 62.23 lakhs were recovered or noted for recovery at the instance of audit. As a result of further review made by the Railways of these and similar cases Rs. 40.55 lakhs more were noted for recovery.



(Y. KRISHAN),

Director of Railway Audit.

NEW DELHI 1978
 Dated the 16th March 1899
25 Phalguna Countersigned



(A. BAKSI),

Comptroller and Auditor General of India.

NEW DELHI 1978
 Dated the 16th March 1899
25 Phalguna

ANNEXURE

(Figures in rupees)

Sl. No.	Particulars of claim	First arbitration	Second arbitration	Third arbitration	Fourth arbitration	Fifth arbitration
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	Minimum guarantee	1,02,230.55 (awarded)	3,19,598.78 (rejected)	4,86,659.42†	..	6,83,472.96†
2.	Price variation for lifted and unlifted quantities	36,173.62 (awarded)	83,274.81 (awarded 34,900)	4,21,508.19	..	%4,82,703.22* @56,058.98
3.	Rental for cylinders	22,482.00 (awarded)	42,123.00 (awarded)	18,557.84	..	..
4.	Damages to cylinders	386.25 (awarded)	2,183.50 (awarded 800.00)	..	..	..
5.	Shortage of acetone	527.58 (awarded 234.35)	1,610.18 (awarded 400.00)	..	..	..
6.	Sales tax	10,057.54 (awarded)	27,940.71 (awarded 2,443.00)	..	..	..
7.	Refund of electric charges	27,604.48 (awarded)	42,105.68 (rejected)	..	4,56,320.91	..

8. For failure to render assistance in procurement of material and other facilities	50,000.00 (rejected)	..	..	..	..
9. For non-supply of power and water in time	1,00,000.00 (rejected)	..	..	..	..
10. For not providing surface drainage facilities	24,000.00 (rejected)	4,800.00 (not pressed)	..	..	..
11. For not providing approach road and other facilities	50,000.00 (not pressed)	50,000.00 (not pressed)	..	..	..
12. For non-supply of power round the clock and at agreed voltage	1,00,000.00 (not pressed)	1,00,000.00 (not pressed)	..	..	..
13. For first-aid box, hospital and other facilities	12,000.00 (rejected)	12,000.00 (not pressed)	..	..	..
14. For failure to provide facilities of light on main road and in obtaining quota permits, etc.	2,00,000.00 (rejected)	2,00,000.00 (not pressed)	..	..	..
15. For breach of provisions of clauses 15 and 16	..	..	1,50,000.00	..	1,50,000.00
16. For breach of undertaking not to construct any structure within 20 metres of boundary and not removing the same	1,00,000.00 (not pressed)	1,00,000.00 (not pressed)	..	..	..
17. For non-supply of pure water	50,000.00 (rejected)	50,000.00 (not pressed)	..	..	..

(1)	(2)	(3)	(4)	(5)	(6)	(7)
18.	For purchase of Burshane gas by Diesel Locomotive Works	1,00,000.00 (rejected)	1,00,000.00 (not pressed)	..	..	..
19.	For breach of clause 11 of the agreement	..	..	1,00,000.00	..	..
20.	For demolition of structures	..	1,00,000.00 (not pressed)	..	..	..
21.	Damages to plant due to power fluctuations	..	..	..	8,48,155.39	..
22.	Damages other than interest	..	..	..	..	1,50,000.00
23.	Compensation for loss and damage suffered on account of financial stringency caused by blocking of capital	..	..	..	..	4,85,608.98
	TOTAL	9,85,462.02	12,35,636.66	11,76,725.45	13,04,476.30	20,07,844.14

Remarks : * *ad hoc* payment of Rs. 3.5 lakhs already made to the firm.

% for lifted quantity.

@ for un-lifted quantity.

† excludes element of price variation which is included in serial number 2.