



ASSOCIATION
OF AMERICAN
RAILROADS

Craig F. Rockey
Vice President - Policy & Economics

September 5, 2003

The Honorable Vernon A. Williams
Secretary
Surface Transportation Board, Room 711
1925 K Street, N.W.
Washington, DC 20423-0001



STB
Office of Proceedings
STB
Public Record

Dear Mr. Williams:

This submission is the AAR forecast of the fourth quarter 2003 All-Inclusive Index and Rail Cost Adjustment Factor, filed in Ex Parte No. 290 (Sub-No. 5) (2003-4), *Quarterly Rail Cost Adjustment Factor*. The versions of RCAF-related indices covered in this filing are: the All-Inclusive Index (initiated in the second quarter 1985), the Unadjusted RCAF (produced since October 1982), the Adjusted RCAF (first published in the second quarter of 1989), and the RCAF-5 (created by the STB in its Ex Parte No. 290 (Sub-No. 7) decision served October 3, 1996). The table below summarizes the fourth quarter 2003 results on the fourth quarter 2002 base, and shows the percentage changes from the previous quarter.

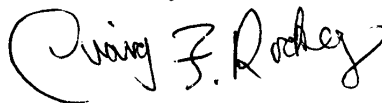
	<u>2003Q3</u>	<u>2003Q4</u>	<u>% Change</u>
All-Inclusive Index	100.6	102.0	1.4
Preliminary RCAF	1.006	1.020	1.4
Forecast Error Adjustment	0.014	-0.003	
RCAF (Unadjusted)	1.020	1.017	-0.3
Productivity Adjustment Factor	1.9649	1.9741	
RCAF (Adjusted)	0.519	0.515	-0.8
PAF-5	2.0542	2.0754	
RCAF-5	0.497	0.490	-1.4

Page 2
September 5, 2003

In its October 3, 1996 decision in Ex Parte No. 290 (Sub-No. 7), *Productivity Adjustment - Implementation*, the STB noted its intent to publish, in addition to the RCAF (Unadjusted) and RCAF (Adjusted), an RCAF-5 (i.e., a calculation of the productivity adjusted RCAF values as if the agency had always used a 5-year rolling average to calculate the productivity adjustment). In response to a request by STB staff, the AAR is including a calculation of the RCAF-5 in its quarterly RCAF filing. The AAR and its members, however, do not believe the publication of a third RCAF index is required or permitted by the applicable statute (49 U.S.C. § 10708) and do not endorse its publication.

Two copies of the quarterly non-proprietary workpapers underlying this submission are filed herewith, in accordance with the ICC's order in Ex Parte No. 290 (Sub-No. 2), *Railroad Cost Recovery Procedures*, served February 8, 1990. A third copy of the working papers has been delivered to Jeff Warren in the STB office handling this proceeding. All workpapers are available for STB inspection. Questions should be directed to me or Clyde Crimmel (202 639-2309) of this office.

Sincerely,

A handwritten signature in black ink, reading "Craig F. Rockey". The signature is written in a cursive, flowing style with a large initial "C".

Craig F. Rockey

Attachments

**Fourth Quarter 2003
All-Inclusive Index**

Ex Parte No. 290 (Sub-No. 5) (2003-4)

**Quarterly Rail Cost Adjustment Factor
Surface Transportation Board**

**Policy and Economics Department
Association of American Railroads**

September 5, 2003

Table of Contents

Subject	Page
Introduction	1
Index Weights	2
All-Inclusive Index - Fourth Quarter 2003	3
Forecast vs. Actual All Inclusive Index - Second Quarter 2003	4
Productivity	5
Rail Cost Adjustment Factor - Fourth Quarter 2003	6
Appendices	
A Labor	
B Fuel	
C Materials & Supplies	
D Equipment Rents	
E Depreciation	
F Interest	
G Other Expenses	

Introduction

On January 2, 1985, the Interstate Commerce Commission (ICC) [now the Surface Transportation Board (STB)] adopted the All-Inclusive Index of Railroad costs as the basis for the Rail Cost Adjustment Factor (RCAF). The quarterly projection of railroad costs, as documented herein, employs the All-Inclusive Index as required by the regulations. Also presented in this submission is the RCAF, both Adjusted and Unadjusted, as required by the ICC in its decision in Ex Parte No. 290 (Sub-No. 4), *Rail Cost Recovery Procedures - Productivity Adjustment*, served March 24, 1989. In addition, the AAR has included (but does not endorse) the RCAF-5, which was instituted by an STB decision served October 3, 1996 in Ex Parte No. 290 (Sub-No. 7), *Productivity Adjustment - Implementation*. This quarter's projection of railroad costs is for the fourth quarter of 2003.

