



**REPORT OF THE**

**COMPTROLLER AND AUDITOR GENERAL**

**OF INDIA**

**FOR**

**THE YEAR 1974-75**

**UNION GOVERNMENT (RAILWAYS)**





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## PREFATORY REMARKS

This Report relates mainly to matters arising from the Appropriation Accounts of Indian Government Railways for 1974-75 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 1974-75 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 1974-75 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 1974-75  
 AND CONNECTED DOCUMENTS**

**1. Financial Results**

1.1. The financial results of working of the Railways during 1974-75 showed a deficit of Rs. 113.83 crores against the anticipated deficit of Rs. 52.79 crores in the budget. The anticipated and the actual revenue receipts and expenditure for the year 1974-75 and the actuals for preceding three years are shown below :—

	Actuals 1971-72	Actuals 1972-73	Actuals 1973-74	Budget 1974-75	Actuals 1974-75	Variation with reference to budget
	(crores of rupees)					
1. Gross Revenue receipts	1096.97	1162.77	1138.19	1435.38	1415.19	—20.19
2. Revenue expenditure	927.89	998.34	1082.78	1306.50	1341.55	+35.05
3. Net revenue (1—2)	169.08	164.43	55.41	128.88	73.64	—55.24
4. Payment to General Revenues	151.24	161.51	170.92	*181.67	*187.47	+5.80
Surplus( +) Deficit(—) (3—4)	+17.84	+2.92	—115.51	—52.79	—113.83	—61.04

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

The net revenue before payment of dividend was only Rs. 73.64 crores against the budget anticipation of Rs. 128.88 crores. The shortfall is attributable to non-materialisation of anticipated receipts and increase in expenditure. These have been dealt with in detail in paragraphs 2 and 3 below.

1.2. The Railways borrowed Rs. 204.97 crores from General Revenues for (a) dividend equalisation (Rs. 129.61 crores), (b) repayment of loan (Rs. 33.24 crores), (c) meeting expenditure on works chargeable to Development Fund (Rs. 16.17 crores), and (d) payment of interest on loans (Rs. 11.48 crores). As the borrowings were based on an estimated deficit of Rs. 143.97 crores (against actual deficit of Rs. 129.61 crores), the amount borrowed for dividend equalisation was slightly higher than the actuals, leaving a balance in Railway Revenue Reserve Fund. At the end of 1974-75 the Railways owed Rs. 379.75 crores (Rs. 130.20 crores on account of Development Fund and Rs. 249.55 crores on account of Revenue Reserve Fund).

1.3. There were net accretions of Rs. 14.24 crores to Depreciation Reserve Fund and Rs. 17.73 crores to Pension Fund.

1.4. A new fund called Accident Compensation, Safety and Passenger Amenities fund was constituted from 1st April 1974 to meet the expenditure on compensation to passengers involved in railway accidents as well as on certain specified safety and passenger amenities works. The fund is credited with the receipts from surcharge levied on passenger tickets from 1st January 1974. [c.f. paragraph 3.8 of the Report of the Comptroller and Auditor General of India for the year 1973-74—Union Government (Railways)]. The credit to and withdrawal from the fund during 1974-75 were Rs. 6.65 crores and Rs. 0.17 crores respectively.

1.5. The operating ratio of the Railways (ratio of gross working expenses to gross earnings) was 92.41 per cent during



1974-75 against 93.39 per cent in 1973-74 and 84.47 per cent in 1972-73.

1.6. The payment to General Revenues during 1974-75 was Rs. 203.26 crores, including the payment of Rs. 15.79 crores which was carried forward from 1973-74.

1.7. The rate at which dividend would be payable by the Railway Undertaking to General Revenues during the Fifth Five Year Plan period as well as other ancillary matters are presently under the consideration of the Railway Convention Committee 1973. The payment to General Revenues during 1974-75 was made in accordance with the recommendations of this Committee contained in its Interim Report and Sixth Report. The interim recommendations of the Committee, approved by Parliament in December 1973 and December 1974, are applicable to the years 1974-75 and 1975-76. According to these, the exemptions and reliefs granted by the Railway Convention Committee 1971 would be available to the Railways subject to further liberalisation that the exemption in respect of capital outlay on works in progress would be 50 per cent instead of 25 per cent. The quantum of relief in payment of dividend on the basis of recommendations of Railway Convention Committee 1973, works out to Rs. 29.46 crores for the year 1974-75 as against Rs. 22.06 crores in 1971-72, Rs. 24.01 crores in 1972-73 and Rs. 25.17 crores in 1973-74 as per the recommendations of the Railway Convention Committee 1971.

1.8. The Ministry of Railways (Railway Board) had informed the Railway Convention Committee 1973 that the capital outlay on the unremunerative branch lines was being assessed precisely in accordance with the recommendations of the Uneconomic Branch Lines Committee 1969 and pending such assessment, the amount of Rs. 42.21 crores (capital outlay on 77 branch lines) as assessed earlier had been adopted for purposes of computation of amount exempt from dividend liability to General Revenues. During 1974-75, the

Railways had sought for exemption on a capital outlay of Rs. 88.73 crores for 142 unremunerative branch lines involving an abatement in dividend of Rs. 2.56 crores on the increased capital outlay (Rs. 46.52 crores) exempt from dividend.

1.9. The deferred dividend on new lines (i.e., dividend accrued but not payable during construction and the 5 year moratorium period thereafter) outstanding at the end of 1974-75 was Rs. 80.44 crores of which Rs. 52.21 crores were for new lines which had already completed the moratorium period.

1.10. The outlay on the Annual Plan for the year 1974-75 was :—

	Budget	Actuals	Variation
	(crores of rupees)		
Capital	209.00	212.11	+3.11
Depreciation Reserve Fund	115.00	112.52	-2.48
Development Fund	18.50	16.17	-2.33
Open line Works—Revenue	7.50	5.83	-1.67
Metropolitan Transport Projects	18.00	7.11	-10.89
Accident Compensation, Safety and Passenger Amenities Fund	0.14	0.05	-0.09
Total	368.14	353.79	- 14.35

There were increases under the heads 'Rolling stock' and 'New Lines' and savings under other Plan heads.

## 2. Revenue Receipts

The revenue receipts during 1974-75 were Rs. 1,415.19 crores, which were less than the budget estimates by Rs. 20.19 crores. The details are shown below :—

Particulars	Actuals 1973-74	Budget 1974-75	Actuals 1974-75	Variation with reference to budget  (crores of rupees)
Passenger earnings				
Upper classes	43.42	42.25	44.49	(+) 2.24
Second class	323.73	378.60	368.06	(-)10.54
Total	367.15	420.85	412.55	(-) 8.30
Other coaching earnings	59.35	73.58	69.21	(-) 4.37
Goods earnings	680.41	899.82	917.50	(+)17.68
Sundry earnings	40.09	38.90	39.02	(+) 0.12
Surplus	(-) 9.11	(-) 6.00	(-)30.09	(-)24.09
Gross Traffic receipts	1137.89	1427.15	1408.19	(-)18.96
Miscellaneous receipts	0.30	8.23	7.00	(-)1.23
Total Revenue receipts	1138.19	1435.38	1415.19	(-)20.19

The budget presented in February 1974 envisaged gross traffic receipts of Rs. 1,427.15 crores on the assumption that the Railways would carry 25 million tonnes of additional originating



traffic over that expected in the revised estimates for the year 1973-74 and that passenger traffic would be at about the same level as projected in the budget estimates for 1973-74. The increase in traffic was expected to bring in additional revenue of Rs. 121.77 crores, of which Rs. 102.04 crores was to be from goods traffic.

It was mentioned in the budget that the cost of inputs particularly wage and fuel bills had risen to such levels recently as to upset fundamentally the value of constituents in freight rates and fares and, bearing in mind the vital role of Railways in the economic infrastructure of the country, an adjustment in the level of fares and freights was inescapable. Accordingly, the budget envisaged introduction of a revised freight structure (without disturbing the *inter se* classification of goods), enhancement in the freight on coal, upward revision of transshipment charges and increase in the supplementary charge levied on parcels and luggage. In respect of passenger fares it was explained that the situation called for an increase in fares on a rational basis so as to give passenger traffic a lower priority within the transport capability of the Railways. Fares for all classes of travel except season tickets were revised upwards. These measures made effective from 1st April 1974 were expected to yield additional revenue of Rs. 136.38 crores during the year.

While presenting the supplementary demands for grants in August 1974 it was stated that the working conditions which were none too favourable earlier, were further upset by the Strike in May 1974 extensively damaging the transport capability and consequently the Railway earnings for the quarter ending June 1974 had fallen short of the proportionate forecast by Rs. 92.45 crores. It was also stated that an adjustment in fares and freight rates were inescapable if the Railways were not to end the year in a massive loss. The proposals in August



1974 envisaged a levy of supplementary charges of 16 $\frac{2}{3}$ —22 per cent on all goods traffic, except food grains, pulses and edible oil, 15 per cent on luggage and parcels except milk and vegetables, and 20—33 $\frac{1}{3}$  per cent increase in passenger fares except season tickets. These increases were made effective from 15th September 1974 and were expected to yield additional revenue of Rs. 133.47 crores, of which the goods revenue was Rs. 89.65 crores.

The increases in freight and fares introduced in 1974-75 were the highest in the last decade. In respect of goods traffic the freight structure was rationalised in April 1970 only adopting base scale rates per kilometre per quintal, the rates for different classes of commodities is derived by adding specified percentages of the base rates. These base rates were revised from 1st April 1974 resulting in increases in freight rates ranging from 5 per cent to 11 per cent. In the previous years also the freight rates had been increased by upgrading the classifications of commodities by one level up to class 52.5 and certain other revisions of classification.

The increase in traffic receipts was Rs. 270.30 crores over that of 1973-74.

The originating goods traffic carried during 1974-75 was 196.6 million tonnes *i.e.*, about 20.4 million tonnes below the expected level. The revenue-earning traffic was 173.6 million tonnes which was the level of traffic in 1969-70.

Under passenger traffic there was a fall both in respect of passenger kilometres (126,254 against 135,664 millions in 1973-74) and originating passengers (2,429 against 2,654 millions in 1973-74).

### 3. Revenue Expenditure

The revenue expenditure during 1974-75 was Rs. 1,341.55 crores which was more than the budget estimates by Rs. 35.05 crores. The details are shown below :—

	Actuals 1973-74	Budget 1974-75	Actuals 1974-75	Variation from budget
	(crores of rupees)			
<b>I. Working Expenses</b>				
(i) Administration, staff welfare and operating staff	341.34	417.36	437.43	+20.07
(ii) Repairs and maintenance	356.28	432.79	452.74	+19.95
(iii) Fuel	158.85	207.87	197.02	-10.85
(iv) Miscellaneous expenses including operation other than staff and fuel, payments to worked lines and suspense	79.01	90.50	99.25	+8.75
(v) Appropriation to Depreciation Reserve Fund	115.00	115.00	115.00	—
(vi) Appropriation to Pension Fund	15.85	15.85	15.85	—
(vii) Appropriation to Accident compensation, Safety and Passenger Amenities Fund	—	8.00	6.65	-1.35
<b>II. Miscellaneous expenditure such as cost of Railway Board and its attached offices, Surveys, Audit and Subsidy paid to branch line companies</b>				
	9.69	11.63	11.78	+0.15
<b>III. Open Line Works—Revenue</b>				
	6.76	7.50	5.83	-1.67
<b>Total</b>	<b>1082.78</b>	<b>1306.50</b>	<b>1341.55</b>	<b>+35.05</b>

The increase in revenue expenditure over that of the previous year was Rs. 258.77 crores.

The increase of Rs. 35.05 crores over the budget reflects the net effect of increases (Rs. 166.22 crores) on account of post budgetary factors and savings of (Rs. 131.17 crores) on account of economy measures and other causes.

The increases were mainly attributable to payment of six instalments of additional dearness allowance to staff sanctioned by Government (Rs. 91.04 crores), increase in cost of coal, diesel oil and electricity tariffs (Rs. 32.11 crores), fluctuations in adjustment of undercharges and overcharges (Rs. 11.22 crores), increased expenditure on consumable stores, clothing, etc. (Rs. 9.36 crores), increased expenditure on maintenance of electrical and signal services (Rs. 7.49 crores), more contribution to Provident Fund (Rs. 6.02 crores), payment of incentive to loyal staff who stuck to their duty posts during the All India Railwaymen's Strike in May 1974 (Rs. 4.54 crores), adjustment of losses on fuel (Rs. 1.77 crores), expenditure incurred in connection with the Strike measures (Rs. 1.34 crores) and payment of house rent allowance and other allowances (Rs. 1.33 crores).

The savings were mainly on account of non-materialisation of traffic to the extent anticipated resulting in less consumption of fuel (Rs. 40.87 crores), economy measures (Rs. 38.63 crores), less payment of arrears than anticipated in implementation of Pay Commission's recommendations (Rs. 10.42 crores), less expenditure on shed and shop reports<sup>air</sup> to rolling stock (Rs. 9.86 crores), fluctuations in adjustment of liabilities under suspense (Rs. 9.82 crores), less expenditure on account of non-accrual of emoluments during Strike (Rs. 7.86 crores), non-filling up of vacancies (Rs. 5.47 crores), less expenditure on repairs and maintenance of track, buildings etc., (Rs. 2.98 crores), revenue works (Rs. 1.67 crores), staff training (Rs. 1.35 crores), running and overtime allowances (Rs. 1.06 crores), and aggregate of other causes (Rs. 1.18 crores).



#### 4. Budgetary Control

The number of demands voted for the year was 21 aggregating Rs. 2,508.52 crores. During the year thirteen supplementary grants were obtained for Rs. 101.69 crores.

The number of charged appropriations for the year was seven for a total sum of Rs. 1.68 crores. During the year 9 supplementary appropriations for Rs. 0.58 crore were obtained.

The disbursement during the year showed a saving of Rs. 37.08 crores over the total grants and appropriations as shown below :—

Particulars	Voted Grants	Charged Appropriation	Total
	(crores of rupees)		
1. Original	2508.52	1.68	2510.20
2. Supplementary	101.69	0.58	102.27
3. Total	2610.21	2.26	2612.47
4. Total disbursement	2573.93	1.46	2575.39
5. Saving	36.28	0.80	37.08
6. Percentage of net saving to total grant/appropriation	1.4	35.4	1.4
7. Percentage of net saving in the previous year. (1973-74)	4.5	10.1	4.5

#### 5. Savings in Grants and Appropriations

##### A. Savings in Voted grants

The net shortfall of Rs. 36.28 crores mentioned in paragraph 4 is made up of shortfall under fifteen grants (Rs. 53.64 crores) and excess under four grants (Rs. 17.36 crores).

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

The largest saving of Rs. 11.40 crores occurred under Grant No. 7—Operation (Fuel). This saving is mainly attributable to non-materialisation of traffic to the extent anticipated owing *inter alia* to Railway Strike in May 1974.

The two works grants, namely, Grant No. 13—Open Line Works—Revenue and Grant No. 14—Construction of New Lines accounted for a saving of Rs. 9.25 crores. The saving occurred under Metropolitan Transport Projects owing to non-finalisation of plans, estimates, contracts etc., and slow progress on other works and economy measures.

A shortfall of Rs. 8.22 crores occurred under Grant No. 9—Miscellaneous Expenses. The final grant (Rs. 42.67 crores) included a supplementary grant of Rs. 8.68 crores obtained by the Railways in March 1975 towards meeting expenditure mainly on Government Contribution to Provident Fund (Rs. 7.42 crores), expenditure in connection with the Strike measures (Rs. 1.14 crores), freight charges on revenue stores (Rs. 0.54 crore), etc.

The shortfall of Rs. 8.22 crores was explained as due to adjustment of more liabilities (credit) under Suspense heads, namely, 'Demands Payable' and 'Miscellaneous Advances-Revenue', (Rs.9.72 crores) which also included Rs. 6.02 crores adjusted through 'Demands Payable' in respect of payment<sup>of</sup> arrears of dearness allowance and other liabilities towards the close of the year, partly offset by increased expenditure on account of adjustment of freight charges on revenue stores (Rs. 0.85 crore) and aggregate of minor variations (Rs. 0.65 crore).

The Railway Administrations surrendered Rs. 3.05 crores under this grant in the final modification. The amount for which supplementary grant was obtained was excessive.

A shortfall of Rs. 2.50 crores occurred under Grant No. 22—Accident Compensation, Safety and Passenger Amenities Fund.



This saving is mainly attributable to less payment in respect of accident compensation during the year owing, *inter alia*, to non-finalisation of certain cases (Rs. 2.42 crores) and aggregate of minor variations (Rs. 0.08 crore).

A saving of Rs. 1.85 crores occurred under Grant No. 12—Payment of Dividend to General Revenues and Contribution to States in lieu of Passenger fare tax mainly due to increase in exemption in respect of capital-at-charge of unremunerative branch lines.

A shortfall of Rs. 1.35 crores occurred under Grant No. 21—Appropriation to Accident Compensation, Safety and Passenger Amenities Fund. This saving is mainly due to less collection of surcharge on passenger tickets owing to non-materialisation of traffic to the extent anticipated.

A saving of Rs. 19.07 crores occurred under 8 grants (Grants 2, 4, 5, 6, 10, 16, 17 and 20) mainly due to certain economy measures taken by Railway Administrations, such as saving in payment of travelling allowance and over time allowance and non-filling of posts etc., (Rs. 4.92 crores), less expenditure on repairs and maintenance of track and buildings (Rs. 3.87 crores), less payment of arrears of pay towards implementation of the recommendations of the Third Pay Commission (Rs. 3.56 crores), less payment of dearness allowance to staff at enhanced rate sanctioned during the year (Rs. 2.48 crores) and less receipt of debits towards cost of Order Police and supply of arms and ammunition (Rs. 0.54 crore) and aggregate of minor savings of less than Rs. 50 lakhs each (Rs. 3.70 crores).

#### B. *Savings in Appropriations*

A total saving of Rs. 80 lakhs occurred in nine charged appropriations. The significant savings were under Appropriation No. 6. Working Expenses—Operation Staff (Rs. 52.77 lakhs), Appropriation No. 9. Working Expenses—Miscellaneous Expenses

(Rs. 9.31 lakhs) and Appropriation No. 8 Working Expenses—Operation other than staff and fuel (Rs. 8.26 lakhs). The balance of savings was under six appropriations offset by excesses of Rs. 0.27 lakh under two Appropriations *viz.*, No. 5—Revenue Working expenses—Repairs and Maintenance and No. 10—Staff Welfare.

#### 6. Excesses over grants and appropriations

During the year under report excesses of Rs. 17.36 crores occurred under four voted grants and two charged appropriations. There was no excess either under voted grants or under appropriations in the previous year. The details of the excesses during 1974-75 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
1. Revenue— Railway Board	2,07,72,000	2,13,30,431	5,58,431	2.69

The excess was mainly on account of increase in expenditure on contingencies and payment of additional dearness allowance.

3. Revenue— payment to worked lines	16,38,000	16,90,265	52,265	3.19
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The excess occurred on Central Railway due to more payment of net earnings to Central Provinces Railway on account of increase in traffic earnings of that Railway. No supplementary grant was taken by the Railway Administration.

8. Working Expenses— Operation other than Staff and Fuel	72,78,02,000	73,89,49,149	1,11,47,149	1.53
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The excess of Rs. 111.47 lakhs occurred mainly on account of increase in consumption of consumable stores (Rs. 104.71

lakhs) and increase in expenditure on account of increase in prices of stores (Rs. 143.73 lakhs), fluctuations in adjustments affecting stock adjustment account (Rs. 47.35 lakhs) and aggregate of minor variations (Rs. 6.00 lakhs) partly counter-balanced by savings due to less adjustments of charges in respect of rolling stock interchanged between Railways (Rs. 190.32 lakhs).

During the course of the year supplementary grant of Rs. 811.7 lakhs had been obtained to meet increased expenditure under this grant on account of payment of additional dearness allowance sanctioned by Government, increase in the cost of consumable stores, increase in tariff of electricity by State Electricity Boards and more payment of compensation claims for goods lost or damaged.

The excess occurred on Northern Railway (Rs. 40.5 lakhs), Northeast Frontier Railway (Rs. 17 lakhs), South Central Railway (Rs. 63.4 lakhs), South Eastern Railway (Rs. 85.5 lakhs) and Western Railway (Rs. 20 lakhs) offset by savings on other Railways.

South Central Railway Administration explained the excess as due to more receipt of debits for stores, clothing, lubricant oil, etc. This Railway had, however, surrendered Rs. 326.1 lakhs in its final modifications.

Grant	Final Grant	Actual Expenditure	Excess	Percentage
15. Open Line Works— Capital, Depreciation Reserve Fund and Development Fund	8,35,54,73,600	8,51,73,79,024	16,19,06,024	1.94

The excess of Rs. 16.19 crores was distributed on all Railways and Production Units except Western Railway. The largest



excess occurred on Northern Railway (Rs. 10.95 crores) followed by Southern Railway (Rs. 7.11 crores), South Central Railway (Rs. 5.82 crores) and South Eastern Railway (Rs. 5.80 crores). With a view to controlling the expenditure under this grant particularly in respect of 'Stores Suspense' the Railway Board had kept a reserve of Rs. 30.82 crores from the original grant. This reserve was distributed to the Railways in the final grant allotted to them. A token grant of one thousand was obtained through supplementary demands for grants for participating in Himachal State Road Transport Corporation. The excess occurred over the final grant.

The net excess of Rs. 16.19 crores occurred under the sub-heads 'Rolling Stock' (Rs. 26.27 crores), 'Manufacturing Suspense' (Rs. 20.38 crores) partly offset by shortfall under Miscellaneous Advances (Rs. 13.89 crores), 'Works' (Rs. 11.41 crores) 'Stores Suspense' (Rs. 2.34 crores) 'Development Fund' (Rs. 2.34 crores), 'Investment in State Road Services' (Rs. 0.28 crore) and 'Taking over of open line wire from Posts and Telegraph Department' (Rs. 0.20 crore).

Brief reasons for variations are given below :—

'Rolling Stock'.—The excess was mainly due to more debits <sup>for</sup> procurement of rolling stock and more procurement of spares.

'Manufacturing Suspense'.—The excess was mainly due to payment of additional dearness allowance to staff sanctioned by Government (Rs. 15.11 crores), increase in expenditure on account of more work done in workshops (Rs. 4.67 crores), less issue of manufactured stores to stock (Rs. 4.51 crores) and aggregate of other variations (Rs. 2.39 crores) partly offset by decrease due to less drawal of stores from stock (Rs. 6.30 crores).



'*Miscellaneous Advance*'.—The shortfall was mainly due to less procurement of imported stores, debits for stores including sea freight (Rs. 14.70 crores) partly offset by excess due to more payment of fabrication charges (Rs. 0.64 crore) and aggregate of minor variations (Rs. 0.17 crore).

'*Works*'.—The shortfall was mainly due to slow progress of works, *inter alia*, owing to certain economy measures, postponement of certain works (Rs. 11.03 crores) and aggregate of minor variations (Rs. 0.75 crore); partly counterbalanced by excess due to adjustment in respect of certain completed works (Rs. 0.37 crore).

'*Stores Suspense*'.—The shortfall was mainly due to less procurement of high speed diesel oil (Rs. 12.90 crores), less receipt of materials returned from manufacture and works (Rs. 6.08 crores), more realisation of credit for sales (Rs. 2.86 crores); partly offset by more receipt of coal and stores for general purposes and increase in prices of stores (Rs. 10.33 crores), issue of stores to Manufacture Suspense (Rs. 6.90 crores) and works (Rs. 1.75 crores) being less than what was anticipated and aggregate of minor variations (Rs. 0.52 crore).

'*Development Fund*'.—The shortfall was mainly due to postponement of certain works as a measure of economy (Rs. 3.04 crores) and aggregate of minor variations (Rs. 0.70 crore).

'*Investment in Road Services*'.—The shortfall was mainly due to less payment on behalf of Central Government to State Road Transport Corporations than originally expected (Rs. 0.28 crore).

'*Taking over of Posts and Telegraph wires from Posts and Telegraphs Department*'.—The shortfall was mainly due to less expenditure incurred on taking over Posts and Telegraph wires

from Posts and Telegraphs Department owing to less receipt of debits than originally anticipated (Rs. 0.20 crore).

*B. Charged Appropriations*

Number and name of Appropriation	Final appropriation	Actual expenditure	Excess	Percentage of excess
5. Revenue Working Expenses—Repairs and Maintenance	2,20,000	2,43,983	23,983	10.90

The excess was due to more decretal payments. A supplementary appropriation amounting to Rs. 1.76 lakhs was obtained in March 1975. It proved inadequate.

10. Revenue Working Expenses—Staff Welfare	8,000	11,223	3,223	40.29
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The excess was due to more decretal payments. The final appropriation was made after obtaining supplementary appropriation in March 1975. It proved inadequate.

## CHAPTER II

### MARSHALLING YARDS

#### 7. Eastern Railway—Marshalling yards—Chitpur, Naihati and Andal

##### *Introduction*

7.1. In a railway marshalling yard, goods trains and other loads originating from the adjoining sections and Railway stations including that serving the yard, are received, sorted out and new trains formed and despatched onwards.

7.2. A yard is under the charge of a Chief/Head Yard Master or Yard Master or Yard Supervisor depending on the quantum of work. In very big yards Gazetted Officers (Divisional or Assistant Operating Superintendents) are also posted for supervising the day to day working. Under the Chief/Head Yard Master or Yard Master there are (i) executive or field staff and (ii) clerical staff.

7.3. A marshalling yard has a number of functions, the more important of which are :—

- (a) dealing with through goods trains (*i.e.*, trains not requiring marshalling in that yard), receipt of through trains and their despatch after change of engine and crew (if necessary), examination of wagons by Train Examiner, adjustment of loads, detachment of sick wagons, and attachment of urgent wagons in exceptional cases ;

- (b) sorting out loads carried by goods trains terminating at the marshalling yard in accordance with the direction of movement and the destinations ;
- (c) formation and despatch of new (originating) goods trains ;
- (d) placement and withdrawal of wagons from various points in the local area for repairs, re-adjustment of loads, repacking (loading and unloading) of wagons ; and
- (e) formation of shunting and work trains or road vans for delivery/collection of smalls and of wagon-load consignments to and from adjoining sections.

7.4. The performance of three marshalling yards of Eastern Railway, namely, Chitpur (Sealdah area), Naihati and Andal was generally reviewed by Audit. The records for selected months (November 1974 for Chitpur and January 1975 for Naihati and Andal) were checked in detail. The results of review are set out in the succeeding paragraphs.

#### *Chitpur*

7.5. This yard is under the direct charge of a District Traffic Superintendent. It feeds the following commercial points in Sealdah and Harbour area in Calcutta—

- (i) Ultadanga goods ;
- (ii) Chitpur goods (including Chitpur ghat) ;
- (iii) Cossipore road goods ; and
- (iv) Calcutta Port Commissioners' Railway.



7.6. In accordance with the programme of formation of trains, one train is required to be formed daily for each of the following directions :—

- (i) Mughalsarai; (ii) Asansol/Burdwan; (iii) South Eastern Railway side; (iv) Budge Budge; (v) Kali-ghat; (vi) Kidderpore docks; (vii) Naihati; (viii) Barrackpore; (ix) Ichhapur; (x) Sodpur; (xi) Belgharia; (xii) Batanagar; (xiii) Dum Dum Cantonment; (xiv) Ballygunge Junction; and (xv) Bangaon Junction.

Depending upon the availability of loads, empty specials to Steel Plants and Pakur Station are also sent from this yard. This yard is also an interchange point with the Port Commissioners' Railway and receives two trains and makes over two trains daily.

7.7. The trains for the first three directions are hauled by electric locomotives and those for other directions are hauled by steam/diesel locomotives.

*Capacity\* of the yard and number of wagons dealt with therein*

7.8. Prior to November 1963, the daily holding capacity of the sorting yard was 497 wagons. As this capacity was less than the capacity of the reception yard (600 wagons), the yard was remodelled in 1963 at a cost of Rs. 19.76 lakhs (booked up to March 1975). The completion report of the work is still (December 1975) to be drawn up. The present daily holding capacity of the sorting yard is 829 wagons. In the course of remodelling the lay out of the yard was changed to facilitate quick movement of the wagons to and from the yard. The total daily holding capacity (reception, sorting, marshalling and despatch lines) of the yard is 3,159 wagons.

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\*The capacity of marshalling yards is assessed in terms of four-wheeler wagons.

7.9. The number of through and terminal loaded wagons and empties dealt with in this yard is indicated below :—

Year	Average number of wagons dealt with (received, sorted out, marshalled and despatched) per month	Number of wagons dealt with (daily average)
1962-63	55,280	1,843
1963-64	43,885	1,463
1964-65	47,377	1,579
1970-71	35,412	1,181
1971-72	35,487	1,183
1972-73	37,343	1,245
1973-74	35,275	1,176
1974-75	34,720	1,157

#### *Detention of wagons*

7.10. In August 1967, the targets for detention of 'through loaded' and 'all wagons' (that is, including 'through loaded' and 'terminal loads') were revised from 16 and 17 hours respectively to 19 and 16 hours respectively after taking into consideration the working conditions of the yard. These were further revised to 23 hours and 18 hours respectively in December 1974. However, the actual detention per wagon, on an average, remained far above the liberalised targets as indicated below: —

Year	Through loaded wagons (target-19 hours/23 hours)			All wagons (target-16 hours/18 hours)		
	Average	Maximum	Minimum	Average	Maximum	Minimum
1969-70	23.0	—	—	17.3	—	—
1970-71	34.8	62.6	21.6	23.5	37.6	16.6
1971-72	43.2	58.8	35.0	26.2	32.3	23.2
1972-73	34.0	47.0	27.8	21.0	26.4	18.4
1973-74	35.2	43.3	29.5	20.0	25.5	18.5
1974-75	38.2	41.6	32.6	25.0	26.5	23.8

7.11. The position of number of wagons dealt with per shunting engine hour also deteriorated from the year 1970-71 as given below indicating use of more engine power :

Year	Average number of wagons dealt with per shunting engine hour	Maximum	Minimum
1968-69	18.80	24.9	16.8
1969-70	18.10	19.0	16.7
1970-71	14.90	17.1	12.4
1971-72	15.00	16.8	11.2
1972-73	15.80	17.4	17.9
1973-74	15.00	16.5	13.6
1974-75	15.00	19.7	14.6

#### *Reasons for detention of wagons*

7.12. The reasons for detention of wagons given by the Railway Administration are analysed below :

- (a) *Fluctuating availability of wagons*—At times more wagons accumulated in the yard for particular section(s) than could be moved out, while at others the loads for a particular destination were less than a train-load and, therefore, the wagons had necessarily to be detained till the over-accumulation (congestion) eased or the loads materialised.

In the case of steam traction, a train will normally have 35 to 50 wagons; in the case of electric or diesel traction, the train formation consists of 70 wagons.

During the selected month of November 1974, however, it was noticed that 14 local trains had been despatched underloaded, although more wagons were available in the yard for the respective destinations

for forming optimum loads. Thus, 7 trains moved with only 1 to 5 wagons each and the remaining seven with 6 to 21 wagons each, resulting in wastage of haulage capacity of the locomotives and detention of wagons.

Further, more than one train were run on a day for loads destined for the same direction when one train would have served the purpose. On the dates indicated below, 34 trains were despatched to different directions, (a) 6 each to Ballygunge and Batanagar, (b) 5 each to Dum Dum Cantonment and Bangaon, and (c) 4 each to Belgharia, Sodpur and Barrackpore/Ichhapur. It could have been possible to attach the loads for Ballygunge to the trains for Batanagar; that for Dum Dum Cantonment to the trains for Bangaon Junction and for Belgharia and Sodpur to the trains for Barrackpore/Ichhapur and thereby running of 19 locomotives between the yard and the intermediate stations could have been avoided :

Name of stations	Train number	Dates on which these trains were despatched in November 1974
Ballygunge Batanagar	714 Dn } 716 Dn }	3, 6, 8, 9, 12 and 14
Dum Dum Cantonment Bangaon Junction	719 Up } 721 Up }	
Belgharia, Sodpur Barrackpore/Ichhapur	743 Up } 723 Up }	6, 8, 9, and 14

The Railway Administration generally explained (February 1976) that the availability of wagons was affected by operational limitations arising from examination



of wagons by Train Examiners and sorting of wagons for eventual formation of trains. It further stated that the availability of wagons was also affected because of the need to attach wagons less than the hauling capacity so as to pick up way-side loads, to run goods trains with available loads in order to avoid clash with suburban trains, and to clear sidings and stations so that fresh wagon placement could be made.

- (b) *Non-materialisation of power*—The electric traction of Chitpur yard proper was completed in June 1965. Since then through goods trains originating from the yard are worked by electric locomotives based at Asansol. Under this system the loads though ready for despatch had to wait till the locomotives were available. The arrangements envisage that ordinarily the locomotives of incoming trains would be deployed for hauling the outward loads on their return journey. A study of the records for the year 1974-75 disclosed that the average time lag between loads awaiting despatch and materialisation of power was about 5 hours. The minimum time lag was one hour and maximum 23 hours during the selected month of November 1974.

The Railway Administration stated that in suburban sections goods trains hauled by electric locomotives had to give preference to suburban, mail and express trains and this resulted in late arrival of power. It has also been stated that there is no automatic matching of loads and locomotives and the detention of loads is inherent in the present day operation under electric traction.

- (c) *Non-availability of path*—Trains not ready for despatch by the scheduled times of departure had to wait till path became available subsequently.

- (d) *Adjustment of load and delay in placement of damaged stock in sick lines*—Wagons are placed in the repacking shed of the yard for adjustment of loads which may shift their position while the wagons are in motion, uneven loads, overloads, etc.

Again, wagons have to be checked for fitness by the train examining staff before placement for loading, after formation of trains and before despatch from the marshalling yards. Unfit or damaged wagons have to be sent to sick lines for repairs. On a review of the cases of such detentions during October to December 1973 and October and November 1974, it was observed that 255 wagons were detained in the yard varying from 48 hours to 1,292 hours as per details given below :—

Month	Number of wagons detained from			Total number of wagons detained	Minimum detention		Maximum detention	
	48 hrs to 250 hrs	251 hrs to 500 hrs	501 hrs and above		hrs	mts	hrs	mts
October 1973	33	11	16	60	84	35	1292	35
November 1973	27	15	1	43	55	00	555	00
December 1973	40	18	3	61	57	27	681	15
October 1974	11	15	9	35	153	00	1210	00
November 1974	32	13	11	56	72	00	932	00

Out of 91 cases of detentions that took place in October and November 1974, the major delay was on account of adjustment of loads (37 wagons), placement of damaged wagons in sick lines (22 wagons) and transshipment (9 wagons). In all these cases most of the detention was in the yard itself. Out of 46

wagons requiring adjustment of loads and transshipment, in the case of 40 wagons the delay in the placement of wagons to the siding and adjustment of load/transshipment was abnormal as indicated below :—

Number of wagons requiring adjustment of load and transshipment	Detention of wagons in transshipment shed		Detention of wagons in yard		Total time (hours)	Average per wagon (hours)
	Total time (hours)	Average per wagon (hours)	Total time (hours)	Average per wagon (hours)		
40	3,508	87.7	12,383	309.6	15,891	397.3

The detention in the transshipment shed was mainly on account of non-supply of crane by the Loco Foreman. Although demand for crane had been placed by the transshipment shed almost daily, crane was not supplied on 27 days during the months of October 1974 and November 1974.

As many as 1,000 wagons had been repaired monthly in the sick lines and not less than 150 wagons suffered detention for over 100 hours per wagon mainly on account of delays in placement of these wagons to the sick lines and withdrawal therefrom after repairs, the repair time being barely 8 hours per wagon, on an average.

The reasons for such abnormal delays by the yard staff in placing the wagons in different sidings and withdrawing therefrom do not seem to have been investigated for taking suitable remedial measures.

The Railway Administration stated that delay in adjustment of load is because a crane of ten tonne capacity



has to be obtained from Sealdah; the delay in placement of wagons on sick lines is due to limited capacity (55 wagons) and the need to give preference to the loaded stock marked damaged.

- (e) *Detention on commercial account*—There are two sets of lines for receiving the loaded wagons in Chitpur Goods shed (i) direct delivery lines of full wagon loads and (ii) shed delivery lines for delivery of smalls. In almost all cases the detention of wagons was in the former lines and that was mainly due to non-release of wagons by the consignees within the free time, as indicated below :—

Year	Total number of wagons received	Number of wagons on which demurrage accrued	Amount of demurrage (lakhs of rupees)			Percentage of demurrage waived to that accrued
			accrued	realised	waived	
1973	20,902	5,373	7.75	3.37	4.38	60
1974	19,648	4,525	8.51	5.11	3.40	40

The Railway Administration explained that a number of wagons had necessarily to be detained due to unloading space remaining blocked. The demurrage on such detained wagons placed on the siding for unloading had been waived on merits.

- (f) *Delay in placement and despatch of wagons*—The number of wagons containing terminal loads dealt with in the yard in November 1974 was 9,072. The average detention per wagon was for 31.8 hours. An analysis of each phase of operation relating to 313 loaded wagons and 309 empties dealt with in that month disclosed that, while detention on commercial account (*i.e.*, for unloading of the consignments) was 3,316 hours (average 10.9 hours per wagon) that on operating account was nearly 10 times



thereof, *i.e.*, 31,304 hours (average 50.4 hours per wagon) as indicated below :—

	Total time taken (hours)	Average time (hours)
Terminal loads (313 wagons)		
1. Arrival to placement for unloading	6029	19
2. Placement to release	3247	10.3
3. Release to placement for reloading (18 wagons)	302	17
4. Reloading time (18 wagons)	69	4
5. Release to despatch	11314	36
Empties (309 wagons)		
Arrival to despatch	13659	44
Total	34620	55.7

Out of 313 wagons only 219 wagons could be placed on the goods shed siding within 20 hours and the remaining 94 wagons were placed within 21 to 48 hours. According to prescribed procedure, the causes for detention of wagons in the yard should be recorded in the register of wagons but the only reason indicated mostly was : "yard detention".

As for empties, only 100 wagons out of 309 could be despatched within 20 hours and the remaining ones were despatched within 21 hours to 645 hours.

7.13. It would be seen from the above analysis that during the selected month (November 1974) the average number of wagons detained per day due to above factors was as below :—

(i) accumulation of more wagons resulting in congestion	412
(ii) Non-materialisation of loads	97
(iii) Non-materialisation of power	81
(iv) Non-availability of path	91

7.14. In that month 20,430 wagons had been detained in the yard for 5,06,664 hours (cumulative figure). The position in other months of the year, September 1974 to February 1975 was almost similar.

7.15. There had been cases of detention of wagons due to taking more than the prescribed time by the train examining staff for issuing certificate of fitness to the wagons after formation of trains, detachment of damaged stock and creation of vacuum; but these have not been taken into account as detentions due to each such operation were up to three hours (on an average).

#### *Mismarshalling of wagons*

7.16. The number of wagons meant for other yards but sent erroneously to Chitpur yard was 1,918 during 1973-74 and 9,886 during 1974-75 (upto February 1975). Accordingly, these wagons had again to be marshalled in this yard and then sent to the correct destinations, resulting in avoidable haulage of wagons to and from Chitpur yard.

#### *Naihati*

7.17. This yard is under the direct charge of a Head Yard Master. The main function of the yard is to cater to the industrial belt on the east coast of the Ganga from Kalyani to Agarpara. In addition to dealing with the traffic relating to Jute and rolling mills, this yard forms daily 4 to 5 empty rakes for the collieries for loading coal for thermal power stations etc. Short distance trains for Sealdah, Chitpur, Ranaghat Junction and Krishnapur Junction stations are also formed here. The traffic to Bangla Desh and *via* started from 1st June 1973 and since then this yard has been forming and despatching trains to and *via* that country.

*Capacity of the yard and number of wagons dealt with therein*

7.18. The holding capacity of the sorting yard is 1,400 wagons and that of the entire yard is 3,300 wagons. The number of wagons dealt with in the yard is given below :—

Year	Average number of wagons dealt with per month	Number of wagons dealt with (daily average)	Average detention to 'through loaded' wagons (per wagon) (hours)	Average detention to 'all wagons' (per wagon) (hours)	Average number of wagons dealt with per shunting engine hour
1962-63	34006	1134	16.7	14.8	Not available
1963-64	35407	1180	15.3	13.4	14.00
1964-65	33341	1111	16.7	14.3	10.90
1970-71	18981	633	39.7	34.6	7.45
1971-72	23299	777	48.0	37.5	7.34
1972-73	27528	918	30.7	25.7	7.21
1973-74	24538	818	35.1	33.2	6.23
1974-75	22714	757	39.7	36.7	6.40

7.19. The targets for detention of 'through loaded' and 'all wagons' were 16 hours and 18 hours respectively till December 1974, when it was revised to 21 hours and 23 hours respectively. It would be seen from the above that the detentions to wagons in the yard were far in excess of even the revised targets.

7.20. The reasons for detentions were analysed with reference to performance of the yard during the selected month of January 1975.

7.21. The position is indicated below :—

Location	Number of wagons for which full particulars were available	Total hours of detention	Hours of detention per wagon (average)
Detention in yard (incoming)	1348	27949	20.7
Detention in goods shed (outside the yard)	1434	89396	62.3
Detention in yard (outgoing)	1271	46393	36.5

Against permissible detention of 21/23 hours per wagon, 1,442 wagons which terminated at this yard, suffered detention for 1,72,319 hours or 119.5 hours per wagon, on the average.

7.22. The following factors mainly contributed towards the detention—

- (a) late formation of trains;
- (b) late start of trains after formation due to delay in issuing fitness certificate of wagons and vacuum examination by Train Examiners' staff, defect in the steam locomotives, detention of locomotives as per decision of the control, idling of drivers, detaching of damaged wagons from the trains ready for despatch, late arrival of guards and want of path and power failure;
- (c) late acceptance of trains by the cabin;
- (d) delays in supply of cranes; and
- (e) re-sealing of wagons.



7.23. Cause-wise analysis of 96 trains which started late from the yard during the selected month is given below :—

	Number of trains
(i) Vacuum trouble	36
(ii) Non-availability of path	6
(iii) Power failure	15
(iv) Other reasons	39

7.24. The other interesting features noticed were :

- (a) *Idling of shunting engines*—During January 1975, six steam locomotives were used for shunting of wagons in the yard. Out of 4,464 shunting engine hours booked during the month, these locomotives were utilised for 4,052 hours for shunting wagons in the yard and for 37 hours for placing wagons in different sidings. They had been idling for 375 hours due to non-availability or less availability of water from storage tank, detention at the coaling point due to failure of coaling engine and also due to late arrival of pilots.
- (b) *Detention for want of cranes*—The average detention per wagon for want of cranes during January 1975 was recorded as 264 hours and that for want of covered empties as 101 hours. Whereas the minimum detention for want of cranes as well as for covered wagons was 24 hours, the maximum was 552 hours for cranes and 192 hours for covered wagons. The detentions were attributed to placement of empties which were not fit and delays in supply of cranes by the Mechanical Department.
- (c) *Under-utilisation of the haulage capacity of locomotives*—Although enough stock was available about 6 hours before the departure of trains to form trains with optimum loads (60 wagons) during the

first fifteen days of January 1975 (for which records were available), 22 underload trains were despatched (13 of them with less than 10 wagons each) resulting in under-utilisation of the capacity of the locomotives. The reasons for not attaching wagons available in the yard were not on record.

The Railway Administration stated (February 1976) that the underload despatch of trains was due to wagons loaded with jute having been held up on account of strike in jute mills (from 6th January to 25th February 1975) and foodgrain wagons having been held up due to labour trouble in the Depots of the Food Corporation of India at Shyamnagar and Kalyani from 27th January 1975. In addition, the detention of wagons was due to late formation of trains for securing better loads, late start of trains for re-sealing and repairs to wagons, arranging escorts of Railway Protection Force, arranging drivers and guards, non-availability of path and shortage of cranes.

- (d) *Cancellation of trains after formation*—After formation, 12 trains consisting of 237 wagons had to be cancelled due to non-availability of rest vans for the crew and congestion in the yard (Shyamnagar) through which some of these trains had to pass. On four occasions the locomotives had to run light from this yard to another because of the cancellation of trains.
- (e) *Mismatching of wagons*—Naihati yard received 1,932 wagons during January 1975 from Bandel, Burdwan, Malda, Andal, Asansol and Mughalsarai yards, although these were meant for other yards. The wagons had to be re-marshalled and sent to correct destinations. Apart from avoidable haulage

of wagons to and from this yard, they suffered detention at Naihati yard to the extent of 57 hours per wagon, on the average.

- (f) *Detention to damaged wagons*—In the sick lines of the Train Examiner 1,244 wagons were repaired. While the total time taken for repair was only 6,842 hours (4 to 7 hours per wagon), that for placement of these wagons on sick lines and withdrawal after repair was 29,448 hours (average 22.36 hours per wagon) and 47,783 hours (average 36.33 hours per wagon) respectively. Thus detention on account of marshalling etc., was 12 times the time taken for repairs. The reasons for such abnormal delays do not seem to have been investigated and remedial measures taken.

The Railway Administration explained that the detention of damaged wagons was due to abnormal conditions in January 1975 arising from the strike in Jute mills and godowns of Food Corporation of India in January-February 1975 mentioned above.

### *Andal*

7.25. About 116 collieries in Raniganj coal field area are served by this yard. The yard is under the direct charge of one Assistant Operating Superintendent. An Assistant Mechanical Engineer has also been posted at this yard to supervise the work of repair of wagons by the staff of the Train Examiner. The empties received in the yard in block rakes as well as in mixed formations are marshalled and placed in the sidings of the collieries for loading of coal. Loaded coal wagons are withdrawn from the colliery sidings

- (a) in block rakes earmarked for bulk consumers like thermal power stations, Steel Plants and locomotive sheds of various Railways; and



- (b) in mixed formation for different destinations for different consignees.

*Capacity of the yard and the number of wagons dealt with therein*

7.26. This yard consists mainly of three yards : (a) Down yard, (b) Up yard and (c) Empty yard. While the former two have a number of receiving, marshalling and despatching lines, the last one has only receiving and despatching lines. The total holding capacity of the sorting yard is 6,000 wagons per day.

Year	Average number of wagons dealt with per month	Number of wagons dealt with (daily average)	Hours of detention (average)		Average number of wagons dealt with per shunting engine hour
			Through loaded wagons	All wagons	
1962-63	84059	2802	17.6	13.4	Not available.
1963-64	90184	3006	16.6	12.6	19.00
1964-65	83330	2778	15.1	11.9	17.60
1970-71	70625	2354	31.2	21.3	12.90
1971-72	80045	2668	39.9	24.6	13.60
1972-73	88106	2937	51.9	30.6	15.00
1973-74	80806	2694	56.5	34.6	13.80
1974-75	85104	2837	49.0	40.1	13.72

7.27. In addition to the detention of wagons for reasons mentioned in the case of Chitpur and Naihati yards, the following features were noticed during the review of the performance of this yard :—

- (a) *Weighment of coal wagons at the weighbridge*—Two weighbridges had been installed in this yard. One more weighbridge was installed in July 1975. During November 1973 to March 1975, 1,22,857 BOX wagons and 2,32,126 ordinary wagons loaded with coal passed through this yard. Out of these,



73,459 BOX wagons and 2,16,410 ordinary wagons had been weighed. While the monthly percentages of ordinary wagons weighed to total wagons ranged from 76 to 98, that for BOX wagons ranged between 47 and 74. The reasons for non-weighment of a large number of BOX wagons were not available or on record. The weighment of coal wagons indicated that there were many cases of overloading and underloading of wagons, for example, during the months of February to December 1974, the number of wagons overloaded was 17,034 which worked out to nearly 10 per cent of the total number of wagons weighed during that period whereas the percentage of underloaded wagons (27,082) was about 16. The overloads in 457 wagons were adjusted and 35 wagons were despatched after off-loading the excess weight. Consequently, loss of revenue due to non-realisation of proper freight in respect of overloaded wagons despatched without weighment is likely to be significant. It was also noticed that off-loaded coal had been allowed to accumulate in the yard because of delay in its disposal; the closing balance at the end of each month during January 1974 to December 1974 varied between 2,288 tonnes to 2,703 tonnes.

- (b) *Short supply of empties to collieries*--The supply of empties to the collieries was far below the number of empties requisitioned. The extent of short supply ranged from 587 wagons to 2,897 wagons per day during the selected month of January 1975. The main reasons for short supply of wagons are :—
- (i) generation of empties far below the number requisitioned daily;

- (ii) detention of wagons in colliery sidings; and
- (iii) some times, shortage of coal pilots.

The Railway Administration stated (February 1976) that factors like non-availability of power (diesel and electric locomotives) which is inherent in the arrangements obtaining for its supply and increase in the quantum of long distance marshalling contributed to the detentions of wagons. It further stated that weighbridge had not been provided until July 1975 for the four additional lines provided to cope with increased volume of traffic in the yard and during the interim period the BOX rakes passing through these lines had to go without weighment; and efforts were being made to reduce accumulation of off-loaded coal in the yard.

### *General*

7.28. The Railway Administration stated (August 1975) that the performance of these yards during the period was particularly bad and unsatisfactory on account of law and order situation, industrial labour unrest, frequent power failures leading particularly to cancellation of EMU trains and consequent blocking of paths and large scale and endemic thefts of vital equipment. It further stated (February 1976) that during the current financial year (up to December 1975) the performance in Chitpur and Naihati yards had definitely improved as there had been an increase in the number of wagons dealt with and decrease in the hours of detention to wagons; there was also an improvement in the number of wagons dealt with per shunting engine hour.

## CHAPTER III

### DIESEL AND ELECTRIC LOCOMOTIVES AND SPARES

#### 8. Diesel Hydraulic Locomotives (WDM-3)

##### *Introduction*

8.1. A Mechanical Engineer of the Indian Railways, while working as an Inspecting Officer in United Kingdom, developed a new hydro-mechanical transmission for diesel locomotives. The design was examined by the Railway Board and the National Research and Development Corporation and was patented in India (as Suri transmission) sometime in 1956-57. In this invention the transmission is hydraulic at low speeds and changes over to mechanical at higher speeds leading to increased transmission efficiency, resulting in saving in fuel consumption. With a view to developing this transmission, the Railway Board placed orders on a West German firm in 1959 for supply of 7 diesel shunters of 650 horse-power fitted with this transmission. Subsequently, the manufacture of these shunters in collaboration with the same West German firm was established in Chittaranjan Locomotive works.

8.2. In 1962, the Railway Board thought of developing Suri transmission in high horse-power locomotives in order to realise its maximum benefit. For this purpose the Railway Board, in April 1962, authorised the Additional Member, Mechanical, and the Director, Finance, to conduct negotiations with West German firms for 5000 horse-power locomotives and with ALCO (U.S.A.) for 2600 horse-power locomotives already under manufacture at Diesel Locomotive Works, Varanasi.



*Selection of locomotives*

8.3. Between 1962 and 1964, the Railway Board considered the question of procurement and development of Suri transmission in 5000 horse-power locomotive or alternatively 2500 or 2600 horse-power locomotive. Having regard to the then technical assessment that the maximum benefits of Suri transmission were likely to show up in the higher horse-power range due to a better power/weight ratio, the Board considered it desirable to procure a few 5000 horse-power locomotives with Suri/Mekydro transmission provided the prices were found to be reasonable and adequate guarantees on the performance of these locomotives, engines and transmission systems were forthcoming.