Index Weights

In the Ex Parte No. 290 (Sub-No. 2) final rules, issued in April 1981, the Interstate Commerce Commission mandated that the weights of each major cost component be updated annually. These "external" weights are calculated using data from Schedules 410 and 210 of the R-1 annual report filed with the Surface Transportation Board by the Class I railroads. The weights are typically updated with the fourth quarter projection.

The previous (2001) weights were used for the fourth quarter of 2002 through the third quarter of 2003. Beginning with the fourth quarter of 2003, the 2002 weights are used. The biggest change in the weights was for Other, which increased by 1.3 percentage points. Fuel decreased by 1.5 percentage points, close to its weight based on 1996 data. The changes for the remaining components were by three tenths of a percentage point or less. The 2002 (current) and 2001 (previous) weights are shown below.

RCAF Weights		
	Previous 2001	Current 2002
Labor	37.8 %	38.0 %
Fuel	10.5	9.0
Materials & Supplies	4.6	4.6
Equipment Rents	10.5	10.3
Depreciation	10.6	10.9
Interest	3.8	3.7
Other	22.2	23.5

Reweightings of the index is accomplished by calculating both the current quarter (normally the fourth) and prior (normally the third) quarter indexes with the new weights. The relative change between the two quarters is then multiplied times the prior quarter (usually the third) *linked* index. Use of this method ensures that the weight change, by itself, does not cause a change in the level of the All-Inclusive Index.

Internal weights in the labor and equipment rents components are updated at the same time as the external weights. When these weights are changed, they are also linked using the procedure described above in order to eliminate the effect of the change in weighting.

All-Inclusive Index Fourth Quarter 2003

The components and values of the current and previous All-Inclusive Indexes are shown below. Details of the construction of each component of the index are contained in the Appendices.

	2002 Weights	Forecast		Percent Change
		Previous 2003Q3	Current 2003Q4	
1. Labor	38.0%	273.5	278.3	1.8 %
2. Fuel	9.0%	106.3	113.3	6.6
3. M&S	4.6%	152.7	154.8	1.4
4. Equipment Rents	10.3%	175.8	175.7	-0.1
5. Depreciation	10.9%	149.9	152.4	1.7
6. Interest	3.7%	98.6	98.0	-0.6
7. Other	23.5%	163.2	162.6	-0.4
8. Weighted Average				
a. 1980 = 100		197.0	199.6	
b. 1980 = 100 (linked)		193.3	195.9 ¹	
c. 4Q02 = 100		100.6	102.0 ²	1.4

Note: The 197.0 weighted average for 2003Q3 is recalculated with 2002 weights to eliminate any changes in the fourth quarter index that would be caused by changing weights. The original figure with 2001 weights is 195.9.

¹ To calculate the 1980 = 100 Linked Index:

$$\text{Index}_{80} = (\text{Current Index} / \text{Previous Index}) * \text{the Previous Quarter Linked Index}$$

$$= 199.6 \text{ divided by } 197.0 \text{ times } 193.3$$

$$= 195.9$$

² To calculate the 4Q02 = 100 index:

$$\text{Index}_{4Q02} = (\text{Current Linked Index} / 4Q02 \text{ Linking Factor}) * 100$$

$$= 195.9 \text{ divided by } 192.1 \text{ times } 100$$

$$= 102.0$$

4Q97 based index = 113.1
 4Q92 based index = 124.9
 4Q87 based index = 148.2

Forecast vs. Actual All-Inclusive Index Second Quarter 2003

As shown below, the second quarter actual index of 100.8 is 0.3 index points below the forecast value of 101.1. Thus, the forecast error adjustment in the fourth quarter 2003 is -0.3 index points.