8.4. As efforts were then being made to procure West German Credit for purchase of these locomotives, the Railway Board, in September 1964, issued tender enquiries to three West German firms. In response, offers were received from two firms who offered locomotives of 5000 horse-power with two 2500 horse-power Maybach engines. In June 1965, the Railway Board appointed a Technical Committee to examine these offers. The Committee was specifically asked to determine (i) technical suitability of the 5000 horse-power locomotives for the development of Suri transmission and (ii) in view of the difficulties experienced by American Railroads with 16 cylinder high speed Maybach engines, what precautions should be taken to ensure that 20 cylinder high speed Maybach engines (which were proposed to be fitted in the 5000 horse-power locomotives) gave minimum trouble under Indian conditions of working. The Technical Committee on various considerations came to the conclusion (December 1965) that no economic benefits of capital and maintenance costs could be expected of 5000 horse-power locomotives as compared to those of dual coupled 2600 horse-power diesel locomotives of ALCO design. The Committee also stated that 5000 horse-power locomotives could not be adopted as a standard unit taking into account the restrictions



imposed by track and bridge conditions, hauling capacity of the locomotives, impracticability of multiple operation and lesser flexibility.

8.5. About 2500 horse-power Maybach diesel engine, the Committee observed that the 20 cylinder engine of the MD series offered by the tenderers had not been installed on any locomotive and the experience so far was limited to bench tests only. The Committee, however, felt that there might not be undue risk in providing 20 cylinder MD 1080 series Maybach engines on the locomotives subject to proper observance of maintenance schedules and the use of recommended lubricants.

8.6. On 9th June 1966, the Railway Board decided that taking all factors into consideration, procurement of 5000 horse-power locomotives for developing Suri transmission could not be justified. Since the standard broad gauge diesel locomotive was of 2600 horse-power, the Board felt that it should be possible to design and fit 2600 horse-power Suri transmission in a diesel locomotive of equivalent horse-power and decided that it would be more prudent to go in for 2600 horse-power locomotives rather than for 5000 horse-power locomotives. Accordingly, the Board decided to procure six or eight numbers of 2600 horse-power Co Co type locomotives fitted with medium speed engines and Suri transmission and to depute a senior Mechanical Engineer of the Railways to West Germany to have informal talks with the representatives of the firms there and obtain their reaction to the proposal of procuring 2600 horse-power locomotives instead of 5000 horse-power.

8.7. In the light of the report of the Railway Engineer deputed to West Germany, the Railway Board decided (August 1966) to go in for 2500 horse-power BB 19 tonne axle load mixed service locomotives with Maybach MD 1080 diesel engine and fitted with 2500 horse-power Suri/Mekydro transmission. In arriving at this decision the Board, *inter alia*,

took into account the following observations in the report of the Engineer :—

- (i) the leading locomotive manufacturers of West Germany and the German Federal Railways indicated that a 2500 horse-power diesel hydraulic locomotive could be built easily on four axles and that these locomotives would more or less perform what the six axle 2600 horse-power WDM-2/WDM-4 diesel locomotives on the Indian Railways were performing;
- (ii) the capital cost of a four axle diesel hydraulic locomotive would be less than a six axle diesel electric locomotive when produced in series; with Suri transmission a higher efficiency and also savings in fuel to the extent of 5 to 9 per cent were anticipated; from the maintenance angle also a four axle diesel hydraulic locomotive should, if at all, be cheaper than a six axle locomotive of the same power;
- (iii) M/s. Maybach who were developing Suri transmission, had no doubt about the proper functioning of either Suri transmission or their own transmission and they would not be interested in developing Suri transmission alone without matching it with their engine as they would not be able to guarantee performance with any other engine in the developmental stages;
- (iv) M/s. Maybach had stated that their modified 20 cylinder MD engine would be a good trouble-free engine;
- (v) the German Federal railways stated that they were quite satisfied with the performance of Maybach engines but they needed greater amount of attention

and skill; there were over 1000 Maybach engines of the MD series in use on the German Railways; and

- (vi) the German firm interested in developing Suri transmission system were of the view that it would be rather cumbersome to couple all the six axles together with Suri transmission.

8.8. Further, in December 1975, the Railway Board stated that there was no other diesel engine known at that time (1966) which could be used with Suri transmission. As such, the possibility of procuring this engine from various engine builders in West Germany alone was pursued as they were pioneers in hydraulic and hydro-mechanical transmission system.

8.9. The Railway Board decided to call for tenders for 2500 horse-power BB 19 tonnes axle load mixed service locomotives with Maybach MD 1080 diesel engine and fitted with 2500 horse-power Suri/Mekydro transmission. Tenders were to be obtained for 5 different combinations of Suri and Mekydro transmissions. The Board further decided that tenders should be called for from at least all those firms who were previously addressed for 5000 horse-power locomotives.

#### *Procurement of locomotives*

8.10. On 30th August 1966, formal tender enquiry was issued to two West German locomotive manufacturers (firms A and B) soliciting offers by 15th September 1966 which was extended upto 28th September 1966. Both the firms submitted their offers.

8.11. The Tender Committee found the offer of firm A superior from technical as well as financial point of view and accordingly recommended its acceptance. The Research, Designs and Standards Organisation of the Railways (R.D.S.O.) also, after technical scrutiny, found the offer of firm B



unacceptable. The Committee found that the guarantee terms offered by firm A were more comprehensive than those of firm B. Firm A quoted for locomotives fitted with Suri transmission as well as Mekyllro transmission. The slightly higher price (DM 67,500 per locomotive) quoted for the locomotive fitted with Suri transmission over that fitted with Mekyllro transmission was found more than justified considering the developmental expenses involved and the expected savings in fuel due to higher efficiency of Suri transmission. The Committee stated that Suri transmission would provide an efficiency of 92 per cent in the final stage as against a maximum efficiency of about 80-83 per cent in the Mekyllro transmission and this higher efficiency should result in corresponding saving in fuel. On the assumption that a locomotive earned (ran) about 400 kms per day on line and that fuel is consumed at the rate of 4 litres per km therefor, the Committee assessed, on a rough basis, the annual saving at about Rs. 20,000 per locomotive even at 5 per cent higher efficiency. Accordingly, the Committee recommended placement of order for 6 locomotives fitted with Suri transmission and 2 locomotives with Mekyllro transmission on firm A. The estimated f.o.b., value of the locomotives was about 10.4 million DM (c & f value 11.02 million DM—approximately Rs. 2.08 crores). The Railway Board approved of these recommendations. Advance letter of acceptance of tender of firm A was issued in December 1966.

8.12. The contract for the supply of the locomotives was executed with the firm on 23rd June 1967. The firm had given a guarantee that the locomotives would be built fully in accordance with the specifications and would operate properly. It also guaranteed proper functioning of Suri transmission. The guarantee was to last for a period of 24 months from the dates of commissioning of the locomotives in India or 26 months from the dates of shipment from Germany or 3,00,000 kms run by each locomotive, whichever event should first occur.



8.13. The eight locomotives (WDM-3) arrived in India in the second half of 1970 and were commissioned between August 1970 and May 1971 at Gooty in Southern Railway. The expenditure booked upto August 1975 towards the cost of these locomotives was Rs. 3.37 crores.

#### *Performance of locomotives*

8.14. These locomotives were utilised mainly on freight services on the Guntakal Division of Southern Railway till November 1972, when they were introduced on express (passenger) service also. In July 1971, Southern Railway Administration reported to the Railway Board that the locomotives had developed defects in the transmission system and convertor turbine wheels leading to failures. On the recommendations of the manufacturers certain modifications were carried out in torque convertor, turbine blades and mechanical clutches and thus the trouble in the system was overcome. Nevertheless, the performance of these locomotives had not been satisfactory as the extent of ineffectiveness of each locomotive ranged from 15.5 per cent to 45.3 per cent (average 27.09 per cent) during the period from the dates of commissioning to end of April 1973. In April 1973, the Board called for a detailed report on the performance of these locomotives.

8.15. The appreciation report submitted by the Railway Administration in May 1973 and subsequent performance report on these locomotives disclosed that

- (i) the locomotive availability in terms of hours per day per locomotive in use was less for WDM-3 locomotives as compared to WDM-2 locomotives

(manufactured in the country) as indicated in the table below :—

Year	Average availability per day in use (hours)	
	WDM-3 loco-motives	WDM-2 loco-motives
1971-72	20.96	22.40
1972-73	20.77	22.60
1973-74	18.50	22.10
1974-75	18.40	22.40

- (ii) on account of lower horse-power (less than 2600 horse-power), lower axle load (76 tonnes against 110 tonnes of WDM-2 locomotives) and lower convertor efficiency at low speeds, the WDM-3 locomotives hauled smaller loads, 23 per cent less in the up direction and 25 per cent less in the down direction, than WDM-2 locomotives particularly on stiff gradients;
- (iii) the maintenance costs were more in case of WDM-3 locomotives (Rs. 6,851 for cylinder heads) as compared to WDM-2 locomotives (Rs. 2,632 for cylinder heads);
- (iv) the locomotive failure rate was higher in WDM-3 locomotives (43,379 kms per failure on the average during 1971-72 to 1974-75) when compared to WDM-2 locomotives (being 1,12,893 kms per failure in the same period);
- (v) the fuel consumption of WDM-3 locomotives (both Suri and Mekyllro transmissions) was approximately 20 per cent more than that of WDM-2 locomotives; (a representative of the manufacturer had stated on 31st January 1973 that the MTU

Maybach high speed engine fitted on WDM-3 locomotives was likely to consume 10 per cent more fuel than WDM-2 engine on account of precombustion chamber configuration); and

- (vi) the WDM-3 locomotives posed major maintenance problems pertaining to cylinder heads, gas inlet casing, turbo changer, vulkan coupling, dog clutches, shock absorbers, wheels etc.

8.16. The R.D.S.O., who examined this report observed in April 1974, amongst others, that

- (i) the power rating of the WDM-2 locomotives is 2,635 under standard conditions (ambient temperature  $15.5^{\circ}\text{C}$ ) and the locomotives deliver 2,430 horse-power at site at an ambient temperature of  $55^{\circ}\text{C}$ . Against this the WDM-3 locomotives deliver 2,440 horse-power at site conditions of  $40^{\circ}\text{C}$  but at site temperature of  $55^{\circ}\text{C}$  the power output was only 2,090 horse-power and consequently the hauling capacity of WDM-3 locomotives was lower than that of WDM-2 locomotives;
- (ii) the large difference of 20 per cent in fuel consumption between the two locomotives could be accounted for only by the vast difference in the diesel engines leading to the conclusion that the MD 1080 engine had not been as efficient under working conditions as it was presumed to be on the basis of bench test results; and
- (iii) any performance evaluation should be done keeping in view that the WDM-3 locomotives used Suri/Mekydro transmission—an absolutely new development—and the MD 1080 engines of the MTU, which were being used on these locomotives for the first time.



8.17. The various major defects in these locomotives, transmissions and engines were brought to the notice of the manufacturers from time to time. The manufacturers advised the Railway Board in November 1973 that, as there had been engine damages on the locomotives equipped with Suri transmission, it would be necessary to operate these transmissions purely hydraulically. The Railway Board agreed to the modifications being carried out. The modifications in essence meant dummied Suri transmission and converting into simple hydraulic Mekydro transmission. This modification in all the locomotives fitted with Suri transmission was carried out in December 1973-January 1974.

8.18. The question of restoration of all stages of Suri transmission was discussed (July 1975) by the Railway Board with the representatives of the manufacturers. The manufacturers stated that after taking into account all aspects with MTU (the engine transmission suppliers) they had come to the conclusion that the mechanical (Suri transmission) portion was to be blanked off.

8.19. With reference to a suggestion of August 1975 from the Railway Board to use these locomotives for passenger service, Southern Railway Administration indicated (August 1975) that it was not very sure about their reliability in service and it would be desirable to consider them as casual addition rather than regular allotment for firm service.

8.20. The Railway Board stated (December 1975) that

- (i) the designing and building of this locomotive in India with imported engine, transmission, drive and auxiliaries was not considered financially viable;
- (ii) the locomotives represented a new development incorporating the first application of a newly developed transmission system; and, therefore, higher



incidence of repairs and limited availability should be expected on such locomotives which were placed on line on trial basis as a Research Programme;

- (iii) power rating of WDM-3 locomotives was lower than that of WDM-2 locomotives; WDM-3 four-axle locomotive had a total weight of 76 tonnes against 113 tonnes on six-axle WDM-2 locomotive; WDM-3 locomotive was, therefore, constrained to start lighter loads as compared to WDM-2; on the sections where these locomotives were operating WDM-3 locomotives could haul 1,350 tonnes in the up direction and 900 tonnes in the down direction against WDM-2 which could haul 1,750 tonnes in the up direction and 1,200 tonnes in the down direction;
- (iv) on freight service, fuel consumption in litres per one thousand gross tonne kilometres had been higher on WDM-3 locomotives as compared to WDM-2 locomotives; however, WDM-3 locomotives fitted with Suri transmission gave favourable fuel consumption on fast passenger trains; and
- (v) the Maybach MD 1080 engine with precombustion engine had shown a specific fuel consumption on bench tests which was comparable with that for ALCO type of diesel engine (manufactured in the country). The design feature in this respect furnished by the manufacturers at the time this engine was selected had been physically established during bench testing of the engines. The field experience in India under the high ambient temperature when compared to ALCO engine in this regard was found not favourable and at variance with the bench tests.

8.21. It may be stated that these WDM-3 locomotives were procured against West German Credit to haul heavy freight trains on graded sections. The objective was development of Suri transmission and as such the Railway Board had stipulated obtaining of adequate guarantees on the performance of these locomotives, and their engines and transmissions. As a matter of fact, the Board had earlier contemplated a guarantee period of 60 months for the diesel engine and transmission and 24 months for the remaining portions of the locomotives.

8.22. The following other aspects of the case also deserve mention :

- (a) The Railway Board, while deciding not to procure 5000 horse-power locomotives fitted with Suri transmission but to obtain 2500 horse-power locomotives did not consider the possibility of obtaining offers from locomotive manufacturers other than from West Germany, though one of the Members of the Technical Committee constituted by the Board in July 1965, pointed out (November 1965) that building of a 2500 horse-power locomotive with Suri or any other hydraulic transmission should present no problems as a 2600 horse-power locomotive was already being manufactured in the country. He had, therefore, suggested development of 2500 horse-power locomotive with Suri/Merydro/electric transmission and ALCO (manufactured in India)/Maybach engines. He had also suggested designing and building of such locomotives in India with imported engines, transmission, drives and auxiliaries or in the alternative obtaining such locomotives from the manufacturers. This was endorsed by the Member, Mechanical, Railway Board.
- (b) The Member, Mechanical, Railway Board, in February 1966, had stated that the performance of

the Maybach engine had to be viewed with a certain amount of reservation in the light of the experience. He also observed :

“Taking all things into consideration and particularly the limitations imposed by Indian track and bridge standards and the technical and operational disabilities from which the proposed 5000 horse-power locomotives would suffer as pointed out by the Committee, I am of the opinion that even though there will be some further delay in finalising this issue, the best and safest course for us would be to go in for the following prototype locomotives which incidentally will provide an adequate means of comparison not only between themselves but also with the 2600 horse-power ALCO locomotives already in use on the Indian Railways :—

	Numbers
(i) 2500 horse-power locomotives fitted with Maybach engine and Suri/Mekydro transmission	4
(ii) 2500 horse-power locomotives fitted with Maybach engine and Mekydro transmission	2
(iii) 2600 horse-power locomotives fitted with ALCO engine and Suri transmission	4.”

(c) The desirability of developing Suri transmission with proven locomotives already in use *viz.*, ALCO was not pursued because of the apprehension that utilisation of ALCO engines of American make with Suri transmission to be developed by M/s. Maybach of Germany might not be looked at with favour by the German Credit Loan authorities, even though the Railway Board was aware at that time that ALCO had collaboration with Mak of Germany for manufacture of diesel hydraulic locomotives and Mak held the licence for Suri transmission. Consequently, enquiries were issued only to the West German manufacturers.



It was also considered in April 1966 that the suggestion of Member, Mechanical, made in February 1966 for the development of 2500/2600 horse-power locomotives fitted with ALCO engine of American make with Suri transmission was not feasible as this would involve a *de novo* examination of the matter leading to further delay, it having already taken over four years in discussions with the manufacturers and the German Bank authorities.

- (d) The Railway Board in 1964 itself had indicated that adequate guarantees on the performance of the locomotives, engines and transmissions should be forthcoming. The four-axle locomotive fitted with high speed Maybach engines and Suri/Mekydro transmission were entirely new to the country. The Maybach 2500 horse-power high speed engine had undergone only bench tests and were being used in this country for locomotive traction for the first time. The Railway Board, however, did not obtain specific guarantees covering locomotive/engine/transmission performance, maintenance, fuel consumption etc.
- (e) These locomotives were obtained with a view to developing Suri transmission and effecting savings in fuel. As stated earlier, Suri transmission on all the six locomotives had been dummied (January 1974) and the manufacturers did not agree to restore the same. Repercussions of this are :—
  - (i) the efficiency of the transmission would be further lowered by about 5 per cent and to that extent the specific fuel consumption would increase as compared to ALCO locomotives (WDM-2) [cf. paragraph 8.15-item (v)]; and
  - (ii) reduction in maximum speed of the engine.
- (f) The engine manufacturers have also pointed out that the precombustion chamber configuration of the



Maybach engine would consume 10 per cent more fuel compared to an open combustion chamber engine like ALCO and that any advantage gained in transmission efficiency was likely to be offset and in fact overshadowed by the lower engine efficiency. The extensive difficulties and maintenance problems posed by these locomotives resulted in operational deterioration and doubts about the reliability of these locomotives.

### *Conclusion*

8.23. The objective of purchasing 2500 horse-power locomotives *viz.*, development of Suri transmission for high speed traction with a view to obtaining operational efficiency and fuel economy have not been realised. In March 1976, the Railway Board stated that Suri transmission was being successfully used in lower horse-power range of locomotives and 257 broad gauge and 15 narrow gauge locomotives had been built with this transmission.

### **9. Chittaranjan Locomotive Works-Collaboration agreement for manufacture of diesel engines for shunters**

In 1967, the Railway Board negotiated with a West German firm (Mak) for technical collaboration for indigenous manufacture of diesel engines for shunters in Chittaranjan Locomotive Works. The terms and conditions regulating payment of royalty and engineering fees agreed to by the firm and approved by the Foreign Agreements Committee, Ministry of Industrial Development and Company Affairs, in December 1967, provided that :

- (i) these would be operative for a period of 8 years plus 2 years ;
- (ii) engineering fees at 3 per cent and royalty at 2 per cent on the value of Mak engine and component (to

be determined as per the agreement) would be payable for the first 8 years for the first 400 engines built at Chittaranjan Locomotive Works; and

- (iii) during subsequent two years only engineering fees at 2 per cent would be payable for 60 engines per year.

As per the clause approved by the Foreign Agreements Committee, royalty is not payable during the 9th and 10th years of the agreement irrespective of the fact whether 400 engines are produced during the first 8 years or not.

However, on the basis of a revised proposal of the firm received in April 1968 it was provided in the agreement executed in June 1968, that both royalty and engineering fees at stipulated percentages would be payable for a period of 10 years, the payment of royalty being limited to 400 engines only.

Therefore, according to the agreement actually executed, if 400 engines were not produced during the first 8 years royalty would be payable during the 9th and 10th years also but limited to royalty on 400 engines.

This material variation was agreed to by the Railway Board without obtaining the approval of the Foreign Agreements Committee. In 1969, an effort was made by the Chittaranjan Locomotive Works Administration to persuade the firm to accept the wording of the clause pertaining to royalties and engineering fees as approved by the Foreign Agreements Committee, but it did not succeed. Thereafter, the Railway Board approached (April 1974) the Ministry of Industrial Development to ratify the variations made in the final agreement. While according *ex post facto* approval (June 1974) to the deviation, the Ministry of Industrial Development observed that the matter should be brought to the notice of both the Chairman, Railway Board, and the Minister for Railways so that an enquiry could be made as to who was responsible for the unauthorised deviation at the time of signing the agreement.

The variation in the terms of the agreement would involve avoidable payment of royalty to the firm during the 9th and 10th years estimated as DM 1.29 lakhs (Rs. 4.55 lakhs) as according to the Administration, there is likelihood of completing production of 200 engines only in a period of eight years and 60 to 70 engines during the remaining two years of the currency of the agreement.

The Chittaranjan Locomotive Works Administration stated (December 1975) that the variation in the terms of the agreement was due to error on the part of the Administration in interpreting the decision of the Foreign Agreements Committee and that action for the deviation in the collaboration agreement had been initiated. In March 1976, the Railway Board stated that the circumstances leading to the deviation were also under examination.

#### **10. Northern Railway—Premature failure and emergency procurement of cylinder heads of WDM-4 diesel locomotives**

Cylinder head is an important component of a diesel locomotive. Its failure immobilises the diesel locomotive. Therefore, it is necessary to maintain adequate stock of cylinder heads.

Seventy-two WDM-4 locomotives imported from U.S.A., were commissioned during August 1962 to June 1963. These locomotives were allotted to Northern Railway and were based at the Diesel Locomotive Shed, Mughalsarai. There are 16 cylinder heads in each locomotive; the 72 locomotives had 1,152 cylinder heads fitted on them. One thousand one hundred and eightyfour cylinder heads were initially received as spares along with these locomotives. The design of these cylinder heads was modified by the manufacturer during 1965-71 (modifications I, II and III) for improved performance in higher horse-power engines. (So far as the Northern Railway is concerned these cylinder heads continued to be used in engines of the same horse-power as before.)



The normal life of these cylinder heads had not been specified by the manufacturer/supplier but, based on the experience of many years of maintenance of WDM-4 locomotives, the Railway Administration had assessed the average service life of a cylinder head as three years.

Cylinder heads for WDM-4 diesel locomotives had been purchased from two foreign firms—one in U.S.A. and another in West Germany. While the U.S.A. firm had offered warranty period of one year for the cylinder heads installed as replacement item in a locomotive, the warranty period allowed by the West German firm was one year after the date of shipment or 1,00,000 miles (1,60,000 kms), whichever would occur first.

The details of cylinder heads procured and cracked are shown in the table below :—

Type of cylinder heads	Number received					Number cracked			
	June 1963	Up to	During			Upto December 1971	During		
		December 1971	1972	1973	1974		1972	1973	1974
(A) Procured from U. S.A., firm									
Original spares	*1184	—	—	—	—	1184	—	—	—
Modification I (1965-66)	—	@241	—	—	—	231	—	—	—
Modification II (1967-68)	—	£850	—	—	—	400	200	100	84
Modification III (1969-70 and 1971-72)	—	†848	400	221	620	112	157	371	415
Total	1184	1939	400	221	620	1927	357	471	499
(B) Procured from West German firm	—	—	—	—	96	—	—	—	73
									(Up to April 1975)

The average service life of 42.5 per cent of the cylinder heads received in 1971 and 66.5 per cent received in 1972 from the firm in U.S.A., was less than three years; 25 per cent of the cylinder heads received from the same firm in 1974 cracked within a year of service.

\* received during 1962-63

@ received during 1965-66

£ received during 1967-68

† received during 1969-70 and 1971-72 (up to December 1971)



The firm, in March 1973, attributed the failure to certain defects in their maintenance by the Railway, stating that the radiator cooling system pressure cap which was located on the make-up water tank of that system had never been changed and the locally made rubber seals used were in a deteriorated condition and were potential leakers.

The claims lodged by the Railway Administration in September 1974 and November 1975 for failure of 67 cylinder heads (costing Rs. 96,756) during warranty period has still (December 1975) not been accepted by the firm. It wanted that the defective cylinder heads should be shipped to U.S.A., freight prepaid, for inspection in its premises, as per warranty clause.

The Railway Administration stated (August 1975) that the stand taken by the firm was not acceptable as it was obviously trying to escape from the claim lodged by the Railway and that there was no reduction in the rate of cracking of the cylinder heads even after the renewal of 140 pressure caps on condition basis. However, the Railway Administration in April 1975 identified thermal overload and inadequate cooling arrangements as prime contributors to the premature cracking of these cylinder heads and suggested to the Railway Board in April 1975 that loads of mail and express trains would require reduction by one bogie and as a further means of reducing the thermal load, the fuel rack setting for WDM-4 should also be slightly reduced.

Out of 96 cylinder heads supplied by the West German firm, 73 (76 per cent) costing \$14,210.71 (Rs. 1,04,693) cracked after giving service ranging between 36 days and 411 days only (the lowest and the highest kilometrage done being 14,040 to 1,60,290 against the warranty of 1,60,000 kms). In accordance with the warranty clause, the cylinder heads, which cracked within one year, were required to be returned to the manufacturer at his factory, transportation charges prepaid. The firm, therefore, asked the Railway Administration to ship the defective cylinder

heads to its works in California. As the cost of returning cylinder heads was high, the firm was advised to inspect them at Mughal-sarai shed. The matter is yet (December 1975) to be discussed with the firm. In the meantime, the Railway Administration decided in April 1975 not to buy any more cylinder heads from this firm.

As the average life of cylinder heads is three years, about 400 cylinder heads are estimated to be required in a year for a fleet of 72 WDM-4 locomotives.

The Mechanical Department had placed an indent for procurement of 400 cylinder heads in November 1971 on the Controller of Stores after taking into account its two indents for 400 cylinder heads placed in July 1971 and 200 cylinder heads in October 1971 and the considerations that the supply of 400 cylinder heads was not likely to materialise before January 1972 and that shortage of cylinder heads was anticipated by that time. The indent of November 1971 was, however, not entertained by the Controller of Stores on the plea that supplies against the order for 400 cylinder heads placed in October 1971 (against the indent of July 1971) were outstanding and that the indent for 200 cylinder heads of October 1971 was to be covered. However, a quantity of 180 numbers was included in a bulk indent sent to Diesel Locomotive Works in April 1972.

In October 1972, the Divisional Mechanical Engineer repeated his request for procurement of 400 cylinder heads as there were only 200 cylinder heads in stock which were not considered sufficient to meet the estimated future requirements. In August 1973, only 45 cylinder heads were in stock. According to the Railway Administration this was due to the India Supply Mission, Washington, having not placed an order till November 1973 against an indent of September 1972. The low stock position necessitated the Railway Administration making emergency purchases of cylinder heads. Consequently, it was decided in



October 1973 to air-lift 48 cylinder heads and another 48 cylinder heads in January 1974.

As the U.S.A. firm, which had supplied the locomotives, indicated in October 1973 that it would take approximately seven months after the placing of the order to supply 48 cylinder heads, the Railway Administration placed an order for 96 cylinder heads on a West German firm—48 in November 1973 and again, 48 in January 1974. The expenditure incurred on airlifting from West Germany was Rs. 2.25 lakhs.

The West German firm from which the cylinder heads were procured and airlifted, had not supplied any cylinder heads to the Railway previously and as such the Railway Administration had no experience of the quality of the cylinder heads obtained from this firm. Till February 1975, seventy-three of these cylinder heads failed prematurely as stated earlier.

Had timely action been taken for procurement of cylinder heads, expenditure on airlifting as well as procurement of cylinder heads from an untried firm, which suffered from comparatively greater premature failures, could have been avoided.

#### **11. Diesel Locomotive Works—Rejection of imported cylinder head castings**

The Diesel Locomotive Works Administration placed three purchase orders (two in May 1970 and one in July 1971) valued at \$5.19 lakhs f.a.s., New York, on a firm in U.S.A., for supply of diesel locomotive components including 3200 cylinder head castings. The supplies were received between May and October 1971 and in September 1972. Out of these, 540 cylinder heads were rejected during machining operation due to various manufacturing defects like valve seat insert landing width not in accordance with the specifications, defective sleeve rolling stud holes and defective nozzle cooling sleeve holes. The Administration preferred warranty claims on the suppliers for these



540 cylinder head castings in 5 instalments between March 1972 and December 1973. Subsequently, the claim for 102 cylinder heads was withdrawn on the advice of the firm that the casting variations were within the permissible tolerances and that these cylinder heads could be used on locomotives without any adverse effect on their life and functioning. The firm accepted warranty claim only for 107 cylinder head castings. Out of the balance 331 cylinder heads, the firm did not accept the warranty claim for 312 cylinder heads on the ground that the defects had arisen at the time of machining due to human error and also because the castings had not been properly adjusted in the fixtures to suit the casting variations. Although the contention of the firm was not acceptable to the Administration, the former finally rejected the warranty claims in August 1974 for all these 312 cylinder heads. The Administration did not follow up the claim for 19 cylinder heads till June 1975 due to oversight.

The representative of the firm suggested in November 1973 that it would be possible to accept the claim for 325 cylinder heads if the Diesel Locomotive Works Administration placed a further order for 1000 cylinder heads but this was not confirmed in writing. The Administration placed a fresh order on the same firm in April 1974 for supply of 1120 cylinder heads at a cost of \$2.36 lakhs f.a.s., New York, as there was no other supplier for this item and indigenous capacity is still (December 1975) to be developed ; but the firm expressed its unwillingness to accept the order until the claim for rejected castings was withdrawn. The Administration, however, persuaded the firm not to link the issue relating to the warranty claim with fresh order for 1120 cylinder heads. The firm accepted this order in April 1975. The cost of 331 cylinder heads, which are still to be replaced by the firm, works out to Rs. 5.87 lakhs with a foreign exchange content of Rs. 4.35 lakhs.

The Diesel Locomotive Works Administration stated (December 1975) that in a meeting held in October 1975 the  
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representative of the firm gave an assurance to replace 200 cylinder head castings free of cost leaving a balance of 131 cylinder head castings (valued at Rs. 2.32 lakhs with foreign exchange content of Rs. 1.72 lakhs). The Railway Board further stated (January 1976) that the firm had advised the Diesel Locomotive Works Administration of the machining technique for reclaiming these cylinder heads. As a result, 25 cylinder head castings out of 131 had since been reclaimed after machining and were in pipe line for being fitted; the remaining 106 cylinder heads are expected likewise to be reclaimed.

## **12. Northern Railway—Import of spare parts for WDM-4 Diesel electric locomotives**

The Railway Administration placed an indent in March 1973, on India Supply Mission, Washington, for procurement of three numbers dwelling assembly, six numbers frame assembly and six numbers bolster assembly for WDM-4 Diesel electric locomotives at an estimated cost of \$ 63,799 (Rs. 4,78,493). These items, being proprietary, were to be purchased from a firm of U.S.A. Out of foreign exchange allocation of \$ 63,799 sanctioned by the Railway Board in October 1972, \$ 56,964 were earmarked for the cost of these spare parts and \$ 6,835 for freight and insurance charges.

The India Supply Mission, (I.S.M.) Washington, informed the Northern Railway Administration on 29th May 1973 (letter received on 20th June 1973) that the prices of all the three items exceeded the estimated cost by 15 per cent and that the catalogue numbers were different for two items, namely, dwelling assembly and frame assembly, from those indicated in the indent. It was specifically mentioned in the communication of the I.S.M., Washington, that quotation would expire on 22nd August 1973. The Railway Administration advised the revised requirements of two numbers dwelling assembly, four numbers frame assembly and four numbers bolster assembly, within the available foreign



exchange, on 1st August 1973. The I.S.M., Washington, cabled back on 3rd August 1973 that the foreign exchange was not sufficient to cover the cost inclusive of freight and that the position should be reviewed by 15th August 1973 since the offers were expiring on 20th August 1973. The Railway Administration again revised their requirements to three numbers dwelling assembly, three numbers frame assembly and four numbers bolster assembly only on 31st August 1973, by which time the offer had expired.

Fresh offers from the same firm of 12th December 1973 were higher for two of the three items, and in order to keep the expenditure within the amount of foreign exchange initially released, orders were placed in February 1974 for three numbers dwelling assembly, two numbers frame assembly and four numbers bolster assembly each at the rate of \$ 4212.60, \$ 13,662.60 and \$ 4,359.60 respectively against original quotations of \$ 4212.60, \$ 10,836 and \$ 3030.36. The purchase order placed by the I.S.M., Washington, in February 1974 was not accepted by the firm on the ground that the letter of credit had not been opened by the I.S.M., Washington, within the validity period, namely, 12th March 1974. The firm was asked on 10th September 1974 to quote again. The offers received in October 1974 were still higher and not only the prices of the stores were increased but also the incidental charges which were raised from 9.67 per cent to 12 per cent. The quantities were again revised to 2 numbers each of dwelling, frame and bolster assemblies. The total increase in expenditure on the quantities now ordered would be \$ 22,907.33 (or Rs. 1,46,742).

The Railway has also sustained indirect loss on account of delay in the receipt of spare parts. It is estimated that every month 8 locodays and 192 manhours are being lost because the locomotives remain in sheds during scheduled overhauls for longer periods than is warranted as the locomotives which come



for periodical overhauls are fitted with damaged assemblies (as dummies) to enable repairs being undertaken and working assemblies taken from such locomotives are fitted to outgoing locomotives in order to make them fit for service.

### 13. Eastern Railway—Import of spare parts for WAG-2 electric locomotives

The Railway Administration invited quotations on 18th June 1971 for 57 items of spares for WAG-2 electric locomotives from the Indian agent of a Japanese firm as the spares were its proprietary items. The c.i.f., value of the quotations received on 8th September 1971 was Rs. 35.4 lakhs against which the Ministry of Finance had agreed in April 1971 to release foreign exchange to the extent of Rs. 6.42 lakhs as asked for by the Railway Administration. The wide variation was due to (i) non-inclusion of agency commission and 10 per cent extra for freight and insurance charges while originally computing the c.i.f., value; (ii) mistake in calculation of foreign exchange requirement for 51 items and (iii) addition of six items. The offer was valid upto the end of November 1971. The tender committee which initially met on 13th October 1971 to consider the quotation could not finalise its recommendation till 15th June 1972. In the meantime, the validity period of the quotation which was extended by the firm upto 31st March 1972 had expired.

It was decided by the Railway Administration in June 1972 to delete certain items and to reduce quantities of others to keep the value of purchase within the foreign exchange limit. In July 1972, the Railway Administration approached the Railway Board for release of foreign exchange of Rs. 6.24 lakhs for procurement of 53 items with reduced quantities against three items; but the latter agreed for Rs. 4.65 lakhs deleting 3 more items because these were stated to be available indigenously. The firm, at the request of the Railway Administration and as a

matter of goodwill, extended the validity of their offer upto 31st October 1972 clearly advising the Railway on 9th October 1972 that from 1st November 1972 the prices would go up by 8 per cent and the increased price would remain valid only upto the end of December 1972. The acceptance of this offer was conveyed by the Administration on 30th October 1972 to the agent. When, however, the purchase order for 50 items was sent to the firm (in Japan) on 18th January 1973, the firm did not accept the order on the plea that cost had increased and sent a revised quotation on 24th April 1973 with validity period upto 15th May 1973 which was later extended by two months (*i.e.*, upto 15th July 1973). The c.i.f., value as per the revised quotation worked out Rs. 5.61 lakhs. The Railway Administration, therefore, did further pruning of its requirements to bring down the value of the order within the foreign exchange limit of Rs. 4.65 lakhs and issued an amendment to the purchase order on 24th July 1973, reducing its value to Rs. 4.49 lakhs. In November and December 1973 the firm indicated its inability to execute the order on old prices due to the oil crisis.

On 20th March 1974, the firm submitted fresh quotations for 48 items, the c.i.f., value of which was Rs. 6.80 lakhs. The Railway Administration further reduced the number of items and quantities and issued another amendment to the order on 18th September 1974 reducing it to 44 items, the c.i.f., value of which was Rs. 3.18 lakhs. The delay in finalisation of the quotations entailed an extra expenditure of Rs. 2.04 lakhs in the procurement of only these items.

The Railway Administration stated (December 1975) that the original demand of 57 items was not inflated and that 44 items had actually been ordered. The additional expenditure was due to the fact that the spares were of imported origin and of proprietary nature.

## CHAPTER IV

### NEW LINES AND LINE CAPACITY WORKS

#### 14. Southern Railway—Hassan-Mangalore Railway Project

In order to facilitate the transport of iron ore, the Ministry of Transport decided in 1959 that certain roads in Karnataka including Hassan-Mangalore road should be developed to all weather standard road with 12 feet wide black topped carriage way and 5 feet wide shoulders of suitable material on either side. For the development of this road, the Government of India agreed to provide a grant of Rs. 26.64 lakhs. This work was sanctioned by the State Government in March 1961 and completed in all respects by March 1969 at a cost of Rs. 3.54 crores. The Railway Board became aware of the road development work in 1962.

The development of Mangalore port as an all weather major port and also the construction of a railway line to link the port to the hinterland was approved in the Third Five Year Plan.

In August 1963, the Railway Board was advised by the Ministry of Transport that the Mangalore Harbour Project had been sanctioned and had been planned for execution and completion within 5-6 years and that it was most essential to go ahead with and complete as quickly as possible, in the first instance, the broad gauge line between the existing Mangalore railhead and the new port site at Panambur; this facility was indispensable for the construction of the major harbour, as the line would enable transportation of approximately 2 million tonnes of stone for breakwaters, 50,000 tons of cement, 15,000 tons of steel and all plant and machineries required for construction, operation and maintenance.



Accordingly the Railway Board, in October 1963, approved the construction of a dual gauge (broad gauge/metre gauge) connection from Mangalore station to the proposed port site (25.8 kms) as part of the Hassan-Mangalore Project. The Southern Railway Administration, on the advice of the Railway Board, sent an urgency certificate for an amount of Rs. 154.80 lakhs for "constructing the portion of the railway line connecting Mangalore station and the new Mangalore port in as short a time as possible so that the port will have the facilities of taking the materials and heavy machinery on this rail link for the construction of new harbour". The total cost of this work (Mangalore to Panambur) was estimated at Rs. 208.28 lakhs. The urgency certificate was sanctioned on 24th October 1963 and the work was commenced in November 1963.

The final location survey report and the traffic appreciation of the Hassan-Mangalore Railway Project proper was completed in December 1963/January 1964; the project was estimated to cost Rs. 23.73 crores including the Mangalore-Panambur Section. The main line from Hassan to Mangalore (189 kms long) consists of 139 kms in plains and plateau and 50 kms in ghat sections. On the ground that the project was an indispensable rail link to serve the hinterland of the new major port under construction at Mangalore, the Ministry sanctioned in August 1964 the construction of the Hassan-Mangalore rail link as a metre gauge single line railway with broad gauge substructures for bridges and broad gauge profiles for tunnels.

The project envisaged a through metre gauge line from Hassan to Panambur, a total distance of about 200 kms and a branch line 5.6 kms in length from Kankanady station at kilometre 182 to run into Mangalore station and a mixed broad gauge/metre gauge link connecting the Mangalore station with the new port at Panambur.

The Project estimate amounting to Rs. 23.73 crores was sanctioned in November 1964. The estimated cost of the project was raised to Rs. 28.34 crores in October 1970. The latest revised estimate (March 1975) for Rs. 42.41 crores is awaiting sanction of the Railway Board.

The construction of the railway connection from Mangalore station to Panambur, the site of the major port, commenced in November 1963. This was almost complete to be able to handle the movement of construction materials and machinery, etc., required for the new Harbour by the end of 1970; the link was completed by October 1972 at a cost of Rs. 2.6 crores. The Harbour authorities, however, did not use the railway for transport of the materials and machinery required for the Harbour Project on the ground that the rail transport was uneconomical. Consequently, the materials and machinery were moved by road. It was explained by the Harbour authorities that the boulder traffic for the construction of breakwaters did not materialise due to a change in the design from deep breakwaters requiring huge boulders to shorter breakwaters requiring smaller size stones for the movement of which road transport was cheaper. This rail link is now being treated as a siding from Mangalore to Panambur.

The work on the construction of the metre gauge line proper from Hassan to Mangalore was commenced in July 1965 and was targeted for completion in a period of 8 years to synchronise with the opening of the new Mangalore port. The Hassan-Mangalore link is still under construction. The new Mangalore Harbour Project was, however, actually sanctioned in June 1968 (and not in August 1963) and formally inaugurated in January 1975. The overall physical progress of the construction of the link upto the end of April 1975 was 79.15 per cent in the plateau and the plain sections and 69.70 per cent in the ghat sections. The progressive expenditure incurred

upto the end of March 1975 was Rs. 30.03 crores. The Hassan-Mangalore link is now expected to be completed and commissioned by 1978-79 subject to availability of adequate funds in 1976-77 and in succeeding years.

#### *Traffic projections and financial appraisal*

The initial financial appraisal of this new line along with the final location survey report and the project estimate sent to the Board in December 1963 took into account iron ore traffic of 2 million tonnes as indicated by the then Ministry of Mines and Fuel and in the Project Report of the Harbour which forecast, *inter alia*, iron ore traffic of 2 million tonnes by 1969-70. The return anticipated was 5.03 per cent in the 6th year and 5.86 per cent in the 11th year on a capital outlay of Rs. 23.73 crores (including the cost of marshalling yard at Panambur). It was clearly indicated in the Project Report that the justification of the rail link almost wholly rested upon the volume of iron ore traffic being not less than 2 million tonnes *via* Mangalore Port. Taking into account the different projections of iron ore, as made by the Indian Bureau of Mines (12.5 million tonnes) and the State Government (300 million tonnes), the financial appraisal was revised in March 1964 assuming a lower iron ore traffic of 0.5 million tonnes. In the light of the statement (October 1964) of the Chairman, M.M.T.C., it was expected that iron ore movement would take place by rail and road movement would stop as soon as rail link was available except in the case of one or two small deposits. The return anticipated was 1.17 per cent in the 6th year and 2.26 per cent in the 11th year based on steam traction and 1.56 per cent in the 6th year and 2.66 per cent in the 11th year taking into account diesel traction. A re-assessment of financial prospects of the project done in 1971 with the scaling down in June 1971 of the estimated iron ore traffic to 0.1 million tonnes per year disclosed that the return would be 1.5 per cent in the sixth year and 1.7 per cent in the 11th year.



*Reasons for the slow progress of work*

(i) In August 1964 the Ministry of Railways became aware that the Port project had not been sanctioned and advised the Southern Railway in April 1967 to go slow with the railway project so as to synchronise its completion with the completion of the Port project. The administrative approval to the construction of the Port project was accorded in June 1968.

(ii) According to the Railway Administration, the progress was hampered by the difficult geological features of the terrain and the heavy rainfall which limited the working season.

(iii) Contracts for tunnelling and bridge works were awarded as early as 1964-65 and the contractors were not able to carry on the works with the rates quoted earlier due to heavy escalation in the rates in the intervening period. This resulted in some of the contractors failing or abandoning the works. Extra expenditure, if any, on execution of these residual works subsequently is still to be assessed.

(iv) Again, according to the Railway Administration the allotment of funds during 1968-69 to 1974-75 for construction of new lines had been extremely limited leading to slowing down the tempo of works being executed departmentally and through contracts. Further, the reduced allotment during 1974-75 led to cancellation of orders for stores valued at Rs. 66.24 lakhs.

It would appear that the fact that the Port project had not been sanctioned was not taken into account while sanctioning the estimate of the rail project (October 1963 and November 1964) and starting execution of this Project (November 1963 and July 1965).

Delay in the execution of the work is partly responsible for the escalation of the cost of the project which is now estimated at Rs. 42 crores. Besides, during the period from January 1975 (when the Mangalore port was opened) to August 1975,

94 ships called at the port and 1.97 lakh tonnes of traffic (both exports and imports) were handled at the port, of which exports of iron ore and manganese ore accounted for 59,119 tonnes. If the rail link had been ready this ore traffic and a considerable portion of the other traffic as well could have been dealt with by the Railways thereby earning additional freight.

#### 15. North Eastern Railway—Restoration of abandoned metre gauge lines between Saraigarh and Forbesganj

The north eastern region of Bihar (part of Saharsa and Purnea Districts) was served by metre gauge rail links—Supaul-Bhaptiahi, (now Saraigarh) (27.2 kms), Bhaptiahi-Nirmali (16 kms), Bhaptiahi-Pratapganj-Kanwaghat (38.4 kms), Ancharaghat-Forbesganj (about 26 kms\*) and Pratapganj-Bhimanagar (19.2 kms). These links had to be gradually abandoned between 1904 and 1938 (the last one immediately after completion in 1911) because of the ravages caused by floods and changes in the course of river Kosi.

With the completion of the Kosi barrage and its related flood control measures in 1963, the river has been contained resulting in development of the area. Consequently, the restoration of abandoned links was considered and the line between Supaul and Thurbhita (about 13 kms) was restored and opened for traffic in October 1967. This line was extended to Saraigarh (11 kms) in November 1970 (cf., paragraph 45 of Audit Report, Railways, 1970 and paragraphs 1.26 to 1.31 and 1.34 of the Eleventh Report of the Public Accounts Committee 1971-72).

On the proposal of the Government of Bihar for the restoration of the railway line from Saraigarh to Forbesganj, the Railway Board directed the North Eastern Railway Administration in November 1970 to make a quick assessment of the rough costs and financial viability of the proposed restoration. The

\*Distance between present locations.

reconnaissance survey report and the traffic appreciation report submitted by the Railway Administration to the Board in April 1971 indicated that the whole section was expected to yield a return of (—) 1.46 per cent during 1974-75 but if the restoration was carried out from Saraigarh to Raghapur only (11 kms) the return would be 3.79 per cent. In the reconnaissance survey report a straight alignment from Forbesganj to Pratapganj via Debiganj and Narpatganj instead of the old alignment via Kanwaghat and Ancharaghat (rail-cum-ferry crossing) was proposed. The total length of the proposed alignment between Forbesganj and Saraigarh was to be 56.34 kms. The Administration recommended restoration of the section from Saraigarh to Raghapur in the first instance in view of the many developments occurring in the Kosi belt.

The Railway Board, however, advised the Administration (November 1971) to update the earlier appreciation report and decided that the proposal submitted by the Railway Administration in October 1971 to undertake a preliminary engineering-cum-traffic survey would be considered only if the revised appreciation report established *prima facie* justification for Saraigarh-Forbesganj link.

Before, however, the Railway Administration could update the appreciation report the Railway Board, in the context of the policy adopted by Government in 1973 for undertaking new lines and for restoration of dismantled lines, desired in April 1973 that an urgency certificate for restoration of line between Saraigarh and Raghapur (11 kms) should be sent to it expeditiously. It was then stated by the Railway Administration that there had been great pressure from the local authorities and public representatives for the restoration of at least that section as part of the total restoration programme. An urgency certificate with an abstract estimate for Rs. 47.98 lakhs was accordingly sent to the Railway Board on 13th April 1973.



Another urgency certificate with an abstract estimate for Rs. 72 lakhs for the restoration of Raghapur-Pratapganj section (12 kms), was also sent to the Railway Board on 3rd May 1973. The circumstances which warranted the urgency were:—

*Saraigarh-Raghapur*

“.....The pressure of the fast developing economy specially in Raghapur area has made the public impatient for the restoration of this railway line. The programme for intensive farming after the recent drought has made the proposed restoration an immediate necessity.....”

*Raghapur-Pratapganj*

“.....Since the area between Raghapur and Pratapganj is comparatively more fertile and populous and also in view of the programme of intensive farming launched after the recent drought, the State Government, local public and the Members of Parliament and the State Legislature have strongly urged that the restoration should be taken up forthwith between Raghapur and Pratapganj also.....”

The Railway Board decided in May 1973 that only essential sub-works should be undertaken during 1973-74 before detailed estimates were sanctioned and communicated its approval to the works of Rs. 48 lakhs being undertaken on the urgency certificates against the amount of the abstract estimates of Rs. 119.98 lakhs. The abstract estimates were prepared based on reconnaissance survey carried out in 1970-71.

The targets for completion of the work in the two sections Saraigarh-Raghapur and Raghapur-Pratapganj, were set as March 1974 and June 1974 respectively. The execution of the work in these sections commenced on 18th June 1973 without preparation of the working estimates for earthwork etc., and completion

of the final location engineering-cum-traffic survey. An expenditure of Rs. 67,703 had been incurred on field work till the end of July 1973.

The Railway Administration stated (December 1975) that the field survey by the Engineering teams was taken up on 12th June 1973 and completed on 4th July 1973 and that the data of final location survey were available by the end of July 1973; the detailed estimate was sent to the Railway Board on 1st August 1973.

As mentioned, the works in the two sections were required to be completed by March and June 1974 respectively. It was found in February 1974 that as many as six major bridges in the former section were still incomplete, and that the girders for these bridges would not be available in time. The Engineer-in-Chief ordered on 25th February 1974 that temporary low level diversions should be laid for five of the six bridges by diverting all earthwork labour from the adjoining Raghapur-Pratapganj section and it was to be ensured that the track was linked continuously from Saraigarh to Raghapur by 2nd March 1974. Accordingly, diversions were laid by executing earthwork measuring 25,200 cu.m. approximately and laying track at an estimated expenditure of about Rs. 1.41 lakhs.

The Additional Commissioner, Railway Safety, however, when approached by the Railway Administration on 4th March 1974 to fix up a date for inspection of the line for authorisation for opening it, declined to inspect the section on the ground, *inter alia*, that, as per extant orders, no temporary or make-shift arrangements, however safe, should be permitted in opening a new line. Consequently, the work on the five bridges was completed by 25th April 1974 and a total avoidable expenditure of Rs. 1.41 lakhs was incurred on the diversion.

The line was inspected by the Additional Commissioner, Railway Safety, and was authorised for opening on 1st May

1974. The up-to-date expenditure (till August 1975) was Rs. 1.33 crores.

Construction estimate for Rs. 1.92 crores for Saraigarh-Pratapganj section was re-submitted to the Railway Board in March 1974 when 60 per cent of work had been completed. In July 1974 (that is, after the line was opened for traffic on 16th June 1974), the Railway Board sanctioned the estimate for the net cost of Rs 1.61 crores chargeable mainly to Depreciation Reserve Fund (after deduction of the provision of Rs. 26.05 lakhs for Rolling Stock).

The detailed estimate submitted to the Railway Board in March 1974 provided for execution of 3.40 lakhs cu.m., of earthwork at an estimated cost of Rs. 14.61 lakhs, whereas the earthwork actually executed was 5.91 lakh cu.m., at a cost of Rs. 23.62 lakhs. There was an increase of about 74 per cent in quantity and 62 per cent in cost as compared to the provisions in the estimate. Again, though the line was opened for traffic in June 1974, the earthwork was finally measured in April 1975.

The Administration stated (August 1975) that this substantial variation in quantity was on account of adoption of a higher formation level due to consideration of floods, clearances at bridges, changes of gradients, etc., as required by site conditions and omission to provide for earthwork for platforms and approach roads to level crossing in the original estimates. As in this case the construction estimates were prepared when 60 per cent of the work had been completed, it is felt that these factors should have been taken into account by Railway Administration for reasonably accurate estimation of earthwork. The Administration further stated (December 1975) that the question of measurement of earthwork did not arise as it had been done departmentally and that the measurements were taken in April 1975 for the purpose of preparing the complete estimate.



In April 1973, the Railway Board directed the Railway Administration to submit a revised estimate for carrying out detailed engineering survey alongwith the traffic survey then in progress for the entire restoration project from Saraigarh to Forbesganj though, the essential sub-works for the restoration of the Saraigarh-Raghopur and Raghopur-Pratapganj sections of this project were sanctioned in May 1973 on urgency certificates and were executed without a detailed or a preliminary engineering survey. The Railway Board also suggested that the above Project should be linked suitably with two other projects under contemplation viz.,

- (a) construction of a metre gauge line between Bathnaha and Bhimanagar, involving conversion of the dead narrow gauge line belonging to Kosi Project authorities; and
- (b) restoration of the Pratapganj-Bhimanagar line.