	2001	Second Quarter 2003		Amt
	Weights	Forecast	Actual	Difference
1. Labor	37.8%	270.4	270.4	
2. Fuel	10.5%	130.4	111.0	
3. M&S	4.6%	152.6	152.6	
4. Equipment Rents ¹	10.5%	175.9	176.0	
5. Depreciation	10.6%	149.1	150.8	
6. Interest	3.8%	98.6	98.6	
7. Other	22.2%	162.1	162.3	
8. Weighted Average				
a. 1980 = 100		196.9	195.1	
b. 1980 = 100 (linked)		194.3	193.6 ²	
c. 4Q02 = 100 ³		101.1	100.8	-0.3

Forecast error → -0.3 index points

	2001	Second Quarter 2003	
	Weights	Forecast	Actual
Car-Hire	51.5%	178.7	177.9
Lease Rentals	48.5%	162.1	162.3
Weighted Average		170.6	170.3
Weighted Average (linked)		175.9	176.0

² Linked actual index = (actual index / previous actual index) x previous linked actual index.
 $193.6 = 195.1 / 194.8 \times 193.3$

³ The 4Q02 based indexes are 1980 based indexes divided by the 4Q02 linking factor (192.1/100).
 4Q97 based indexes are the 1980 based indexes divided by the 4Q97 linking factor (173.2/100).
 4Q92 based indexes are the 1980 based indexes divided by the 4Q92 linking factor (156.9/100).

Productivity

On January 31, 2003, the Surface Transportation Board (STB) served a decision in Ex Parte 290 (Sub-No. 4) which added the year 2001 to the Productivity Adjustment Factor (PAF) and deleted the year 1996. This creates an average annual productivity for 1997 through 2001 of 1.9 percent – an decrease from the 1996 through 2000 average of 4.2 percent. The components of this average annual value are shown on the following table. Productivity changes are calculated by dividing the output index by the input index. The average annual rate is calculated by multiplying each of the five productivity changes together and taking the result to the one fifth power. The quarterly productivity adjustment factors (PAF) are calculated by increasing the previous quarter's PAF by quarterly versions of the annual rate which are the fourth root of the average annual growth rate. The difference between the PAF and the PAF-5 is the timing of the 5-year productivity trend.

Comparison of Output, Input, & Productivity 1997 - 2001			
Year	Output Index (1)	Input Index (2)	Productivity Changes (3)
1997	1.008	1.019	0.989
1998	1.006	1.018	0.988
1999	1.032	1.008	1.024
2000	1.029	0.953	1.080
2001	0.971	0.955	1.017
Average			1.019
Previous Average (1996-2000)			1.042

Note: To be consist with their recent requirement that CSX Transportation (CSXT) include expenses and operating statistics for CSX Intermodal traffic carried by CSXT, the STB has recalculated all of the Input and Output Indexes used to develop the latest 5-year average. The impact of this change was insignificant.

Calculation of PAF and PAF-5			
For 1997-2001 use fourth root of avg. productivity change			1.0047
For 1996-2000 use fourth root of previous avg. change			1.0103
Quarter	Year	PAF	PAF-5
Q1	2003	1.9466	2.0126
Q2	2003	1.9557	2.0333
Q3	2003	1.9649	2.0542
Q4	2003	1.9741	2.0754
Q1	2004	1.9834	2.0852

Rail Cost Adjustment Factor

Fourth Quarter 2003

Four RCAF values are presented in this filing. Two of the indexes, the All-Inclusive Index and the Unadjusted RCAF, are not modified for productivity, while the Adjusted RCAF and the RCAF-5 incorporate a productivity calculation. The All-Inclusive Index and all four RCAF values, plus the percent change for each, are shown below.

	Previous 2003Q3	Current 2003Q4	Percent Change
All-Inclusive Index ¹	100.6	102.0	1.4
Preliminary RCAF ²	1.006	1.020	1.4
Forecast Error Adjustment ³	<u>0.014</u>	<u>-0.003</u>	
RCAF (Unadjusted) ⁴	1.020	1.017	-0.3
Productivity Adjustment Factor ⁵	1.9649	1.9741	
RCAF (Adjusted) ⁶	0.519	0.515	-0.8
PAF-5 ⁷	2.0542	2.0754	
RCAF-5 ⁸	0.497	0.490	-1.4

¹ See All-Inclusive Index on page 3.

² All-Inclusive Index divided by the All-Inclusive Index in the base period (100.0).

³ The current figure is from Forecast vs. Actual All-Inclusive Index in this filing (page 4). The previous quarter figure is shown in a similar section of the previous quarter's filing.

⁴ Preliminary RCAF plus the forecast error adjustment.

⁵ See Productivity on page 5.

⁶ RCAF (Unadjusted) divided by the Productivity Adjustment Factor (PAF).

⁷ See Productivity on page 5.

⁸ RCAF (Unadjusted) divided by the PAF-5.

Appendixes

Labor

Fourth Quarter 2003

The fourth quarter 2003 Labor Index is forecast to increase 1.8 percent, caused mostly by rebenchmarking to 2002 annual reports and wage statistics.