(These works, however, are still to be sanctioned.)

The Railway Administration submitted a final location survey and traffic appreciation report in August 1973 alongwith an estimate for Rs. 4.43 crores for the entire project with proposed alignment of 72 kms (of which 49 kms was between Pratapganj and Forbesganj). The Railway Board, in October 1973, modified the report and the length of the alignment between Pratapganj and Forbesganj finally approved was 41 kms. In March 1974 the Railway Administration submitted a construction estimate of Rs. 3.98 crores to the Railway Board for the restoration of the Pratapganj-Forbesganj link with reference to the alignment finally approved. In July 1974, the Railway Board sanctioned a net estimate of Rs. 3.37 crores mainly chargeable to Capital and Depreciation Reserve Fund (after deduction of the provision of Rs. 55.50 lakhs for Rolling Stock).

The work in this section started in September 1973. It is scheduled to be completed by January 1975; the line was

authorised for opening by the Additional Commissioner, Railway Safety, on 11th June 1975 ; but was actually opened for goods traffic on 25th August 1975 and passenger traffic on 2nd October 1975. The progressive expenditure on this work was Rs. 2.57 crores till the end of August 1975.

The detailed estimates for the section Pratappganj-Forbesganj provided for execution of earthwork measuring 8.17 lakh cu.m., (for an alignment of 41 kms) at an estimated cost of Rs. 33.44 lakhs. The total expenditure on earthwork (for an alignment of 36.25 kms) booked up to October 1975 was Rs. 59.89 lakhs, the increase being 79 per cent over the estimated cost. The measurement of earthwork is stated to have been completed by December 1975.

The accounts of both the works are still open to admit the liabilities already incurred and to accrue in future as certain ancillary work is still to be done in both the sections.

#### **16. Central Railway—Construction of a third line between Tughlakabad and Palwal stations**

The chartered and the practical capacities of the double line section between Tughlakabad and Palwal (38.44 kms) on Delhi-Mathura section of the Central Railway and its utilisation during the year 1966-67 were 40, 36 and 34 trains respectively each way. The Railway Administration considered the provision of a third line necessary between Tughlakabad and Palwal in two phases between (i) Tughlakabad and Ballabgarh (18.30 kms) and (ii) Ballabgarh and Palwal (20.14 kms) with a view to avoiding detention to suburban and long distance trains and also for handling additional number of passenger and goods trains that might be introduced in future. In February 1968, the Railway Board approved of the inclusion of the work for provision of a third line between Ballabgarh and Tughlakabad section in the Works Programme for 1968-69 with the stipulation that the Railway should not enter into any commitments

without prior clearance from the Board. In September 1968, the Railway Board enquired whether any improved signalling could be provided to increase the line capacity and enable more throughput in the section and, if subsequently it became a busy suburban section of Delhi area, whether the provision of automatic signalling would be essential. While the Chief Signal and Telecommunication Engineer considered that the problem would require closer examination, the Railway Administration informed the Railway Board in March 1969, that the contemplated improvement in the existing signalling would not increase the line capacity and that provision of automatic signalling could only be considered as a measure to increase the line capacity of the section. This, the Administration stated, would not eliminate the difficulties of operation caused on account of slow movement of suburban shuttle trains which affect adversely the punctuality of not only the fast passenger trains but also of the running of through goods trains as the existing two lines could not permit of segregation of fast moving and slow moving trains.

In May 1969, the Railway Board approved the provision of the third line between Tughlakabad and Ballabgarh on an urgency certificate. The abstract estimate of Rs. 2.79 crores for this work was sanctioned in July 1971 and this was revised to Rs. 3.61 crores in September 1973. The revised estimate for Rs. 3.61 crores was sanctioned in January 1974.

The provision of the third line between Ballabgarh and Palwal was also sanctioned by the Railway Board in January 1972 at an estimated cost of Rs. 1.59 crores. The works in both the sections were to be executed in such a way as to enable the commissioning of the third line for traffic on the entire Tughlakabad-Palwal section by 31st March 1972. However, due to delay in the execution of the work relating to the extension of the existing road overbridge at Ballabgarh station on account of change in the design from pre-stressed concrete girders to reinforced cement concrete slab girders, the third line was connected



to the existing down main line on either side of the bridge by providing a temporary block cabin with signalling arrangements at a cost of about Rs. 1.39 lakhs in order to run the trains on the third line from April 1972. The third line was completed by September 1974 when the improvised signalling arrangements were discontinued. During that period an expenditure of Rs. 76 thousand was incurred on the operating staff employed on this cabin.

The table below shows the capacities provided in the section and the actual materialisation of traffic during the years 1966-67 to 1974-75 :—

Year	Chartered capacity	Practical capacity (90 per cent of the chartered capacity)	Number of passenger trains			Number of goods trains		Total number of trains	
			Long distance	shuttles	total	Thro-ugh	Others @		
1966-67	40	36	15.0	4.0	19.0	13.0	2.0	15.0	34.0
1967-68	40	36	15.0	4.0	19.0	11.5	2.0	13.5	32.5
1968-69	40	36	15.0	4.0	19.0	13.3	3.0	16.3	35.3
1969-70	40	36	16.0	4.0	20.0	14.7	3.0	17.7	37.7
1970-71	40	36	16.0	4.0	20.0	14.9	3.0	17.9	37.9
1971-72	44	40	17.0	4.0	21.0	17.1	3.0	20.1	41.1
1972-73	*58/44	*52/40	18.0	4.0	22.0	17.3	2.0	19.3	41.3
1973-74	*58/44	*52/40	18.0	5.0	23.0	17.3	2.0	19.3	42.3
1974-75	*58/45	*52/40.5	18.0	5.0	23.0	16.3	3.9	20.2	43.2

It would be seen from the table above that the section would have had chartered capacity of 58 trains and practical capacity of 52 trains on provision of the third line from April 1972 but the

@Including departmental, military and coaching specials etc.

\*Anticipated chartered and anticipated practical capacities—58 and 52 trains respectively.

actual charted and the actual practical capacities were substantially lower, namely, 44/45 and 40/40.5 trains during 1972-73 to 1974-75 because the third line is presently (December 1975) a non-interlocked line and has been opened for goods traffic only. Further, this line had not been fully ballasted until September 1974 resulting in restrictions on the speed of the goods trains to 45 kilometres per hour. (The line is stated to have been opened for passenger traffic also with effect from 24th October 1974 with speeds not exceeding 65 kilometres per hour.) The provision for interlocking in the sanctioned estimate for the third line in the section was Rs. 68.63 lakhs but these arrangements are still (January 1976) to be provided. The Railway Administration explained in January 1976 that signalling to standard III interlocking as provided for in the sanctioned estimate could be installed only after the station yards were remodelled.

While standard III interlocking has still to be installed, against the provision of Rs. 68.63 lakhs in the sanctioned estimate, the expenditure incurred on procurement of signalling stores was Rs. 35.08 lakhs up to March 1975.

The actual number of trains run is in excess of the number that can be run as per the practical capacity. It is possible to run more trains than the practical capacity if the criterion of speed is ignored. In consequence more trains have been run than the practical capacity involving detention to the trains in the section. Again, as the increased practical capacity is only slightly more than the capacity before the introduction of the third line, namely, 4.5 trains, the segregation of fast moving and slow moving trains has not been considered feasible ; this would be possible only when the anticipated capacities (charted 58 and practical 52) are attained after completion of standard III signalling. Further, because of the delay in the provision of interlocking arrangements there have been restrictions on the speed of trains running on the third line and there has been no improvement in

the running time of the trains between Tughlakabad and Palwal. Consequently, the benefit of the investment amounting to Rs. 5.11 crores on the laying of the third line has not been fully realised.

The Railway Administration stated (January 1976), "It will be possible in due course to generate the anticipated charted and practical capacities of 58 and 52 trains respectively when standard III interlocking is provided at all stations between Palwal and Tughlakabad for the third line and the third line is ballasted properly for running the passenger and goods trains with maximum permissible speed on the section. . . . . The actual number of trains run has been slightly in excess of the practical capacity. However, this has always led to congestion in the section, heavy detention and regulation of trains affecting the speed of goods trains. Even though the increase in practical capacity has been of the order of about 4.5 trains after the third line was commissioned for slow traffic, it has helped in segregation of comparatively slow moving and less important trains on the third line whenever that traffic clashed with other fast moving and more important trains."

It further stated that running time of suburban and long distance trains depends on maximum permissible speed, type of traction, section to section running time (which does not change with the increase in the capacity of the section), flexibility of yards at either end to accept traffic and the extent of saturation of train services on the section. It also maintained that there had been no under-utilisation of the capacity as available with the present standard of signalling for the third line.

The non-achievement of the anticipated charted and practical capacities and the non-improvement in the running times of the suburban and long distance trains between Tughlakabad and Palwal even after the provision of a third line at a cost of Rs. 5.11 crores (including expenditure on procurement of signalling stroes) would appear to be due to delay in the provision of standard III interlocking for the third line.



The Railway Board stated (February 1976) that the practical capacity was adequate to cater to the traffic available; but for creation of the third line, it would not have been possible to carry the additional traffic of six to seven trains; that segregation of slow moving shuttle trains from fast trains could not be fully done as standard III interlocking has not been installed on the third line due to constraint of funds and relative priority of works. It further added "...the delay in commissioning standard III interlocking was not of much consequence inasmuch as even if substantial capacity had been created on the section ahead of commissioning of automatic signalling on Mathura-Palwal section, which feeds the traffic on to the section, the full benefits thereof would not have been realised".

It is mentioned that in May-June 1971, the Railway Administration undertook the survey for the extension of the third line from Palwal to Mathura (83 kms). As the Signal and Telecommunication Department was of the view that the third line would present certain working difficulties in controlling the movement of trains on three proximate and interconnected lines on manual block and that past experience had proved that the third line operation could be exploited only by the control of all the routes of a section from one location or by judicious combination of automatic block and remote control, the Railway Administration suggested a survey for provision of automatic signalling as an alternative to the third line between Palwal and Mathura. This proposal was accepted by the Railway Board in May 1972. As a result of the survey, the Railway Administration recommended in July 1973, the provision of automatic signalling with axle counters on Palwal-Mathura section with a flyover at Mathura as an alternative to the third line which was accepted by Railway Board in December 1973.

The proposal to take up this work has been under the consideration of the Railway Board (August 1975).

### 17. South Eastern Railway—Dismantling of a line

The section between Kharagpur and Gokulpur stations of South Eastern Railway was served by double line till 1967. The remodelling of Kharagpur Yard was undertaken in the year 1961-62 and one of the lines (down line—6 kms) was disconnected in March 1967, ostensibly to facilitate completion of the remodelling work of the Yard. In May 1967, the Divisional Superintendent, Kharagpur, proposed that the line might be re-connected as the capacity of the single line was saturated, detentions to trains were occurring due to single line working and increase in goods traffic from Adra side was anticipated because of the coming up of Haldia Port. In 1969, an estimate for Rs. 3.57 lakhs was prepared. The administrative approval of the General Manager to take up the work, out of turn, during 1971-72 was also obtained in September 1971.

The proposal was dropped in October 1971, when it was found that the cost of work as per the revised estimate prepared by the Civil Engineering Department would increase to Rs. 9.94 lakhs and this would require the approval of the Railway Board. The work could not be included in the Preliminary Works Programme for 1972-73 since it had already been finalised. It could also not be included in the Preliminary Works Programme for 1973-74 due to paucity of funds.

The Engineering Department of the Railway handed over the line to the Security Department in November 1968 for guarding it round the clock. During the period November 1968 to May 1973 an expenditure of Rs. 1.16 lakhs was incurred in guarding the line. Nevertheless, permanent way materials costing Rs. 88 thousand were stolen from the track.

In February 1973, the Divisional Superintendent, Kharagpur, pointed out that the utilisation of the sectional capacity between Kharagpur and Gokulpur was not even 50 per cent of the charted capacity and suggested dismantling of the down line which

had not been in use for about six years. Accordingly, it was decided in March 1973 to dismantle the line and except a small portion which got embedded in the earth with the passage of time, the line was dismantled in June 1973.

The dismantlement of the line was contrary to the intentions of the Railway Board conveyed as far back as September 1964 when they did not approve of the proposal of the Railway Administration for doubling the Nimpura-Gokulpur chord section, *inter alia*, on the ground that the double line between Kharagpur and Gokulpur should be adequate for catering for all the traffic expected to be handled on the Kharagpur-Adra section in the first two years of the Fourth Plan and even beyond this stage any increase in traffic could be efficiently handled by adoption of panel interlocking.

Further, it also appears from the communication of October 1969 of the Chief Engineer of the Railway that "the earlier abandonment of the line was not occasioned by the necessities of the yard re-modelling as the yard re-modelling could have been done without abandoning the line".

In September 1973, the Railway Board, however, agreed to include the work of restoration of the dismantled line in the Works Programme for the year 1974-75 on the grounds that it would provide necessary mobility in operation, fulfill the un-met demand of the travelling public for introduction of additional coaching services and cater to the needs of increased traffic during Fifth Plan consequent upon the opening of Haldia Port; but in October 1973 it decided to delete this work from that Works Programme. The proposal to restore the dismantled line has since (December 1975) been dropped. It is not clear how the needs of traffic as above would be met.



## CHAPTER V

### PURCHASES, STORES AND LOSSES

#### 18. Eastern Railway—Procurement of tyres for electric multiple unit (EMU) coaches

In March 1971, the Railway Board placed an order on a Belgium firm for manufacture and supply of 3604 tyres required for electric multiple unit (EMU) coaches on Eastern, Central and Western Railways. The total c.i.f., value of the contract was about Rs. 32.48 lakhs. The firm was required to deliver 1200 pieces by 30th September 1971, 400 pieces by 30th October 1971, 1200 pieces by 30th November 1971 and 804 pieces by 31st December 1971.

In April 1971, the Research, Designs and Standards Organisation advised an amendment to the specification of incidental alloying elements for EMU tyres according to which, *inter alia*, the chromium content of the alloy was to be restricted to 0.15 per cent and suggested incorporation of this modification in the subject order. In May 1971, the Railway Board requested the firm to supply the tyres to the amended specification. The firm, in June 1971, declined to accept the change in specification for the reason that the manufacture of tyres was already in progress. The firm also indicated that the steel chosen by it had, *inter alia*, chromium content ranging from 1.1 per cent to 1.4 per cent. The Railway Board, in November 1971, asked the Research, Designs and Standards Organisation to confirm that the reply of the firm was acceptable adding that contractually the suppliers could not be asked to supply tyres with later amendments. The Research, Designs and Standards Organisation, in December 1971, indicated that the offer of the firm for supply of EMU

tyres with 1.1 per cent to 1.4 per cent chromium content was unacceptable. The Research, Designs and Standards Organisation also stated that the proposed amendment was necessary in view of heavy incidence of burst tyres experienced in respect of earlier supplies of tyres from Japan, which had chromium content of 0.9 per cent to 1.12 per cent. Meanwhile, in September 1971, the Railway Board revised the delivery schedule to November 1971—February 1972, as there was a delay of 17 days on the part of the Railway Board in sending the formal contract duly signed to the firm within the time stipulated by it, namely, 1st March 1971. The delivery schedule was further extended upto 31st March 1972 as there was a strike in the works of the firm.

The Eastern Railway received 1667 tyres during January to August 1972 against allotment of 1669 pieces. Two tyres were received short and this matter was taken up with the Calcutta Port Trust. In October 1972, five tyres which were fitted on the wheel, were found to have cracked. A detailed investigation was undertaken by Eastern Railway in December 1972; representative samples from 19 casts, out of 25 casts involved in the supply, were subjected to chemical and metallurgical tests by the Chemist and Metallurgist of the Railway who, in his report, indicated, *inter alia*, that visual examination and micro characteristics clearly showed evidence of prominent internal defect in the shape of laminations in all the tyres and that the failures might be attributed to presence of inherent internal defects in the materials.

In September 1973, the Railway decided that, keeping in view the safety aspect, every tyre should be tested ultrasonically. Out of 1440 tyres which were available for testing (213 numbers had already been fitted in coaches and 5 numbers had been rejected), 706 tyres were found defective and unfit for use. In March 1974, the Railway Board asked the supplier to replace these defective tyres in terms of the warranty clause of the contract. Thereupon, the firm desired to have particulars of brand

marks, cast numbers and details of deviations from the specifications. The Railway Board forwarded the investigation report of the R.D.S.Q. to the firm in April 1975; the cast numbers and brand marks of the defective tyres were advised to the firm in July 1974 and August 1975 respectively.

The Railway Adviser, London, who carried out inspection of the tyres before shipment to India, was also simultaneously advised of the defects by the Railway Board. He, however, stated (April 1974) that chemical analysis, mechanical test results and sulphur prints of the heats involved seemed to indicate conformity with specification.

The firm stated in July 1974 that as per the contract specification, the manufacturer was to supply complete chemical analysis of each cast of steel and the purchaser or his Inspecting officer should, in case of reasonable doubts, resort to other forms of testing such as ultrasonic, magnetic, etc., as might be mutually agreed to between the concerned parties for satisfaction that the tyres were free from defects of any kind; since there had been no doubts with regard to chemical analysis by the inspection at the works, the ultrasonic testing was of course not necessary; and that the Railway should have obtained their preliminary agreement for ultrasonic testing at destination. The firm stated that the defects were discovered for the first time after hot setting-up at destination and could also be due to unsound handling of the tyres causing change in their structure. The firm, therefore, refused to comply with the request for replacement of the defective tyres.

At the instance of the Railway Board, the Research, Designs and Standards Organisation also carried out (February 1975) metallurgical investigations on macro sections and micro specimens pertaining to the tyres which initially failed after shrinking on wheel centres as also cut portions from two new tyres out of those found defective in ultrasonic tests by Eastern Railway.



These investigations showed that there were internal discontinuities in the form of transverse cracks and distinct flaws in the tyres, which had originated at the time of their manufacture. The Research, Designs and Standards Organisation also opined that the defects discovered initially could not be due to unsound handling of the tyres as contended by the firm, since defects were found even in tyres not taken up for heating and shrinking.

The firm, however, declined (May 1975) to accept the findings of the Research, Designs and Standards Organisation and the claim of the Railway Board for replacement of the defective supplies. Earlier in July 1974, the Railway Board decided to withhold payment of Rs. 3.90 lakhs available under the bank guarantees furnished by the firm for this particular contract and another contract with the firm. The Chief Accounts Officer, London, was advised to this effect in April 1975 by the Railway Board. The Chief Accounts Officer stated (19th August 1975) that the bank guarantee for the subject contract, validity of which had already expired, was not traceable and that the payment against the other contract had been authorised on 13th August 1975. These defective tyres (706) have been lying with the Railway Administration (February 1976) without replacement or recovery of cost from the firm. The cost of these defective tyres is Rs. 7 lakhs with foreign exchange content of Rs. 5.76 lakhs.

The Railway Board stated (December 1975) that in a concluded contract enforcement of an amendment in specification retrospectively was not possible in the face of the categorical denial by the firm. It further stated that the firm, in October 1975, had indicated its agreement for the reimbursement of the 'eventual broken tyres' and agreed to extend the warranty period by two years and that the Board was continuing its efforts to make the firm accept its contractual liability and replace the defective tyres. It was, however, not incumbent on the Board

to have revised the delivery schedule when the firm had declined to supply the tyres according to the amended specification.

#### 19. Eastern Railway—Procurement of screw couplings

In August 1972, the Director General, Supplies and Disposals entered into a running contract with a Calcutta firm for supply of 6,068 screw couplings to the Stores Depots of Eastern Railway at Liluah and Halisahar at the rate of Rs. 170 each plus sales tax. The supplies were to be completed by 30th June 1974. Between July 1973 and August 1974, the firm delivered 5,900 screw couplings to these Depots duly inspected by the Director of Inspection of the Director General, Supplies and Disposals. On the basis of proof of inspection and despatch, Rs. 10,07,699 representing 98 per cent of the value of the materials were paid to the firm during August 1973 to June 1974.

Some representative samples were drawn in January 1974 from the supplies received at Liluah and these were sent to the Railway workshop at that station for test. The test report available in April 1974 disclosed that the materials were unsuitable due to major dimensional defects. Two months later, the defect was confirmed in a joint inspection carried out by the representatives of the firm, the Railway and the Director of Inspection. The entire quantity (4,000 screw couplings) supplied to Liluah stores depot was rejected by the Railway on 25th June 1974 and the firm was advised accordingly. However, on the suggestion of the Director of Inspection, the firm was given a chance to sort out 200 to 250 screw couplings out of the rejected lots to see if any of them conformed to specification and the Railway could accept the same for use. The firm sorted out 500 couplings but in the joint inspection carried out on 18th July 1974 these materials were again rejected. Subsequently, two more opportunities were given to the firm in

August-September 1974 but the materials could not be accepted owing to their unsuitability. According to the record note of joint inspection conducted on 19th September 1974, most of the sorted out materials were not in accordance with the governing drawing.

Similar defects were noticed in the supplies received at Hali-sahar Stores Depot during February—August 1974 and they were rejected straightaway and the firm was informed on different dates between April and December 1974.

The Director General, Supplies and Disposals was advised of the defects in the supplies first in June 1974 and again in November 1974 and January 1975. However, the Railway Administration did not notify its intention to make purchases of the material at the risk and cost of the firm. The Pay and Accounts Officer, Calcutta, who was requested from time to time during May to December 1974 to recover the payment already made to the firm, succeeded (till November 1975) in withholding its dues to the extent of about Rs. 1.38 lakhs against payment of about Rs. 10.08 lakhs. The Railway Administration stated (January 1976) that the Pay and Accounts Officer, Calcutta, has so far recovered Rs. 6.57 lakhs.

To meet the pressing demands of Liluah and Kancharapara workshops, the approval of the General Manager was obtained in June 1974 and February 1975 for direct purchase of 3,300 couplings at the rate of Rs. 450 each. This entailed extra expenditure of Rs. 9.24 lakhs. In the absence of notification of the Railway's intention to purchase these materials at the risk and cost of the firm, it is doubtful whether this extra expenditure would be made good by the firm.

#### 20. Western Railway—Procurement of wire-mild steel

In July 1973, the Railway Administration placed an order on a firm for supply of 18 tonnes of wire, mild steel, annealed for general engineering purposes 1.25 mm (18 SWG) diameter to specification No. IS 280 (soft). According to the stipulated



conditions, the payment to the firm was to be made after inspection and acceptance of the material by the District Controller of Stores, Mahalaxmi. The firm supplied 18.46 tonnes of wire mild steel, between 27th July and 12th September 1973. These were accepted by the District Controller of Stores, Mahalaxmi, after test and inspection and sent to the Assistant Store Keeper, Kota, in two lots in August and November 1973. A sum of Rs. 42,352 was also paid to the firm towards the cost of the material.

The Assistant Engineer (Construction), Kota, reported in September/October 1973 that the materials received by the Assistant Store Keeper, were in five sizes (varying from 16 to 26 SWGs) and were old stock, badly rusted and rottea. As a result of joint inspection conducted in January 1974 by a team of three technical officers, these were found unacceptable and returned to the Stores Depot, Mahalaxmi, on 20th February 1974. The District Controller of Stores rejected the materials in April 1974; but the firm expressed its inability to accept the rejection on the grounds that the materials were inspected by the Technical Inspector and also tested by the Assistant Chemist and Metallurgist before these were accepted by the District Controller of Stores. Thereupon, the Chief Engineer (Survey and Construction) agreed (in August 1974) to make use of wires of 17, 18 and 19 SWGs. Consequently, the rejection memo was cancelled in September 1974.

When the Survey and Construction Organisation found these wires to be badly corroded and rusty it did not accept them. Ultimately, the Controller of Stores, Churchgate, in February 1975, ordered a final inspection of the wires by the Deputy Chief Engineer (Survey and Construction), Kota, and the Deputy Controller of Stores, Mahalaxmi. They observed (April 1975) that the materials, as inspected, did not conform to the

specifications and were rusty and brittle. They recommended the rejection of the entire lot as not suitable for use either as binding wire or for general use. The supply was accordingly rejected in October 1975.

In the meantime, Rs. 21,992.90 were recovered by the Administration from the pending bills of the firm and in addition, its other dues of Rs. 8,089.80 were withheld. The firm protested against these deductions, *inter alia*, stating in July 1974 that the materials returned to Stores Depot, Mahalaxmi, by the consignees were not the same as were supplied by it. The firm again wrote to the Railway Administration in March 1975, that, if payment were not made it would be obliged to charge interest at the rate of 18 per cent per month.

The Railway Administration stated (January 1976) that, it proposed to hold an enquiry (i) to investigate how the materials already inspected were later found to be sub-standard at the consignees' end; (ii) to ascertain the extent to which the materials are now unserviceable; (iii) to fix responsibility for failures, if any; and (iv) to go into the technical and legal aspects.

#### **21. Chittaranjan Locomotive Works—Auxiliary switches for electro-magnetic contactors in electric locomotives**

The original Group design for the ACFT (alternate current freight type) and ACMT (alternate current mixed type) locomotives has 8 electro-magnetic contactors with a set of two auxiliary switches for each contactor; in the case of DCFT (direct current freight type) locomotives there are 13 electro-magnetic contactors with a set of two switches for each contactor. The manufacture of electro-magnetic contactors was taken up by Chittaranjan Locomotive Works from January 1969 and they experienced difficulty initially in developing auxiliary switches of the required quality. To maintain production of

electric locomotives with the available auxiliary switches pending development of the manufacture at Chittaranjan, the Administration found it feasible to instal 9 ( $4\frac{1}{2}$  sets) as against 16 (8 sets) auxiliary switches in the ACFT from January 1969 and ACMT locomotives from 1971 and 18 (9 sets) as against 26 (13 sets) auxiliary switches in the DCFT locomotives from 1971.