Rebenchmarking: Rebenchmarking, as well as updating the internal weights (i.e., the proportion of labor costs represented by wages and supplements, respectively), is reflected each year in the fourth quarter filing. The 2002 data underlying the fourth quarter rebenchmarking are obtained from the railroads' 112-Class Wage Statistics and the railroads' R-1 Annual Reports (including railroad revisions through August 14) to the Surface Transportation Board. The source for the wage and supplements internal weights, like the external weights, is the R-1 Annual Report Summary.

Grand Trunk Corporation: To comply with the STB Ex Parte No. 634 decision served on November 7, 2001, Canadian National has consolidated its 2002 R-1 annual report to include all of its operations in the United States – including some smaller railroads not previously included. CNGT is the abbreviation used here for the entity representing Canadian National's U.S. operations, Grand Trunk Corporation. Because of differing union contracts, the AAR has kept CNGT wage statistics split among six railroad groups: Chicago, Central & Pacific; Duluth, Winnipeg & Pacific; Grand Trunk Western; Illinois Central, Sault Saint-Marie Bridge Company; and Wisconsin Central.

Wage Index

National Contracts: No increases or new agreements were added to the index. According to the Web site for the Brotherhood of Railroad Signalmen, that union has reached a tentative agreement with the National Carriers' Conference Committee. The ratification process is expected to be completed in September. If this agreement is ratified and signed, it will be incorporated in the first quarter RCAF filing in December.

Independent Contracts: One new contract, for Grand Trunk Western's International Brotherhood of Electrical Workers (IBEW), was added to the fourth quarter labor index. This contract affects less than 25 employees, and had almost no impact on the wage rate, lump sum adjustment, or back pay adjustment.

Lump Sums: The lump sum adjustment decreased by 8.6 cents as four lump sum amounts were completely amortized and removed. Most of this was the United Transportation Union's (UTU) Longevity Bonus from last year's new contract. Smaller amounts were also removed for the UTU Yardmaster Longevity Bonus, a signing bonus for the UTU-Yardmasters of CSX Transportation, and a signing bonus for the Grand Trunk Western's National Conference of Fireman and Oilers (NCFO). A small amount was added for Grand Trunk Western's IBEW signing bonus.

Labor Fourth Quarter 2003

Back Pay: The back pay adjustment decreased 6.6 cents. Most of this decrease was caused by the complete amortization and removal of amounts related to last year's UTU contracts. A small back pay amount was added for the new GTW IBEW contract.

Other: This component contains the amortization of a profit sharing payment that the BNSF made to its Brotherhood of Locomotive Engineers employees from the former Atchison, Topeka and Santa Fe Railway in early 2003 for performance in 2002. This hourly adjustment was unchanged.

Supplements Index

The Supplements Index is forecast to increase by 5.5 percent from the third quarter filing. Most of this increase was caused by rebenchmarking Health & Welfare to 2002 annual report and wage statistics data.

Health & Welfare: Health & welfare premiums and cost sharing are unchanged from the prior quarter. All of the change in Health & Welfare was caused by rebenchmarking to 2002 annual report and wage statistics data.

Railroad Retirement: Lower wages (because of the lower lump sum and back pay adjustments) caused the slight decrease in the Railroad Retirement and Medicare hourly rate. Part of the wage-related decrease was offset by a small increase caused by rebenchmarking.

Unemployment Insurance: Railroad unemployment insurance costs increased by \$0.003 because of rebenchmarking to 2002 annual report and wage statistics data.

Other: The "Other" category, a reflection of a quarterly employer matching 401(k) contribution by BNSF to certain BMW and Brotherhood of Locomotive Engineers employees, increased by one tenth of one cent.

Labor Index Calculation

As shown in table A-1 on the next page, the 0.8 percent decrease in the Wage Index and the 5.5 percent increase in the Supplements Index had a combined effect of a 1.8 percent increase in the Labor Index. The linked fourth quarter 2003 index of 278.3 is determined by multiplying the third quarter linked index of 273.5 times the change between the fourth quarter labor index (291.6) and a third quarter labor index (286.6) recalculated using the original third quarter wages and supplements indexes weighted with the new 2002 weights. This method eliminates changes caused by the new weights, but captures changes caused by rebenchmarking. The purpose of the center "Updated to Reflect..." column in table A-1 is only to enable the reader to discern the impact of rebenchmarking.

Labor
Fourth Quarter 2003
Table A-1 Labor Index

	2003Q3		2003Q4	
	Used in Previous Index Filing	Updated to Reflect 2002 Actual Data	Based on 2002 Data	Pct Chg From Prev. Filing
<u>Base Wage</u> – Straight Time & Pay For Time Not Worked	\$28.127	\$28.057	\$28.057	-0.2%
Adjustments:				
Lump Sum	0.140	0.143	0.054	-61.4%
Back Pay	0.099	0.100	0.033	-66.7%
Other	0.010	0.010	0.010	0.0%
Total Wages	<u>\$28.376</u>	<u>\$28.310</u>	<u>28.154</u>	-0.8%
Health & Welfare Benefits	3.871	4.466	4.466	15.4%
RR Retirement & Medicare	6.355	6.357	6.332	-0.4%
Unemployment Insurance	0.325	0.328	0.328	0.9%
Other	0.009	0.009	0.010	11.1%
Total Supplements	<u>\$10.560</u>	<u>\$11.160</u>	<u>\$11.136</u>	5.5%
Total Labor	\$38.936	\$39.470	\$39.290	
Wage Index¹	242.8	242.3	240.9	-0.8%
Supplements Index²	390.2	412.4	411.5	5.5%
Total labor Index, 2001 Weights ³	284.1			
Total labor Index, 2002 Weights ⁴	286.6	292.8	291.6	
Labor Index (linked)⁵	273.5		278.3	1.8%

¹ 1980 wage rate \$11.685

² 1980 supplements rate \$2.706

³ 2001 weights: wages, supplements 72.0% 28.0%

⁴ 2002 weights: wages, supplements 70.3% 29.7%

⁵ 2003Q4 linked Index = $2003Q3_{\text{linked}} \times (2003Q4_{WT2002} / 2003Q3_{WT2002})$
= 273.5 x 291.6 / 286.6

Fuel

Fourth Quarter 2003

The forecast for fuel is based on: (1) a survey of railroad fuel purchasing officers concerning current price and volume levels, (2) expectations of railroad purchasing officers based on discussions with their major suppliers, and (3) a consensus of petroleum industry experts and general business publications.

Fuel prices have been creeping upward during the summer. Inventories and Iraq are the major concerns for purchasers of heating oil* and locomotive diesel fuel. The railroads' fourth quarter (October 2003) fuel prices are expected to increase 4.9 percent from the third quarter (July) actual level – a 6.6 percent increase from the third quarter forecast.

Forecast fuel index	113.3
Change from previous quarter forecast	6.6%
Change from previous quarter actual	4.9%

* Heating oil is very similar to the diesel fuel used by locomotives. Heating oil spot prices and futures prices are monitored by the U.S. Department of Energy and other energy industry groups.

Materials & Supplies

Fourth Quarter 2003

The Materials & Supplies index increased slightly for the fourth quarter 2003. Regional purchases of cross-ties contributed to a 1.4 percent increase.

2003Q4 Materials & Supplies Index = 154.8

2003Q3 Materials & Supplies Index = 152.7

Difference	2.1 basis points
	or
	1.4 %

Equipment Rents

Fourth Quarter 2003

The equipment rents index consists of two components – car hire and lease rentals. The methodology used to create these two components and the final equipment rents index are explained below.

Car Hire

The car hire component is indexed using data from the Car Hire Accounting Rate Master (CHARM) file. Car hire rates for the forecast quarter are estimated based on data for the most recent month available. For the first quarter, December 1 of the previous year is used. For the second, third and fourth quarters; March 1, June 1, and September 1 are used, respectively. Using data retrieved from the latest CHARM file, an average rate per car is developed. Next, those average rates are grouped into car type categories to create an overall summary of car hire rates. The summary rates are then compared from quarter to quarter to determine the car hire index.

Lease Rentals

The lease rental portion of the equipment rents index uses the Producer Price Index for Industrial Commodities less Fuel and Related Products and Power (PPI-LF). The Commission adopted this surrogate in its decision served March 13, 1987. The AAR uses six years of historical data to derive its forecast for the PPI-LF. The forecast is used not only for lease rentals, but also for the "Other" component of the All-Inclusive Index. Appendix G discusses the forecast in more detail.

Equipment Rent Index Calculation

The table below calculates the Equipment Rent Index. To eliminate any changes caused by the fourth quarter's new weights, the third quarter weighted average (but not the linked value) has been recalculated using the new weights. The third quarter weighted average using the old weights was 170.5. The increase in the Car Hire portion of the Index was caused by higher rates for privately-owned cars.