While the number of auxiliary switches actually fitted in the locomotives was less than that provided in the original design, the cost of auxiliary switches debited to the locomotives was as per the number provided in the design. Consequently, the cost of 58 ACMT and 57 DCFT (115) locomotives manufactured at the Chittarnjan Locomotive Works during April 1970 to 10th November 1975 was overloaded with the cost of auxiliary switches to the extent of 7 switches per ACMT and 8 switches per DCFT locomotive, that is, by the cost of a total of 862 switches amounting to Rs. 79,304. While the number of auxiliary switches actually fitted was less than the number charged to the cost of locomotives, the auxiliary switches not utilised had not been accounted for in the stores accounts of the Chittaranjan Locomotive Works.

The Railway Board advised the Chittaranjan Locomotive Works Administration (January 1976) that these switches might be offered to the Railways as spares and till this was done they should be kept in Stores Depot rather than on the Shop floor.

## 22. South Central Railway—Unnecessary procurement of boilers

The doubling of track between Talamanchi and Manubolu stations on trunk route of South Central Railway (45 kms) commenced in April 1961 and was completed in December 1965. The work involved construction of a number of bridges on well foundation including a major bridge across Pennar river. For well sinking and dredging operations, vertical cross tube boiler

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was considered as a handy equipment to work the winches and two such boilers were purchased in the year 1963 at an approximate cost of Rs. 1 lakh (as indicated in the accounts relating to the work).

The boilers were never used either for the work for which they were specifically purchased as dredging for well sinking could be done manually, or for any other purpose and had been lying at Ongole station till 2nd August 1974, unpacked from crates; they were sent to Stores Depot, Vijayawada, on 3rd August 1974. Attempts made to transfer the boilers to the Engineering or the Mechanical department of this Railway proved unsuccessful. They were offered to other Railways but they did not show any interest in taking them. A Survey Committee which inspected the boilers in November 1973 declared them as 'dead surplus' and assessed the scrap value at Rs. 5 thousand each. The boilers are yet (November 1975) to be utilised. In the meantime, a further liability of Rs. 66 thousand had been incurred towards payment of dividend to General Revenues.

The Railway Administration stated (October 1975) that, even though there was no favourable response from the Railways to an earlier enquiry, Eastern Railway subsequently indicated that these boilers would be required for its mechanical workshops at Kancharapara. Accordingly, the boilers were sent there in August 1975 and the cost (Rs. 1 lakh) was being debited to that Railway.

### **23. Eastern and Northern Railways—Shortage of imported parts for diesel locomotives**

Imported Railway stores landing at Calcutta port are cleared from the port by Eastern Railway. During February to June 1973, Eastern Railway unloaded from ships 310 packing cases pertaining to Northern Railway. Out of these, 74 packing cases contained spare parts for diesel locomotives supplied by a firm

of U.S.A., for use in diesel locomotives owned by Northern Railway and based at Repair Shed, Mughalsarai. All these 74 packages were found in sound condition at the time of unloading at the port.

The District Controller of Stores, Eastern Railway, Howrah, advised the Assistant Controller of Stores, Northern Railway, Mughalsarai, first in March 1973 and again in April and May 1973 to send Railway Protection Force staff to escort high sided open wagons loaded with packing cases. The latter deputed a Ward Keeper on 10th June 1973 to receive the packing cases of spare parts at Howrah. The Ward Keeper on reaching Howrah on 11th June 1973 found that 71 cases had been loaded in five high sided open wagons for despatch to Mughalsarai. The Ward Keeper was told that the wagons would not be despatched until an escort was provided and a clear acknowledgement for the receipt of the material was given.

On 16th June 1973, one clerk and five khalasis were sent from Mughalsarai to Howrah to escort the wagons. The clerk found that all the packing cases (74 in number including 3 that were loaded subsequently) were not in sound condition, and therefore, he gave a qualified acknowledgement stating that four cases were in broken condition and that some cases were wet and their packing had been tampered with. Although the packing cases were not intact, he did not insist on open delivery of the spare parts.

Railway receipts for the consignments loaded in five wagons were not issued as they were attached to a goods train on 22nd June 1973 as stores vans. The staff deputed by Northern Railway could not accompany the wagons as these were despatched by a goods train. One of the wagons developed hot axles enroute and was sent back to Howrah sick line on 24th June 1973. This

wagon was again despatched to Mughalsarai on 5th July 1973 by a parcel train.

The four wagons which were despatched by goods train arrived at Mughalsarai on 29th June 1973, and the fifth wagon by the third week of July 1973. All the five wagons were unloaded by 25th July 1973. It was found that some of the cases were empty and some others were broken/damaged. The staff of Northern Railway at Mughalsarai made efforts to arrange for a joint inspection by the representatives of Eastern and Northern Railways but they did not succeed.

Attempts made by the Northern Railway Administration, through India Supply Mission, Washington, to secure replacement of lost/damaged spare parts also did not fructify as the firm stated in March 1974 that based on the available shipping records all materials were despatched as invoiced. A tenable claim against the carrier (Eastern Railway) within the country could not be lodged as the material despatched by rail was not covered by railway receipts. Consequently, the surveyors could not be summoned to assess and report on the losses to make a valid insurance claim.

A Joint Enquiry Committee of senior scale officers of Eastern and Northern Railways was constituted only in May 1975, that is, about two years after the unloading of the consignments at Mughalsarai. The Committee is yet (January 1976) to submit its findings.

The value of imported spare parts received short/in damaged condition has been assessed at Rs. 89,242 excluding freight, insurance and customs duty.

The Railway Board stated (February 1976) that steps were being taken to eliminate the procedural shortcomings which made this shortage possible.



#### 24. South Eastern Railway—Import of lathe machines from West Germany

The Railway Administration placed an order in December 1966 on a firm in Calcutta, for supply of two numbers heavy duty wheel lathe machines which had to be imported from West Germany. The cost of these machines was DM 11,75,626 (or Rs. 22.35 lakhs) f.o.b., Hamburg. These machines were required for the Wagon Repair Shop, Raipur. The shipment of the machines was arranged by the Shipping Co-ordination Committee and on arrival at Calcutta Port the consignment was cleared on 17th June 1967 by the Controller of Stores, South Eastern Railway.

A foreman was deputed by the District Mechanical Engineer, Raipur Workshop, to inspect the consignment on arrival at the jetty. Out of 12 packages unloaded from the ship, damages and shortages of materials valued Rs. 44,574 (including customs duty) were reported by the Foreman. The Controller of Stores, South Eastern Railway, preferred a claim on the steamer agent and the insurance company, but only Rs. 32,660 could be realised. The balance amount of Rs. 11,914 represents the proportionate customs duty for the refund of which an appeal is still (September 1975) to be made to the Collector of Customs, Calcutta.

The packages were reconditioned and booked by rail to Raipur. On arrival, further losses of materials valued Rs. 64,700 were noticed in two packages. A claim was preferred against the Commercial department of the same Railway in December 1967, but these were repudiated by that department in 1969 on the ground that the packages were landed from the ship in broken condition and that the unloading at the destination station had not been supervised by staff of the Commercial department and no deficiency messages were issued. Four years after the repudiation of the claim, the Chief Engineer (Construction),

Bilaspur, constituted a Departmental Enquiry Committee in March 1973 with a view to pin-pointing responsibility for the loss. The Departmental Enquiry Committee submitted its report in October 1975 and it is under consideration of the Railway Administration (January 1976).

The machines were later commissioned in December 1967 and July 1968 after importing spare parts costing Rs. 87,164 (inclusive of freight, insurance and customs duties—foreign exchange content DM 28,708).

## CHAPTER VI

### WORKS

#### 25. Northern Railway—Provision of platforms, washing lines and coaching lines for 18 bogie trains

The construction of broad gauge rail link between Kathua and Jammu was taken up in 1969. The work relating to the provision of coaching and washing lines and platforms, which were capable of handling 15 bogie trains, at Jammu station started in October 1969. The link was completed and opened to passenger traffic on 2nd December 1972.

In June 1971 the Railway Board issued a directive that the Railway should plan for platforms for accommodating 18 bogie trains at the terminals and intermediate stations where electrified or dieselised trains were scheduled to stop. It was also desired that stabling and washing lines at terminals should have capacity to accommodate 18 bogie rakes. It appears that as early as 1968 the dieselisation of this section was under contemplation.

In pursuance of this directive the Senior Civil Engineer, Jammu, in July 1971, proposed amendment of the plans for these items of work which were then under execution. In August 1971 he sought sanction to the revised plan from the Chief Engineer (Construction) for the facilities for handling 18 bogie trains and asked for instructions whether the additional quantity of work could be executed through the agency of existing contractors or separate contractors were to be fixed in each case. However, the Chief Engineer (Construction), for reasons not on record, advised in October 1971 that no additions and alterations to the



coaching and washing lines for accommodating 18 bogie rakes need be made and that the length of the platforms need also not be extended ; only provision for their extension in future be kept.

In August 1972, in response to the General Manager's enquiry for the reasons for not providing facilities for stabling and washing etc., of 18 bogie rakes, the Chief Engineer (Construction) stated, "Heavy alterations were needed including extension of road underbridge at the west end. The extension towards station building was not desirable as it is about 20 feet filling and frontage to parcel siding gets affected etc". He further stated "The total cost of extension to 3 platform faces comes to Rs. 3 lakhs. Thus a total of Rs. 10 lakhs expenditure was involved". He, therefore, "did not think it proper to spend this amount chargeable to Capital, hence the scheme was dropped to be taken up when other stations on Delhi-Jammu route are tackled".

In November 1972, that is, within a little over one year of the decision of the Chief Engineer (Construction) not to provide for facilities for stabling and washing etc., the General Manager desired that the extension of platforms to 18 bogie train of both main and island platforms be taken up and as a temporary measure a rail level platform be provided before passenger train opening. Consequently, contracts for the work were awarded in March/April 1973. The execution of work necessitated dismantling of certain works already done (Rs. 15,264 including works valued at Rs. 2,334 which would have been dismantled if the work were undertaken in October 1971 itself) and payment to contractors at higher rates (Rs. 81,825). The total extra expenditure has been assessed at Rs. 97,089.

The Railway Administration stated (December 1975) that it could not be said with certainty that the old contractors would have carried out the additional work at the same rate at which they were doing the other works, particularly when the increase

in the scope of work was considerable and when there was an all-round increase in prices. It may be mentioned that the Senior Civil Engineer, Jammu, had stated in August 1971 that it would be proper and more efficient to allot the quantities to the existing contractors.

#### **26. Northern Railway—Avoidable expenditure due to faulty execution of earthwork**

In March 1971, the Railway Administration awarded a contract for the construction of piers and abutments on open foundations including reinforced cement concrete T-beams, slabs, bearing and R.C.C. railing along with approach slab including earthwork for a road overbridge near Sarai-Rohilla station. The contract provided, *inter alia*, that earthwork in excavation of foundation or for clearance of the site in the proximity of the road overbridge up to formation level between the tracks should be done according to the plan in all classes of soil/rock and under all conditions. The quantity of earthwork to be executed as per contract agreement was 15,000 cu.m. Neither the tender papers nor the contract agreement including the plan forming part of the contract defined the word 'proximity' in terms of distance on either side of the site of the road overbridge to be constructed.

The contractor commenced the work on 17th March 1971 and executed 19,000 cu.m., of earthwork by March 1972. The Railway Administration directed the contractor in November 1971 that excavation in the earthwork should be concentrated up to 150 feet on either side of the road overbridge and this site should be cleared first up to the formation level before starting clearing the other areas; but by that time about 4,000 cu.m., of earthwork beyond the limits of 150 feet from the centre line of the road overbridge had already been executed and the same had also been measured and billed for payment.



In March 1972, the contractor submitted his ninth 'On Account Bill' for Rs. 75,026 for the earthwork done up to 250 feet on either side of the road overbridge. The Railway Administration informed the contractor in August 1972 that 'proximity' meant nearness in space to the road overbridge and could be stretched at the most to a distance of 100 to 150 feet from the centre line of the road overbridge, especially because the length of abutment and piers of road overbridge as per plan was only 80 feet. The payment of the ninth on account bill was stopped also on the ground that extra earthwork done by the contractor was beyond the scope of the contract.

Thereupon, the contractor sought arbitration and the arbitrator appointed by the Railway Administration in April 1973, gave an award of Rs. 75,026 in favour of the contractor (March 1974).

Had the word 'proximity' been defined in the tender papers or in the contract agreement or timely instructions been issued about the distance up to which the work should have been executed by the contractor, expenditure of Rs. 85,744 on the additional quantity of earthwork (4,000 cu.m.) would have been avoided.

The Railway Administration stated (November 1975) that in case definite distance had been mentioned in the tender papers or in the contract agreement, execution of extra work beyond that distance necessitated by site condition would have put the Railway Administration in difficulties.

#### **27. Western Railway—Extra expenditure in the construction of bridges**

A contract for construction of bridges between Keladevi and Bharatpur stations in Bayana-Mathura section of Western Railway was awarded to a contractor in July 1972 at 210 per cent above the Schedule of rates (corrected upto August 1969) of this Railway. During the execution of the work it came to the notice of the Railway Administration that the quantities of work in respect



of bridges on well foundations were likely to exceed the agreed quantities. In September 1973, when the contractor was asked to sign a supplementary agreement he pointed out in May 1974 that the quantities of work were likely to exceed by 500 per cent and asked for increased rates for quantities of work over and above what had been stipulated in the contract agreement. Negotiations were then held with the contractor and it was agreed in March 1975, that, for the additional quantities against items of work of 'Reinforced cement concrete' and 'Sinking well-wet' [items numbers 301(b) and (e) and 2005(a) to (e) of the Schedule of rates], payment would be made at 410 per cent above the Schedule of rates instead of at 210 per cent above the Schedule of rates resulting in extra expenditure of Rs. 2.24 lakhs.

The Administration stated (September 1975) that the revision of quantities was necessitated due to the fact that the contract was awarded for the quantities as provided in the project estimate. No provision was made in the project estimate for the work of reinforced cement concrete for well caps for two bridges since these were stated to have been planned to be constructed in plain concrete with rails embedded in them. The change from plain concrete to reinforced cement concrete was subsequently made when the designs for the bridges were finalised in January 1973. As regards the item of work, 'Sinking well-wet,' the quantities were underestimated in the project estimate. The underestimation was due to error in calculation inasmuch as according to the Railway Administration, the quantities were arrived at on the basis of one metre diameter instead of the actual diameter of 4.88 metres. Question of fixation of responsibility for this lapse is stated to be under the consideration of the Railway Administration (December 1975).

**28. Western Railway—Non-deduction of shrinkage allowance from earthwork**

For raising of track between Billimora and Amalsad stations of Western Railway, a contract for earthwork measuring 61,000

cubic metres in diversion bank and 15,000 cubic metres in side slopes of the existing bank was awarded to a contractor in January 1971. One of the conditions of the contract agreement stipulated that for earthwork in diversion bank, shrinkage allowance or subsidence allowance at the rate of 25 per cent would be deducted from the gross cubic contents of the finished bank irrespective of the mode or method of transport or machinery used for the earthwork. The contractor executed approximately 32,600 cubic metres of earthwork (net, that is, after deducting 25 per cent shrinkage from the gross quantity) in the diversion bank and no earthwork was done on the side slopes before the contract was rescinded in October 1971, at the risk and cost of the contractor.

The balance work (except earthwork measuring 1,600 cubic metres, which was executed departmentally) was entrusted to another contractor in December 1971 subject to the same special specifications and conditions as were laid down in the rescinded contract. However, an item—"consolidation of earthwork by means of compaction at the rate of Rs. 3 per cubic metre" was also provided for earthwork in side slopes, but no such provision was made for earthwork in diversion bank.

In February 1972, the contractor represented that shrinkage allowance on earthwork done in diversion bank should not be deducted as the work was done by heavy earth-moving machinery and in that process the earth was fully compacted. This was accepted by the Chief Engineer in April 1972. However, the earthwork formation profile given to the second contractor was not available (January 1976) for comparison with the formation profile given to the first contractor to determine whether the factor of subsidence and compaction had been taken note of in the profile.

In the case of the diversion bank, no mechanical compaction was required to be done and non-recovery of shrinkage allowance of Rs. 58,592 was contrary to the terms of the contract.

The Railway Administration stated (January 1976) that the contractor had imposed a condition (and this also formed part of the contract) that compaction would be done to the required standard with sheep foot rollers or otherwise and no shrinkage deduction would be made. It may be added that the contractor had agreed that the left over work of diversion bank would be executed on the terms and conditions of the rescinded contract which provided for deduction of shrinkage allowance and the stipulation made by the contractor regarding compaction was not attracted nor did the specification require it to be done.



## CHAPTER VII

### EARNINGS

#### 29. South Eastern Railway—Incorrect levy of freight on consignments of slag mixed with iron or steel scrap

Open hearth slag mixed with iron/steel scrap lying at the area commonly known as “muck dump” of the Bhilai Steel Plant was being offered by two firms to the Railway for despatch from Durg station to foundries in and around Calcutta for reclaiming the metal. Till 14th February 1972, the Railway Administration had been charging freight on these consignments at the class rate applicable to iron and steel scrap based on the declaration given by the consignors in the forwarding notes.

From 15th February 1972 a lower classification was introduced for iron or steel slag described as a waste refuse of steel plant containing practically very negligible percentage of iron (ferrous content less than 2 per cent) and used only for road making. With the introduction of this classification, these firms started declaring the commodity, *i.e.*, slag mixed with iron or steel scrap metal as iron and steel slag in the forwarding notes ; the Railway Administration charged freight at the lower classification in spite of the fact that a chemical analysis of the commodity carried out at the National Test House, Alipore, in August 1971, disclosed that the commodity being booked by these firms contained metallic iron to the extent of 53.20 per cent and ferric oxide 15.44 per cent, thereby leading to the conclusion that the commodity could not be properly classified as iron or steel slag for the purpose of charging freight. The same commodity despatched from two other stations, namely, Rourkela and Tatanagar was, however, continued to be charged at the rates applicable to iron and steel

scrap. However, as per direction of the Travelling Inspector of Accounts, Durg station also started charging freight for the commodity at the rates applicable to iron and steel scrap from 4th June 1973. A scrutiny of the records for the period October 1972 to March 1973 disclosed undercharges of Rs. 85,000. The total undercharges for the period 15th February 1972 to 3rd June 1973 are still (January 1976) to be assessed and recovered from the parties concerned.

In May 1974, the Railway Administration suggested to the Railway Board that the classification of iron or steel slag should be raised to the level of rate applicable to iron and steel scrap. In December 1975, the Railway Board explained that the classification of iron or steel slag would depend upon its metal content and the sale value. The final decision of the Railway Board is awaited (January 1976).

A scrutiny of the records of sale of this material in 1971 by the Bhilai Steel Plant disclosed that the material was auctioned under the following description :—

- (i) Open hearth slag mixed with steel/iron scrap.
- (ii) Used steel scrap.
- (iii) Blast furnace slag mixed with 0 to 3 per cent iron content.

It would appear that the commodity booked was largely iron and steel scrap and not slag and that the declaration of the commodity had not been given correctly by the firms, who thereby rendered themselves liable to penalty for mis-declaration of goods.

### 30. Northern Railway—Charges for improper description of goods

According to Goods Tariff, if goods on arrival at destination are found to have been improperly described and a lower rate than that correctly applicable has thereby been obtained on them, charges at double the highest rate will be levied and collected



from the consignees. However, according to the guidelines of the Freight Forwarder Scheme circulated by the Railway Board in June 1971 the freight forwarder is not required to give description of the individual packages or their contents in the forwarding note; but he has to attach thereto a list of packages constituting each wagon load consignment indicating, amongst other things, particulars of the commodities contained in the packages. These guidelines also envisage that packages containing any contraband, offensive or dangerous goods notified in Red Tariff cannot be booked under this scheme. If such consignments are found loaded in a wagon by a freight forwarder, freight charges at 'smalls' class rates applicable to such commodities will be recoverable in addition to the lumpsum rates (the freight forwarder rate) payable by the freight forwarder. The recovery of these undercharges will be in addition to other action which may be taken and penalty imposed for offering for carriage by rail such goods in violation of the rules prescribed in this respect from time to time. The normal demurrage and wharfage rules are also applicable to consignments booked under the scheme.

Dinitro-chloro Benzene has been described as a dangerous poisonous (toxic) substance in the Red Tariff. Drums of Dinitro-chloro Benzene numbering 770 were booked in March 1973 by a freight forwarder in 11 wagons from Carnac Bridge to Ghaziabad describing the contents as Benzene and declaring it as non-dangerous and non-explosive. The consignment, on unloading at Ghaziabad, was found to be a 'dangerous' article and a penalty of Rs. 59,312 was recovered by the Station Master, Ghaziabad, at the 'smalls' class rate applicable to this commodity. In addition, demurrage and wharfage charges of Rs. 24,302 were realised.

The party represented its case to the Railway Board in March 1973. The Railway Board, after consulting the Northern and Western Railways, decided in November 1973 to refund Rs. 27,989 to the party on the consideration that (i) the Freight Forwarder Scheme was facing very severe competition from road



transport operators and in case it was decided to recover full penal charges, the possibility of the freight forwarder ceasing to function as such and undercutting the Railways' freight forwarder rate as a retaliatory measure could not be ruled out and (ii) the particular freight forwarder seemed to be resourceful having loaded as many as 504 wagons during the quarter ending December 1972. It may be mentioned that under the Freight Forwarder Scheme the freight forwarder firm realises freight from consignors/consignees generally at 'smalls' rate but pays to the Railways at lump sum rates (freight forwarder rate) notified by the Railway.

**31. Southern Railway—Minimum weight condition for bamboo cuts used for rayon grade pulp**

Under the Railway Tariff, minimum weights have been prescribed in respect of different commodities at which wagon load rates are applicable. The minimum weight for bamboo cuts is 110 quintals for a broad gauge wagon (4-wheeler).

There used to be a regular traffic in bamboo cuts from Ullal and Mangalore stations of Southern Railway to Calicut, Elathur and West Hill stations, intended for a firm manufacturing rayon grade pulp. On a representation from the firm, the Railway Administration reduced the minimum weight for bamboo cuts from 110 quintals to 70 quintals with effect from 16th July 1966. In actual practice, it was, however, found that over 50 per cent of the wagons had been loaded in excess of the reduced minimum weight. Taking into account this fact and with a view to cover the cost of haulage, the Railway Administration raised the minimum weight to 100 quintals per broad gauge wagon with effect from 16th January 1968. This was reduced to 90 quintals with effect from 5th March 1968 at the instance of the firm. The concessional minimum weight continued until 10th March 1975, when it was finally withdrawn. There had been no movement of this commodity for more than one year.

It has been laid down in the rules that a reduction in the minimum weight of any commodity prescribed in the Goods Tariff may be made by an individual Railway Administration with reference to the floor area of the wagons. This aspect was, however, not taken note of by the Administration either at the time of granting the concession initially or during its subsequent modification/extension. In a review undertaken by the Railway Administration in November 1967 when the minimum weight for charge was 70 quintals, it was found that during the six months period ending August 1967, out of 600 wagons 39 were loaded with bamboo cuts weighing 110 quintals and over and 284 wagons were loaded with 90 quintals and over each. The weight particulars of some wagons loaded with bamboo cuts collected by the Travelling Inspector of Accounts during February 1968 indicated that the loadability was ranging between 101 quintals to 112 quintals per broad gauge wagon. In view of the fact that a demand for the reduction of the prescribed minimum weight had not been made by any other party, the grant of the concessional minimum weight for this traffic was actually operating to the benefit of the particular party alone resulting in the Administration forgoing freight to the tune of Rs. 1.66 lakhs (approx.) from 1968 to 1973 for 6,622 wagons carrying this traffic.

### **32. Northern and Southern Railways—Incorrect levy of freight charges on wagon load consignments**

Rule 164 of the Goods Tariff enjoins that in cases where goods tendered for conveyance are of such description that owing to their bulk or measurement it is found impossible to load a broad gauge/metre gauge/narrow gauge wagon beyond 60/40/35 quintals respectively, the freight charges on such goods will be charged at the 'smalls' rate as for 60/40/35 quintals provided that if the charges at the wagon load rate for the prescribed minimum weight for the wagon load are less than the charges at the 'smalls' rate, the wagon load rate will apply.



Rule 164-A of Goods Tariff, effective from 1st September 1973, further provides that, except in the type of the cases covered by Rule 164 of this tariff, if the consignor indents and is allotted a full wagon but loads less than the prescribed minimum weight under which wagon load rate applies, freight will be charged at the wagon load rate on the minimum weight prescribed for that commodity. The Railway Board clarified in December 1973 that this rule would apply only when a wagon is indented by the consignor and would not apply in cases covered by Rule 164; the benefit of differential rule regarding weight would also not be allowed when charges are levied under this rule (164-A).

A test check of the records relating to the consignments of boiler components, mild steel fabricated materials etc., booked from the High Pressure Boiler Plant siding, Golden Rock, Korukkupet, Bangalore Cantonment and Avadi stations of Southern Railway during January to April 1974, to stations on the Central, Eastern, Northern, South-Central, South-Eastern and Western Railways and from Madras Harbour and Avadi stations to local stations of Southern Railway disclosed that in cases where the consignors had actually indented for broad gauge wagons and utilised them when supplied, these consignments had been treated as 'bulky' and freight charges levied as per Rule 164 even though the weight of the consignments actually loaded in each of the broad gauge wagon exceeded 60 quintals and thus Rule 164 was not attracted. Similar cases had been noticed in respect of such traffic terminated at Cuddapah and Bangalore Cantonment stations. The incorrect application of the rules resulted in undercharges of freight of Rs. 1,14,801 on these consignments, out of which Rs. 1,03,574 are still (November 1975) to be realised. The Southern Railway Administration stated (December 1975) that action to review and recover undercharges relating to such traffic was being taken.



A test check of the records of Nangal Dam and Bhatinda stations of Northern Railway revealed similar irregularity in the case of 64 consignments out of 256 consignments of boiler components and mild steel fabricated material, booked to these stations by the High Pressure Boiler Plant siding, Golden Rock and Korukkupet stations during July 1974 to April 1975, resulting in undercharges of Rs. 60,873.

The Northern Railway Administration stated (November 1975) that error sheets had been issued to the stations for the recovery of undercharges of freight of Rs. 59,191 in respect of 63 consignments and that one case involving Rs. 1,682 is still under review.

### 33. Northern Railway—Non-observance of routing and rating instructions

(i) The Railway Board issued instructions on 26th October 1974 that under the rationalised scheme the chargeable distance would be computed by the routes mentioned below and the freight charged accordingly :—

- (i) (a) all goods traffic from Tughlakabad side to Ludhiana station and beyond and *vice versa* should be routed *via* Shakurbasti—Jakhal and Dhuri; and
- (b) all goods traffic booked from Delhi area for Ludhiana and beyond should be routed *via* Tughlakabad—Shakurbasti (*via* Delhi avoiding lines), Jakhal, Dhuri and *vice versa*;
- (ii) all goods traffic from Varanasi Junction side to Lucknow and beyond should be routed *via* Janghai—Partapgarh—Rae-Bareli (traffic in the reverse direction should be carried *via* shortest route); and

- (iii) all goods traffic from Shahjahanpur side to Moradabad and beyond should be routed *via* Chanehti-Chandausi (traffic in the reverse direction should be carried *via* shortest route).

These orders were to come into force from 15th November 1974.

A limited review by Audit of the inward and outward traffic at Moga, Ludhiana, Jullundur Cantonment and Jammu Tawi stations covering the period November 1974 to February 1975 disclosed that these instructions had not been implemented due to non-receipt of the notification by the station staff, resulting in short realisation of freight charges to the extent of Rs. 64,807. As a result of further review of traffic received at some other stations by the Accounts office during the period from 15th November 1974 to 14th May 1975, undercharges of Rs. 2,55,945 had been noticed.

The Railway Administration stated (December 1975) that debits for the undercharges were being raised and that the result of review by other Zonal Railways was awaited.

(ii) Rules in the Indian Railways Conference Association's Goods Tariff provide that in the absence of specific instructions in writing from the sender to the contrary, goods will be despatched by the shortest route at charges by the cheapest route, that is, the route by which freight charges are the lowest. For purposes of determining the shortest route in cases where transshipment at break-of-gauge is involved, each break-of-gauge is to be reckoned as equivalent to 160 kms. In the event of the shortest route when not the cheapest, being partially or wholly closed for traffic, the goods may be despatched by the next shortest route at charges by the cheapest route.

There are two routes for carriage of traffic from stations on Kotkapura-Bhatinda section of broad gauge main line between

Ferozpur Cantonment and Delhi to stations in Bombay area— (A) all broad gauge route *via* New Delhi, Mathura and Dadar; and (B) broad gauge-*cum*-metre gauge-*cum*-broad gauge route *via* Bhatinda or Hissar, Marwar and Sabarmati stations involving transshipments at Bhatinda or Hissar (from broad gauge to metre gauge) and at Sabarmati (from metre gauge to broad gauge). Route (A) is shorter as the notified distance of route (B) is inflated by 320 kms on account of two transshipments involved on it for purposes of ascertaining the 'shortest route'. However, route (B) is cheaper as for charging freight, the distance for charge *via* the broad gauge-*cum*-metre gauge-*cum*-broad gauge route is not inflated on account of transshipments.

The Northern Railway's Goods Tariff provides that stations on Bhatinda-Kotkapura section are closed for all descriptions of goods traffic involving transshipment at Bhatinda and Hissar. Consequently, only route (A) has been available for routing and rating of traffic between these places.

A test check of the records of stations on Kotkapura-Bhatinda section disclosed that freight on traffic booked on different dates between January 1972 and March 1975 from these stations and carried by route (A) had been incorrectly charged as for route (B), resulting in undercharges of freight of Rs. 1,94,462.

The Railway Administration stated (November 1975) that debits for the undercharges had been raised. The amount is, however, still (January 1976) to be realised.

#### **34. Western Railway—Undercharges of freight on consignments of Arjun bark**

Arjun bark is used in the manufacture of Oxalic acid and country drugs. Therefore, for the purpose of freight by rail it is classified as 'Drugs—crude or raw' and with effect from



1st April 1970 is chargeable at class rate 85 in 'wagon loads' and at 105 in 'smalls'. The freight rates for bark or leaves used for tanning and classified as "Tanstuff—NOC" are lower than that for Arjun bark; freight is at present chargeable at class rate 42.5 when booked in 'wagon loads' and at 62.5 as 'smalls'.

There is a regular traffic of Arjun bark to chemical industries at Petlad and Vallabhvidya Nagar stations of Western Railway from various stations of this Railway and other Zonal Railways. Several consignments described variously in the railway receipts as tanning bark, tanstuff, loose tanstuff, bark tanstuff etc., had been received at these stations during May 1968 to February 1974 and charged at class rates applicable to "Tanstuff-NOC". Such traffic had also been received at Bhalej and Anand stations of this Railway up to May 1973 and August 1973 respectively and charged at the lower class rates. In September 1972 Petlad station detected this undercharge. In January 1973, Audit pointed out certain cases of undercharges of freight on these consignments booked to Vallabhvidya Nagar.

Investigation undertaken during November 1973 at the instance of Audit disclosed that these consignments were actually of Arjun bark used in the manufacture of Oxalic acid and were, therefore, chargeable at the higher class rate as for 'Drugs—crude or raw'.

A test check of the records relating to the above period by Audit showed that (a) undercharges of freight for traffic received at Vallabhvidya Nagar station on certain days in February, April and May 1973 and that for the period from 27th December 1972 to 23rd February 1973 at Petlad station had been recovered and (b) realisation of freight at correct rate started to be made by these stations from January 1974 and March 1974 respectively. Total undercharges for different periods during May 1968 to February 1974 have been assessed at Rs. 3,56,149 out of which Rs. 2,63,709 were detected by the Railway Administration.

Debits for the entire amount of Rs. 3,56,149 have been raised; but only Rs. 167 have so far (January 1976) been recovered.

The Railway Administration stated (December 1975) that vigorous efforts were being made to recover the undercharges of freight.

### 35. Northern Railway—Railway dues against Power Houses and Oil Companies

(i) The rules provide that, if wagons are placed in a Railway siding for unloading without effecting the book delivery and collecting the freight and other charges due, it should be ensured that there is no delay in effecting book delivery and collecting the charges due. However, the Power House authorities of the Delhi Electric Supply Undertaking had not been surrendering railway receipts immediately after the wagons had been placed for unloading in their sidings before book delivery. In some cases railway receipts had been surrendered by them after the lapse of six months or so. Consequently, billing of freight and other charges was delayed and had to be done on the basis of invoices instead of the railway receipts.

At the end of July 1975, a sum of Rs. 8.81 crores was outstanding against the Undertaking on account of freight and other charges on coal wagons booked and delivered to its Power Houses. Out of this amount, Rs. 5.96 crores pertained to the year 1974-75 and Rs. 0.14 crore (approximately) to the earlier years.

In addition, Rs. 1.89 crores was outstanding (December 1975) against the Undertaking on account of cost of coal and railway freight of 3329 coal wagons diverted to its Power Houses.

In January 1975, the General Manager, Delhi Electric Supply Undertaking, stated that because of difficult financial position the Undertaking could not liquidate its liabilities.



Likewise, at the end of July 1975, a sum of Rs. 4.09 crores was outstanding against the Uttar Pradesh State Electricity Board on account of freight and other charges on coal wagons booked and delivered to its Power Houses. Out of this, a sum of Rs. 1.97 crores is stated to have been paid during August 1975.

In January 1976 the Railway Administration stated that all possible steps were being taken to recover the dues.

(ii) In respect of tank wagons of P.O.L. traffic placed in the sidings of oil companies for unloading without book delivery, these companies had not been surrendering the railway receipts immediately after delivery and there have been heavy accumulations of freight charges against them at the end of each month. The review of the position at Shakurbasti station disclosed that the average monthly outstanding dues against the oil companies during the years 1973-74 and 1974-75 were Rs. 14.56 lakhs and Rs. 16.19 lakhs respectively. At the end of March 1975, the total outstanding stood at Rs. 33.40 lakhs of which Rs. 21.19 lakhs pertained to traffic 'on hand', that is, traffic actually received and unloaded by the oil companies. During May 1975 the total outstanding in respect of consignments 'on hand' stood at Rs. 36.97 lakhs and at the end of July 1975 it stood at Rs. 15.46 lakhs.

According to the agreements with the oil companies interest at the rate of 10 per cent per annum is leviable on all freight amounts which have fallen due for recovery. No interest had been levied on the overdues of freight and other charges recoverable.

During the years 1973-74 and 1974-75, out of total demurrage charges of Rs. 33.83 lakhs due from the Indian Oil Corporation, Rs. 24.81 lakhs were written off.



The Railway Administration stated (August 1975) that the delay in collection of freight charges is inevitable due to the system of periodical billing for freight, which is done after the railway receipts are surrendered by the companies, and that the waiver of demurrage was sanctioned by the competent authority on merits of each case and also on grounds of (i) defective tank wagons, (ii) wrong placements and (iii) failure of electricity. It may be mentioned that the Railway Administration decided to recover demurrage charges to the extent of only 25 per cent of the total charges accrued, on an *ad hoc* basis, without examining individual cases on merits.

It may also be added that, for the P.O.L. supplied by the oil companies including Indian Oil Corporation, the Railways are required to make 100 per cent advance payment.

### **36. Eastern, Northern, North Eastern, Northeast Frontier, Southern and Western Railways—Undercharges of freight**

(i) The particular liquid/oil a tank wagon is intended to carry, its loadability by volume and the weight of the particular liquid for the loadable volume, are all marked on each wagon. Liquid carried in a tank wagon is to be charged on the appropriate marked carrying capacity (in weight) of a tank wagon.

The Eastern Railway Administration notified revised carrying capacity of the Oil tank wagons owned by it in its Special Through Rate Circular of 19th March 1973. The revised carrying capacity became effective from the same date. The Northern Railway Administration received the notification in the first week of August 1973 and as the same was not legible, it requested the Eastern Railway Administration on 14th August 1973 to send legible copies. It supplied printed copies of the Special Through Rate Circular which were received by the Northern Railway on 22nd September 1973. Thereupon, the Northern Railway Administration notified the revised carrying capacity to its stations on 1st October 1973.

A test check of the records of inward P.O.L. traffic at Shakurbasti, Bhagtanwala, Ambala Cant., and Lucknow stations disclosed that freight charges on such traffic booked on different dates between 19th March 1973 and 8th November 1974 and loaded in Eastern Railway tank wagons had not been levied on the enhanced carrying capacity of these wagons resulting in undercharges of freight of Rs. 89,514.

As a result of test check of the records of certain stations on the Eastern, Northeast Frontier and Southern Railways it was noticed that freight had also not been charged by these stations on the revised carrying capacity effective from 19th March 1973. The undercharges in respect of these stations have been estimated to be Rs. 5.95 lakhs.

The actual amount of undercharges is still (November 1975) to be assessed and realised. A review of the freight charged at other stations of the zonal Railways is still to be made.

(ii) The freight rate of glass sheets (plate or sheet) below 4.8 mm silvered or unsilvered, booked in wagon loads, was increased due to revision of the Goods Tariff classification from 65 to 95 with effect from 15th December 1973. Consignments booked between 15th December 1973 and September 1974 from certain stations of Eastern and Western Railways continued to be charged at lower rate resulting in undercharges of freight amounting to Rs. 3,53,897, out of which Rs. 2,93,492 are still (October 1975) to be realised. The position relating to other stations of these Railways as well as of South Eastern Railway from which this consignment is booked is still (November 1975) to be reviewed.

#### *Northern Railway*

(i) Muriate of potash (potassium chloride) to be used as manure and classified as chemical manure, is charged lower rates of freight than those applicable to it when booked for other purposes. For availing of the benefit of lower freight rates the



sender must declare on the forwarding note that the consignment of muriate of potash is intended for use as manure indicating the licence number of the consignee and produce a certificate from the District Agriculture Officer or the Director of Agriculture or the Deputy Director (Manures) of the State in which the destination station is situated, to the effect that it is intended for use as manure.

In paragraph 24 of the Report of the Comptroller and Auditor General of India for the year 1972-73—Union Government (Railways) it was mentioned that freight on consignments of muriate of potash had been charged at the lower rates at Bandra station of Western Railway even though the prescribed conditions had not been fulfilled.

A test check of the records of Juhi (Kanpur) station of the Northern Railway for the period from September 1970 to September 1971 disclosed similar irregularity in respect of consignments of muriate of potash booked from different stations on the Central, Eastern, South Eastern and Western Railways resulting in undercharges of freight of Rs. 1.48 lakhs out of which Rs. 55 thousand are still (December 1975) to be recovered. As a result of further check by Eastern Railway, undercharges of freight of about Rs. 2.44 lakhs were detected in respect of traffic booked from K.P. Docks stations during 1971.

(ii) A test check of the records of Panki station for the month of March 1971 disclosed that freight on high speed diesel oil booked in tank wagons had been charged on a uniform weight of 200 quintals per wagon instead of on the actual weight arrived at by converting litres into quintals on the basis of the prescribed conversion ratio (1215 litres : 1 tonne up to 31st March 1971 and 1198 litres : 1 tonne thereafter). This irregularity resulted in undercharges of freight of Rs. 18,900. A detailed review undertaken by the Railway Administration at the instance of Audit



disclosed undercharges of freight of Rs. 2.24 lakhs for the period from 1968 to 1971 which are still (December 1975) to be recovered.

#### *North Eastern Railway*

From 15th March 1973, the minimum weight condition for sawn timber booked in wagon loads from stations on the North Eastern Railway was enhanced to carrying capacity of a wagon. In accordance with the notification issued by the North Eastern Railway in 1972, freight charges on commodities chargeable on the carrying capacity of a wagon should be computed on the marked carrying capacity of a wagon increased by one tonne if that is a four or six-wheeled metre gauge wagon and two tonnes if that is an eight-wheeled metre gauge wagon.

A test check of invoices of 30 timber booking stations of the North Eastern Railway for the period April 1973 to October 1973 disclosed that these stations did not correctly compute the carrying capacity as per instructions while calculating freight charges and this resulted in undercharges of Rs. 2,56,382. Out of this amount, undercharges of Rs. 1,09,695 were stated to have been realised by destination stations, Rs. 86,045 were dropped on re-checking of invoices and owing to axle load restrictions and Rs. 60,642 are still (December 1975) to be recovered.

The Railway Administration stated (October 1975) that efforts were being made to realise the outstanding amount and that action against the staff responsible had been initiated under the Discipline and Appeal Rules.

#### *Western Railway*

Prior to 1st December 1972, there was no goods tariff classification for Ammonium Nitro-phosphate and freight was being charged at class rate applicable to 'Chemical manures—Division-B'. In October 1972, it was decided by the Railway

Board that, from 1st December 1972 freight on this commodity should be levied as for 'Chemical manures—Division-A'. The freight rate of 'Chemical manures—Division-A' booked in wagon loads was increased from 1st April 1973 as a result of its up-gradation in goods tariff classification from class 50 to 52.5. A test check of the records of Oil Depot station of Bombay Port Trust Railway and Kandla Port station of Western Railway for different periods between December 1973 and August 1974 disclosed that these stations had been incorrectly charging freight at class 45 applicable to 'Chemical manures—Division-B' resulting in undercharges of Rs. 1,35,268 (including Rs. 86,411 detected in internal check also). As a result of subsequent checking of the records of Bhavnagar Concrete Jetty station for the month of November 1974, the Accounts Department of the Railway detected undercharges of Rs. 64,472. Out of total undercharges of freight of Rs. 1,99,740 an amount of Rs. 1,73,956 is still (October 1975) to be recovered. Review of the records of other stations is stated to be in progress to ascertain whether freight on such consignments had correctly been charged by these stations.

### **37. Central Railway—Delay in revision of adjustment charges for overloaded coal wagons**

Wagons loaded with coal from collieries in Pench Valley Coal fields are shunted to Junnardeo Railway siding for weighment and removal/adjustment of coal loaded by the collieries in excess of the permissible carrying capacity of a wagon. To discourage detention of the wagons at this siding, the Central Railway Administration, in January 1944, levied adjustment charges at the rate of 8 Annas (50 paise) per hour per wagon for the full time the wagons were detained for weighment/adjustment, subject to a ceiling limit of Rs. 3 per wagon. (The ceiling limit was removed in May 1950).

In March 1959, Audit suggested upward revision of the rates of adjustment charges on the grounds that (i) the then existing



rate was not commensurate with the expenditure on extra labour and power required for shunting of wagons to and back from adjustment siding to the weighbridge for re-weighment, and (ii) the colliery authority was responsible for the overloading and consequent detention to wagons requiring adjustment. Based on the then prevailing rate of demurrage charges, namely, Rs. 1.55 per wagon (4-wheeler) per hour, the rate of Rs. 1.50 per wagon (4-wheeler) as adjustment charge was also suggested by Audit. The Railway Administration stated (July 1962) that *status quo* would be maintained as efforts were being made to reduce detentions to coal wagons by providing required facilities for weighing/adjustment.

A new weighbridge was installed in December 1962; but other facilities required for weighing/adjustment of coal wagons like land for stacking excess coal removed from overloaded wagons etc., were not provided. Consequently, detentions to wagons continued.

In November 1968, the Chief Operating Superintendent of this Railway directed that the principles on which the rate of 50 paise was originally levied should be examined and the charge re-fixed based on present day cost. The Railway Administration, after nearly five years, recommended, in September 1973, to the Railway Board the adoption of the same rates as were then existing on Eastern and South Eastern Railways. These rates, effective from 1st October 1958, were on a sliding scale of Rs. 2.50 to Rs. 33 per wagon where the number of wagons needing adjustment in a month exceeded 3 per cent of the total number of wagons received from each colliery in that month. In May 1974, the Railway Board approved of the introduction of these rates on the Central Railway with effect from June 1974. On this basis, adjustment charges that would have been realisable during the years 1969 and 1970 (for which data were available) have been assessed at Rs. 20,860 against Rs. 3,614 realised by the Railway at the then existing rate. The amount that the



Railway had to forgo by way of enhancement in adjustment charges during the period April 1972 to May 1974 has been assessed by Audit at Rs. 1 lakh (approximately). Besides, the increased rate would have served as an effective deterrent to detention to wagons since the percentages of total number of overloaded coal wagons requiring adjustment to total number of wagons loaded in collieries served by Junnardeo station during 1971-72, 1972-73 and 1973-74 were 5.97, 4.88 and 4.05 respectively as against 2.89 in 1970.

The revised rates adopted on Central Railway from June 1974 were based on the rates notified in 1958 by the Railway Board for coal wagons overloaded by collieries served by Eastern and South Eastern Railways. Hence the revised rates would seem to require further revision in view of the fact that there had been an upward revision in the rates of demurrage charges from December 1972.

## CHAPTER VIII

### RAILWAY SIDINGS

#### 38: Northern Railway—Incorrect fixation of siding charges

The siding charges for three sidings served by Amritsar station were revised from 1st January 1969. The revised rates were lower than the rates existing immediately prior to this date and this was pointed out in July 1969 by the Goods Inspector, Amritsar, to the Divisional Commercial Superintendent, Northern Railway, Ferozepur. The latter advised that the revised siding charges had the approval of the General Manager (Rates) and must be levied with effect from 1st January 1969. Accordingly, the recovery of siding charges at the reduced rates was enforced and the amount collected at the old rates till July 1969 was refunded to the siding owners.

In August 1969, Audit pointed out that the revised siding charges had not been calculated as per approved formula of the Railway Board resulting in considerable reduction of the charges. Thereupon, the Railway Administration reviewed the traffic data and revised the rates in April 1972 giving them retrospective effect from 1st January 1969. Based on these rates, arrears of siding charges of Rs. 89,123 for the period from 1st January 1969 to 31st July 1972 became recoverable from the three siding owners; the amount is still (January 1976) to be realised.

On the failure of one of the three siding owners to pay the charges, the Railway stopped placement of wagons in the siding. The party obtained a temporary injunction against the Railway Administration restraining it from stopping the placement of wagons in its siding. The injunction was vacated by the Court

in August 1975 and placement of wagons in the siding was again stopped from 17th September 1975, but on an appeal being filed by the party the Court granted stay and the placement of wagons was again resumed from 1st October 1975.

A notice for payment of outstanding dues had been served in September 1975 on the second siding owner.

The third siding owner had gone into liquidation and, in September 1974, his mill had been taken over by the Central Government for a period of 5 years and the State Bank of India had got all the assets of the mill frozen. Since a moratorium had been imposed on all payments of dues outstanding against the Company for a period of one year (later extended by another one year) there is no likelihood of recovering the amount from it also so long as the moratorium remains in operation. Railway freight and other charges amounting to Rs. 12,844 are also outstanding against this siding owner.

The Railway Administration stated (August 1975) that, to avoid recurrence of such type of cases, suitable record was being maintained so that siding charges might be revised on due dates.

### **39. Central Railway—Failure to recover siding charges**

During the Second World War a military siding with a ramp for loading and unloading goods was provided at Vithalwadi station, 2½ kms away from Kalyan. The siding was taken over by the Railway Administration in July 1953. From 15th March 1955, the station was opened for outward goods traffic in wagon loads only. Subsequently, this station was opened in the year 1960 for inward wagon load traffic in selected goods consigned to firm A whose premises were contiguous to the siding.

From the year 1960 to 1962, the siding was used exclusively for loading and unloading outward and inward consignments of firm A and from the year 1963 it was utilised for the same purpose by firm B which had taken over the premises of firm A.



In May 1971, the Inspector of Station Accounts questioned the propriety of the inward booking facilities enjoyed by firm B. Eventually, after examination, the Railway Administration notified in November 1971 that Vithalwadi station was also open for inward traffic in wagon loads consigned to firm B. In December 1973, it was decided to levy siding charges at the rate of Rs. 35 per four wheeled wagon, to be effective from February 1974, for haulage of wagons from the centre of the station to the siding and back.

Since the siding had been used from 1960, exclusively for the inward and outward traffic of one party, siding charges should have been recovered from that year. The delay in fixing the siding charges resulted in loss of revenue estimated to be Rs. 78,900 for the period from 1969-70 to 1973-74 (upto January 1974) for which records were available.

It may also be added that the rate of Rs. 35 had not been fixed in accordance with the standing instructions in force on the Railway since 1964. These instructions enjoin that at least 5-6 trials should be conducted for arriving at the average shunting time, whereas the charges fixed in December 1973 were worked out on the basis of three trials only. Secondly, the charges are being recovered as in the case of the departmental sidings which do not include the element of overheads. This concession is not admissible in respect of private parties using a Railway siding. Lastly, the element of interest, depreciation and maintenance charges had also not been included in the rate of Rs. 35.

The Railway Administration stated (February 1976) that the use of the term 'siding' for the old military siding would not be correct as "it is only a dead-end siding provided with a platform for loading and unloading of goods" and "was treated as a part of station goods shed facilities for dealing with goods traffic at the station". It further stated that the question of levying interest, depreciation and maintenance charges and also of including the

element of overheads in the computation of rate of siding charges did not arise as it is neither an 'assisted' nor a 'private' siding. However, it may be mentioned that the facility for inward booking of goods traffic to this station had been made available in favour of one party only and for specified commodities.

#### **40. Northeast Frontier Railway—Interest and maintenance charges for railway sidings used by many parties**

Rules applicable to the construction of a railway siding to serve a factory, mill or other industrial premises provide that the party at whose request the siding is provided should pay interest and maintenance charges at  $8\frac{1}{2}$  per cent calculated on the portion of cost of the siding borne by the Railway. Siding charges as fixed by the Railway Administration, for every wagon, either loaded or empty, hauled over the siding are also payable by the user of the siding to cover the cost of working the siding. These charges are to be specified in the agreement required to be executed by the party.

On the Northeast Frontier Railway, there exist a few Railway sidings which were constructed during the company management days on a basis different from that stated above. In some of these cases agreements were not executed with the siding owners concerned nor were any interest and maintenance charges realised from them. Even though the cost of such sidings was borne by the siding owners or apportioned between the Railway and the siding owners, the sidings were being used by a number of parties. The owners of the sidings had raised objections when asked to pay interest and maintenance charges. The Railway Administration, thereupon, suggested to the Railway Board in May 1965 that in view of the special circumstances attending the working of such sidings, rent for the land and interest and maintenance charges should be merged in the siding charges. The Railway Board advised the Railway Administration in October 1965 and March 1967 that the matter was under consideration.



Only in March 1974 the Railway Board agreed with the original proposal of the Railway Administration made in 1965. The revised siding charges on the basis approved by the Railway Board are still (December 1975) to be fixed by the Railway Administration. Notice about Railway's intention to revise the siding charges has also not been sent to the users of the sidings so far (July 1975).

On this Railway there are two assisted sidings which had been in use by more than one party. One of them served by Rangapahar Crossing station was constructed in 1942 at an estimated cost of Rs. 1.47 lakhs. Railway Administration has been incurring an annual expenditure of Rs. 12,535 on the maintenance of this siding and also in the shape of interest on capital outlay. The total expenditure on account of interest and maintenance charges for the period of 9 years since 1965 is estimated to be Rs. 1.13 lakhs. The particulars about the other siding served by Sukna station are stated to be readily not available.

The Railway Board stated (January 1976) that the relevant records covering these sidings had been handled by more than two or three Administrative Units, which had been subjected to subsequent re-organisation; that the Railway was finding it difficult to lay hands on the relevant records to determine the exact status of the sidings and that necessary investigation was in progress.

#### **41. Northeast Frontier Railway—Interest and maintenance charges for Railway sidings**

The rules provide that before undertaking the construction of an assisted or a private siding to serve a Government or semi-Government Department, Public Sector Undertaking, factory, mill or industry the party for whose benefit the siding is to be constructed should execute an agreement with the Railway setting out the terms and conditions for the construction, maintenance



and operation of the siding. The rules also provide that the siding owner should pay annually to the Railway interest and maintenance charges at the prescribed rates.

There are 59 sidings on the Northeast Frontier Railway, out of which 40 serve private mills and factories and 19 serve Government or semi-Government Departments and Public Sector Undertakings. Twenty-four of them had been in existence prior to the formation of this Railway in 1958. However, agreements had been executed in respect of only 47 sidings of which 8 were not in the standard form prescribed by the Railway Board. For 12 sidings the agreements are still (November 1975) to be executed (two of them were constructed in 1940—45, one in 1950, two in 1963 and seven between 1966 and 1969). Rupees seventeen lakhs and fifty-six thousand (pertaining to 1959-60 and onward) were outstanding at the end of 1974-75 by way of interest and maintenance charges. This included Rs. 4.81 lakhs relating to 21 sidings (15 owned by private parties) which had been closed during 1960—73 and Rs. 6.90 lakhs due from private parties.

The Railway Administration stated (October 1975) that dues amounting to Rs. 13.14 lakhs (including Rs. 3.88 lakhs against private parties, Rs. 4.46 lakhs against Government/semi-Government organisation etc., Rs. 4.72 lakhs in respect of sidings which had been closed) were outstanding at the end of June 1975 and that the reasons for delay in the execution of agreements and accumulation of outstandings and action taken towards realisation of dues from the siding owners would be analysed in depth.

It may be added that out of Rs. 13.14 lakhs, Rs. 7.10 lakhs relate to the period 1964-65 to 1970-71 and a major portion (Rs. 4.33 lakhs) has been outstanding against the owners of sidings which had already been closed.

## CHAPTER IX

### OTHER TOPICS OF INTEREST

#### 42. North Eastern Railway—Non-utilisation of an air-conditioned tourist car

In September 1959, the North Eastern Railway Administration sent a proposal to the Railway Board for provision of an air-conditioned tourist car (metre gauge) anticipating demand from the following categories of Railway users :—

- (a) Buddhist pilgrims from abroad as well as from different parts of the country for journeys to a number of places of Buddhist interest on the North Eastern Railway;
- (b) V.I.Ps., and mountaineering expeditions travelling to and from Nepal;
- (c) upper class passengers for journeys to various hill stations; and
- (d) upper class businessmen, tourists and high officials in private and public sectors growing up in North Bihar.

The proposal was not supported by a financial appraisal showing anticipated revenue from the car *vis-a-vis* recurring expenditure on it. The approval of the Railway Board to the manufacture of an air-conditioned tourist car (metre gauge) was conveyed in December 1963. The lay out and drawing of the car was finalised by the Railway Board in March 1965 and detailed estimate for Rs. 2.54 lakhs was sanctioned by it in November, 1967. However, the manufacture of the car was started in July 1966 itself and was expected to be completed by the end of 1967. It was completed and turned out of the workshop in March 1970.

After trials conducted in August 1970, the car was made over to the Chief Train Examiner, Gorakhpur, in October 1970 for traffic use; but the car was returned to the workshop and was not put to any service till May 1973, when the Electrical department conducted a trial. The Chief Electrical Engineer, after personal inspection of the car, pointed out certain deficiencies and shortcomings to the Chief Mechanical Engineer for necessary rectification. In January 1974, the car was declared fit for use subject to the conditions that

- (i) it should invariably be booked with mail or express trains; in very special cases, where it is to be booked by other trains, Electrical department must be consulted first ;
- (ii) it should generally be booked/worked for important junction stations where battery charging/train lighting facilities exist; and
- (iii) sufficient notice in advance as regards its movements should be given to the electrical supervisors and officers concerned at originating, enroute and destination stations.

The car was finally turned out on 16th February 1974. The expenditure booked up to August 1975 was Rs. 2.25 lakhs. The completion report is still (December 1975) to be prepared.

The car was based at Lucknow Junction station and was used only on 11 occasions during the period 5th March 1974 to 18th April 1975, out of which 4 were empty runs, 5 runs were for senior Railway officials and two runs for a foreign dignitary.

Thus, the use was not really by the category of passengers for whom it was originally intended. Further, no requisition was found on record from any party for such a car from 1960 to February 1974. Although the detailed estimate of the car



was approved by the Board 8 years after the proposal was initially made to it by the Railway Administration, the need for the car did not appear to have been reviewed in the light of :

- (a) the developments in road transport, air travel and rail services providing air-conditioned coaches; and
- (b) the requisitions for such a facility from tourists especially keeping in view that the Buddhist pilgrim centres mentioned in the proposal were not located near metre gauge rail heads and in some cases were not served by mail/express trains.

The Railway Administration stated (September 1975) that there had been no demand for the use of tourist car but this had to be judged in the context that there had been 300 to 500 per cent rise in air-conditioned class fares since 1960 and this had perhaps been a deterrent to the use of the air-conditioned accommodation by Indian tourists and pilgrims. It further stated that due to various measures taken by the Government of India for promoting international tourism, a demand might be generated in future years for the use of the air-conditioned tourist car and that it would not contribute to the prestige of the country or the Indian Railways if foreign tourists were advised on demand that no air-conditioned tourist car was available.

#### 43. **Western Railway—Installation of a Goliath Crane at a Coal Dump**

In 1961, the Railway Board issued a directive that electric gantry cranes should be provided in all major locomotive sheds where coal consumption was 250 tonnes or more per day. Accordingly, the Railway Administration placed an order in March 1965 for a 7½ tonne capacity electrically operated Goliath crane for installation at the coal dump, Sabarmati. The crane was received in April 1969 and commissioned in March 1972. Its cost was Rs. 4.48 lakhs and the installation charges were estimated to be Rs. 3.84 lakhs. The financial implication worked

out in the detailed estimate sanctioned in November 1970, showed a net return of 11.85 per cent.

The total quantity of coal requiring transshipment at the shed was approximately 40 BOX wagons per day (about 2,200 tonnes). The rated capacity of the crane was 1,200 tonnes per day working round the clock under ideal conditions. However, taking into account the quantity of coal requiring transshipment from broad gauge to metre gauge wagons at Sabarmati coal dump and availability of coal in stacks it was presumed that the crane could tranship only about 800 tonnes per day. Accordingly, complete mechanisation was not expected to be achieved.

The quantity of coal handled by the crane at the shed *vis-a-vis* that by the contractor by head loads is indicated in the table below :—

Period	Quantities handled by the		
	contractor (tonnes)	crane (tonnes)	crane per day on an average (tonnes)
March 1972 to March 1973	1,87,257	68,164	172.1
April 1973 to March 1974	1,55,536	28,748	78.7
April 1974 to March 1975	97,556	58,784	161.0

If the quantities of coal handled by the crane during March 1972 to March 1975 had also been handled by the contractor, handling charges of Rs. 1.12 lakhs would have been paid to him; against this the cost of service of the crane was Rs. 2.59 lakhs resulting in an extra expenditure of Rs. 1.47 lakhs.

The trials conducted by two technical officers of the Railway in 1972, showed that a minimum height of 4 feet of coal stack was a prerequisite for the efficient operation of the crane and even then only an average of 1.62 tonnes of coal could be

grabbed in each grabload reducing its capacity to 750 tonnes per day. With this pre-condition of minimum height of 4 feet, 3,000 tonnes of coal had always to remain on the ground and labour had to be employed for lifting the same. Further, in the course of its working, a lot of coal was crushed, powdered and blown away. Again, a part of coal lifted by the crane dropped on either side of the metre gauge wagons as its jaws, when opened fully, were wider than the width of the wagons. The crane could be used for loading open wagons.

For loading 750 tonnes of coal per day, 48 open metre gauge wagons would be needed; but the availability of such wagons was to the extent of 25 to 30 per cent of the required number. Due to non-availability of such wagons, the crane remained idle for 108 days in 1973-74 and for 137 days in 1974-75.

The availability of the crane was also affected by frequent breakdowns; there were failures on 43 occasions during 1973-74 and on 91 occasions during 1974-75.

The Railway Administration stated (July 1973) that it had procured the crane for educational purposes. It may be mentioned that such a justification was not given in the detailed estimate sanctioned in November 1970 showing a net return of 11.85 per cent on the investment.

#### 44. Northern Railway—Diversion of a rake of coal to Power House, Harduaganj

In April 1968, the Railway Board issued a directive that "in really emergent cases, only when State/Private industries are faced with the prospect of closing down for want of coal, the General Manager may at his personal discretion, give permission to render assistance to such industrial units by way of sale of loco coal to them. Such assistance should, however, be provided only if it does not adversely affect the loco coal stock position on the Railways. The demands are to be carefully considered in order to prevent any misuse by the industries".



On 20th December 1973, one rake consisting of 42 BOX wagons loaded with 2,356 tonnes of coal meant for locomotives was diverted to the Power House, Harduaganj, even though there was no demand of coal by the Power House authorities, on the basis of verbal orders of the General Manager on the ground that the Power House had only 1,761 tonnes of coal just sufficient for 20 hours of generation. According to the records of the Power House, about 19,087 tonnes of coal was in stock on that day and based on the daily average consumption this was sufficient for 5 to 6 days.

The Railway Administration initially treated this transaction as sale and on 18th May 1974, asked the Power House authorities to deposit Rs. 2.28 lakhs towards the cost of coal plus freight, incidental and supervision charges. The Uttar Pradesh Electricity Board informed the Railway Administration in September 1974 that the rake of coal was diverted to the Power House without any request from them and as such any incidental and supervision charges that the Railway claimed were not admissible. It was further stated that the Electricity Board would consider paying only the legitimate cost of coal.

Thereupon, the Railway Administration reduced the claim to Rs. 2.14 lakhs (cost of coal plus freight) on the ground that the coal was despatched to the Power House without any formal demand from it and as such the transaction could not be treated as sale but one of diversion of coal.

The Power House authorities paid only Rs. 1,86,781.95 in March 1975 stating that the rebooking charges of Rs. 17,080 were included illegally by the Railway Administration in the amount of the claim as the diversion of coal was done by the Railway themselves without any formal demand from the Power House authorities. They also contended that the quality of coal despatched was not suitable to their Power House. The Power House authorities deducted not only the

rebooking charges but also adjusted the cost of 2 wagons of coal (101.3 tonnes) the claims for which were then pending with the Railway Administration. An amount of Rs. 6,037.20 is still due from them as per the revised claim.

The Railway Administration approached the Railway Board on 1st May 1975, for the first time, for waiving incidental and supervision charges and for regularising the transaction. In July 1975 the Board accorded *ex post facto* sanction to the waiver of the supervision and incidental charges (Rs. 13,600) only, as a special case.

The Railway Administration stated (July 1975) that the diversion and sale of loco coal to private parties had been done under the verbal telephonic orders, which were in the form of executive directions given by Member (Traffic), Railway Board, and were recorded by the General Manager on 9th August 1973. It further stated (December 1975) that the stock position then obtaining in the Power House as per records maintained by Railway Control was so critical (1761 tonnes, just sufficient only for 20 hours) that the diversion of a rake was warranted to maintain generation of power and continuous supply of electricity and the closure of the Power House would not only have affected train operation on electrified sections but also would have been a source of great hardship to the general public in Uttar Pradesh.

#### **45. Eastern Railway—Disposal of ferrous scrap at Belur Scrap Yard**

Ferrous scrap received in Belur Scrap Yard of Eastern Railway in a mixed condition is weighed at the time of receipt and accounted for in ledgers on the basis of actual weight. Identifiable individual items fetching higher prices are segregated but are not weighed, nor are separate numerical ledgers for such segregated items maintained. At the time of formation of lots for disposal by periodical auctions, the weight of each lot is assessed visually and is indicated in the

auction pamphlets for the information of the bidders. After auction, delivery orders for the auctioned lots are prepared with reference to the estimated weight shown in the auction pamphlets. The successful bidders deposit in advance the amount payable on that basis. The delivery is effected after actual weighment and for the quantity short delivered the bidders claim refund from the Railway Administration.

During 1971-72, six auctions were held at Belur Scrap Yard for disposal of 299 lots of ferrous scrap. For the two auctions held in April and May 1971, the successful bidders deposited Rs. 57.79 lakhs representing the sale value of 98 lots of auctioned material. The delivery commenced on 4th June 1971 and concluded on 22nd December 1971. The quantities of scrap delivered against 71 lots agreed with those shown in auction pamphlets; but in the case of remaining 27 lots (containing, amongst others, rails, steel trough sleepers and points and crossings), the quantity actually delivered was 3060.32 tonnes against 5704.82 tonnes mentioned in the auction pamphlets. Consequently, the Railway Administration refunded Rs. 22.83 lakhs to the bidders. The percentages of deficiency in delivery ranged between 33 and 76 in the case of 21 lots and between 5 and 24 in the remaining ones. In the case of other 4 auctions held in that year to dispose of 201 lots, deficiencies between the notified weight and actual weight were noticed only in 14 lots and the extent of deficiency was between less than one per cent and twelve per cent.

It may be added that in thirteen other auctions held at this yard during the period February 1969 to July 1973 the percentages of deficiencies between the quantities delivered and those shown in the auction pamphlets ranged between less than one and three.

The Railway Administration stated (December 1974) that the deficiency in delivery was partly due to withdrawal of rails



from the lots put up for auction because of a court injunction (served on the Railway in October 1969) restraining their sale to trade and subsequent issue (during June 1971 to September 1971) of one thousand tonnes of scrap rails (valued at Rs. 9 lakhs) to an Ordnance factory. It was further stated that during stock verification conducted between November 1972 and January 1973 steel trough sleepers weighing 648.59 tonnes (valued at Rs. 6.55 lakhs) had been identified and that the reasons for short delivery of materials valued at Rs. 7.28 lakhs were under investigation.

It may be pointed out that 1,000 tonnes of rails were supplied to the Ordnance factory from seven lots three of which had not been put up for auction in April and May 1971 and therefore, the quantity of rails actually withdrawn from the four lots put up for auction is still (January 1976) to be ascertained.

Although four years have elapsed, the reasons for the difference in the quantities mentioned in the auction pamphlets and the quantity actually delivered, namely, 2644.50 tonnes, have not been fully investigated. The Railway Administration appointed a Committee in December 1974 to examine the existing procedure of accountal of stores received and disposed of at this yard and to suggest measures to streamline the procedure. The Committee met for the first time in May 1975. It submitted its recommendations in August 1975 and these are under consideration of the Railway Administration (January 1976).

#### **46. Eastern Railway—Catering service in an Express Train**

Departmental catering on the Railways is expected to be so run as to yield a small profit of 3 to 4 per cent to be ploughed back into the service. Departmental catering on the Eastern Railway has, however, been running in loss since 1970-71 (except in 1971-72) and the cumulative loss to the end of 1974-75 was Rs. 16.59 lakhs. The profit and loss incurred by this Railway

on departmental catering during the last five years is given below :—

Year	Profit (+) Loss (—) (lakhs of rupees)
1970-71	— 1.41
1971-72	+ 0.19
1972-73	— 2.05
1973-74	— 4.74
1974-75	— 8.58

On the recommendation of the Zonal Railway, the Railway Board approved the introduction of a buffet car service in the Pataliputra Express train introduced between Dhanbad and Patna Junction from November 1972. The buffet car service was approved on the assumption that this service will be profitable; profit was expected to be Rs. 950 per month on a monthly sale of Rs. 18,500.

As a buffet car was not available, a dining car was provided in this Express Train and this service had been running at a loss from the inception of the train service viz., November 1972. To the end of March 1975, the quarterly receipts, expenditure, profit and loss incurred are given below :—

Period	Receipt	Expenditure*	Loss
Quarter ending	Rs.	Rs.	Rs.
December 1972	25,345.59	27,576.48	2,230.89
March 1973	21,908.46	25,312.89	3,404.43
June 1973	32,335.14	40,137.41	7,802.27
September 1973	23,919.99	36,933.78	13,013.79
December 1973	28,635.40	41,364.78	12,729.38
March 1974	34,116.99	36,537.79	2,420.80
June 1974	22,721.26	33,212.21	10,490.95
September 1974	28,546.93	35,206.54	6,659.61
December 1974	24,108.73	33,848.43	9,739.70
March 1975	26,445.34	54,559.34	28,114.00

The basis on which the Railway Administration forecast that the buffet car service in the Pataliputra Express would be profitable, is not known.

\*Figures based on proforma Accounts. These do not include annual cost of service (haulage, depreciation and interest and maintenance charges) of the dining car.

The Railway Administration, with the approval of the Railway Board, decided in September 1975 to withdraw this service from Pataliputra Express train with effect from 21st October 1975—the requirement of passengers being proposed to be met by departmental and contractor-operated static catering units *en route*.

Explaining the basis for the introduction of the catering service the Railway Administration stated (February 1976) that the train had a carrying capacity of 1200 passengers per round trip, the stoppages *en route* were inadequate to complete the service of early morning tea, breakfast, afternoon tea and dinner by the static catering units at places on its way in up and down directions and that dinner of satisfactory standard could not be served by the contractor-operated catering unit at Madhupur where the train had a short stoppage. The Administration further stated that it was, therefore, not unjustified at the time of introduction of the train to expect that a sizeable number of passengers would avail themselves of the catering service. According to the Railway Administration the expectation regarding sales did not materialise as the train service passes through an agricultural belt where people have low purchasing power, the bulk of the passengers consisted of students and persons working in the Secretariat and other offices in Patna.

**47. South Eastern Railway—Arrears in realisation of occupation/licence fees for Railway land**

On the South Eastern Railway, at the end of March 1975, arrears in recovery of occupation/licence fees for railway land licensed to private parties for commercial purposes amounted to Rs. 47.78 lakhs of which Rs. 4.38 lakhs pertained to the period prior to 1967.

According to the extant instructions, occupation/licence fees for land licensed to private parties is to be recovered in advance in addition to obtaining security deposit. In 1967, the Railway Board had laid down that occupation fees for a period of



12 months along with security deposit equal to 12 times the monthly occupation fees should be recovered in advance for licences with currency of one year or more. The licensees were liable to pay liquidated damages at the rate of one per cent per month or part thereof on the amount in default.

These instructions have not been enforced by the Railway Administration mainly on the ground that the financial resources of the shopkeepers and merchants, who are the majority of the licensees, did not permit them to pay the licence fee and the security deposit in advance and that adoption of coercive steps for recovery of arrears creates serious administrative problems.

The Railway Administration, in May 1975, approached the Railway Board to permit the Administration to recover from the licensees current dues of one month along with arrear dues of one month and that licence fees of only one month should be recovered in advance. The orders of the Railway Board are awaited (December 1975).

The Railway Administration stated (January 1976) that with the marked improvement in the law and order situation, particularly after proclamation of Emergency in June 1975, vigorous efforts were made to realise the outstanding dues, as a result of which Rs. 18.21 lakhs were realised and that the efforts would be continued for the realisation of the balance amount (Rs. 29.57 lakhs—of this, nearly Rs. 19 lakhs are outstanding due to cases pending in law courts and with the Estate Officer).

#### 48. **Eastern and Western Railways—Ex parte judgement in court cases**

##### *Eastern Railway*

A private motor truck collided with a goods train engine on 11th May 1961 at an unmanned level crossing. As a result, some occupants of the truck were killed and some others injured. The Railway was not found responsible for that accident by the Departmental Enquiry Committee.

The owner of the truck and its insurer filed a money suit, in July 1962, in the Court of Sub-Judge, Daltonganj, against the Railway Administration for recovery of Rs. 67,800 as compensation on account of loss of lives and injuries to persons and also for damages to the truck and loss of business. The Railway Administration asked its advocate to contest it.

While the case was pending in the court, the services of the advocate were terminated in June 1972. Consequently, another advocate was appointed even though he was already engaged by the plaintiff. He, however, informed the Railway Administration that he would not be able to appear on behalf of the Railway in this particular case as prior to his appointment he was holding brief for the plaintiff in the same suit. The former advocate did not return the brief and the papers on the alleged ground that the Railway had not paid up his dues. Alternative arrangement to handle the case of the Railway was not made and there was none to defend the suit which was decreed *ex parte* on 23rd November 1973 against the Railway for Rs. 67,000 and Rs. 3,565.35 towards costs.

The Railway Administration came to know of the decree only in December 1974, when the time for filing appeal had already expired. The decree holder claimed Rs. 1,21,199.35 which included interest on the decretal amount from the date of the suit. The Railway Administration ultimately paid Rs. 1,16,268.45 on 2nd May 1975 after the party agreed to forgo a part of the interest.

#### *Western Railway*

A Permanent Way Inspector who was removed from service in December 1960 for misconduct and whose appeal in this regard was also rejected by the Railway Board, filed a suit in July 1962 in the Bombay City Civil Court praying for declaration of the orders of removal null and void and payment of arrears of pay,



allowances and increments. When the case came up for hearing in September 1973, the Railway advocate who appeared on behalf of the Administration, did not lead any evidence. Before the decree was passed, the Court called for a statement of pay and allowances due to the petitioner during the period in question but this was also not submitted. Consequently, a decree was passed in favour of the petitioner, in September 1973, based on the statement of dues submitted by him. An application for the certified copy of the judgement was filed as late as May 1974, that is, four months after the expiry of the period of limitation for appeal. In September 1974, Government of Maharashtra forwarded a certified copy of the decree for compliance and Rs. 75,320.71 were paid by the Railway in satisfaction of the decree.

The Railway Administration stated (August 1975) that the advocate failed to get the information required by the Court and to argue the case; the proposal to report the matter to Bar Council of Maharashtra for taking action against him for professional misconduct in advising incorrectly that he had already applied for the certified copy of the judgement in February 1974, was under consideration.

It may be mentioned that the advocate requested the Railway Administration on 21st August 1973, to depute some officer acquainted with rules to brief him and also to direct one of the two officers under whom the petitioner was working, to contact him stating that 27th August 1973 was the date fixed for hearing; but none appears to have briefed and contacted the Railway advocate.

#### **49. Northeast Frontier Railway—Irregular payment of allowances to running staff**

Running allowance is granted to the staff of the Operating and Mechanical Departments (drivers, shunters, firemen, guards and brakemen) for performance of duty directly connected with the charge of moving trains. This allowance includes 'mileage



allowance' for running duty and 'allowance in lieu of mileage' for other than running duties (for example, journeys on transfer, joining time, attending enquiries etc.). A special compensatory allowance is also payable to such staff to meet out-of-pocket expenses at outstations when running room facilities (with cooks) are not provided or when they are detained there beyond prescribed hours after 'signing-off' duty or when the trains are detained beyond eight hours due to accidents or when they are deputed to work temporarily at stations away from headquarters. In case of staff employed on stationary duties for a period exceeding 21 days, no running allowance is payable; their pay, however, is to be fixed as per rules in the Establishment Manual.

The Railway Board revised the rates of mileage allowance from 1st December 1968 which included payment for all duties performed from the time of 'signing-on' to the time of 'signing-off' including engine or train attendance, incidental detentions, light engine kilometrage run between shed and station before and after working trains and compensation for the factors of shunting and predeparture detentions. In December 1969, the Railway Board issued instructions, in relaxation of these orders, that 'waiting duty' allowance should be paid at the rate of 10 kms per hour after 'signing-on' when the running staff were called upon to wait according to roster, or the train or the booking of staff was cancelled, or the staff was kept back for administrative convenience, or they were required to wait on President's special train.

A review of the journals of guards of Tinsukia Division of Northeast Frontier Railway conducted by Audit in 1972 disclosed that :

- (a) special compensatory allowance for the lack of running room facilities had been paid even for outstations where running rooms (with cooks) existed ;
- (b) running allowance had been paid although such staff had been working on stationary duties for more

than 21 days, which was more beneficial to them than the pay admissible after refixation under the rules; and

- (c) contrary to the orders of the Railway Board issued in December 1969, allowance for 'waiting duty' had been paid even in the cases of late start of trains.

In certain cases, the irregular practice had been continuing since 1969. For the period of thirteen months (from March to June 1972, February and March 1973, May to November 1973), the irregular payment had been assessed at Rs. 23,623.

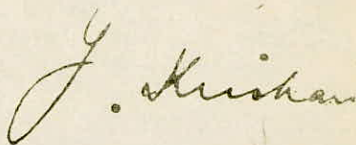
The Railway Administration stated (January 1976) that in the absence of some of the relevant records, the exact period during which the irregular payments were made, could not be ascertained and that the overpayment so far assessed was Rs. 32,610 out of which Rs. 7,070 are still to be recovered. It may be mentioned that the amount of irregular payment for the entire period from 1969 is yet to be ascertained and regularised.

On being alerted by the Accounts Department, the Vigilance Department of the Railway also reported in August 1974 that irregular payment of mileage allowance had been made to firemen, diesel assistants etc., due to incorrect calculation, exhibition of inflated mileage in the mileage register, entertainment of claims for mileage allowance though not supported by entries in the mileage register and non-adjustment in the following month of excess mileage charged in the previous month with reference to the assumed mileage for the wage period.

The Railway Administration stated (January 1976) that the Accounts Department enforced recovery of overpayment of Rs. 33,228 between July 1970 and August 1971 and in the absence of complete records an assessment of overpayment was being made based on records available in the locomotive sheds.

## 50. Recoveries at the instance of Audit

During the year 1974-75, Rs. 38.26 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. 2.09 lakhs more were noted for recovery.



(Y. KRISHAN),  
*Director of Railway Audit.*

NEW DELHI

Dated the

**26th**  
**6th**

March, 1976.

Chaitra, 1898

Countersigned.



(A. BAKSI)  
*Comptroller and Auditor General of India.*

NEW DELHI

Dated the

**26th**  
**6th**

March, 1976.

Chaitra, 1898



1872

1872

1872

28