	2002 Weight	2003Q3	2003Q4	Percent Change
Car Hire	50.6%	177.4	177.8	0.2 %
Lease Rentals	49.4%	163.2	162.6	-0.4
Weighted Average		170.4	170.3	-0.1
Weighted Average (Linked)		175.8	175.7	-0.1

Depreciation

Fourth Quarter 2003

The Producer Price Index for Railroad Equipment (PPI-RE) is used to index depreciation expense. The PPI-RE is forecast using an ARIMA process on 6 years of monthly data (a sample size of 72) with the most recent available monthly data being the first month of the quarter prior to the forecast quarter. For a first quarter forecast, the most recent month of data available would be for October of the prior year. For a second quarter forecast, January would be the most recent monthly data available. April and July would be the most recent months available for third and fourth quarter forecasts, respectively. The output from the forecast model is shown on page 2 of this appendix for 1982=100. The value for the forecast, up by 1.7 percent from the previous quarter's forecast, reflects a PPI-RE that has been increasing throughout 2003.

Forecasted depreciation index (1982=100)	137.8
Forecasted depreciation index (1980=100)	152.4
Change from previous quarter forecast	1.7%
Change from actual first month of previous quarter	0.0%
Change from same quarter of prior year (actual)	2.4%

Depreciation

Fourth Quarter 2003

PPI RAIL EQUIPMENT

Forecast Model for PPIRE
ARIMA(0,1,0)

Within-Sample Statistics

Sample size 72	Number of parameters 0
Mean 135.2	Standard deviation 0.6805
R-square 0.659	Adjusted R-square 0.6638
Durbin-Watson 1.997	Ljung-Box(18)=11.45 P=0.1257
Forecast error 0.3946	BIC 0.3946
MAPE 0.001898	RMSE 0.3946
MAD 0.2569	

Actual Values for the Most Recent 6 Periods:

Date	Actual
2003-02	135.400
2003-03	135.500
2003-04	136.000
2003-05	136.400
2003-06	136.500
2003-07	137.800

Forecasted Values

Date	2.5 Lower	Forecast	97.5 Upper
2003-08	137.021	137.800	138.579
2003-09	136.699	137.800	138.901
2003-10	136.451	137.800	139.149
2003-11	136.242	137.800	139.358
2003-12	136.059	137.800	139.541
QTR AVG	136.251	137.800	139.349
2004-01	135.892	137.800	139.708
2004-02	135.740	137.800	139.860
2004-03	135.597	137.800	140.003

Interest

Fourth Quarter 2003

The Interstate Commerce Commission, in its decision served February 28, 1989, revised the All-Inclusive Index methodology to include a specific interest component, which is to track changes in the average interest rate from year to year. The interest rate is essentially the embedded cost of debt, i.e., total interest expense divided by average total long term debt. The interest rate is calculated for the most recent year and used until the next year's figures are available. Typically in the fourth quarter filing, the interest rate is updated to the new level. The source for interest expense is Schedule 210, column b, from the R-1 annual report. The lines used from current R-1 annual reports are listed below. The source for average total debt is Schedule 200 from the R-1 annual report. The sums of data from columns b and c (ending and beginning balances) are combined and divided by 2 to compute an average balance. The line numbers are listed below.

Interest Expense (Schedule 210)

Line	
42	Total Fixed Charges
44	Contingent Interest
less	
22	Release of Premium on Funded Debt

Average Total Debt (Schedule 200)

Line	
30	Current Loans and Notes Payable
39	Equipment Obligations and Other Long Term Debt Due Within One Year
41	Funded Debt Unmatured - Non-Current
42	Equipment Obligations - Non-Current
43	Capitalized Lease Obligations - Non-Current
44	Debt in Default - Non-Current
45	Accounts Payable: Affiliated Companies - Non-Current
46	Unamortized Debt Premium - Non-Current

2002	Interest Rate	7.69%
1980	Interest Rate	7.85%
2003Q4	Interest Index	98.0
2003Q3	Interest Index	98.6
	Percent Change	-0.6%

Other Expenses

Fourth Quarter 2003

The Producer Price Index for Industrial Commodities less Fuel and Related Products and Power (PPI-LF) is used to index purchased services, casualties and insurance, loss and damage, taxes (other than income and payroll), general and administrative expenses, and lease rentals. These expenses, when grouped together, are usually called "Other" expenses.

Like the PPI-RE, the PPI-LF is forecast using an ARIMA process on 6 years of monthly data (a sample size of 72) with the most recent available monthly data being the first month of the quarter prior to the forecast quarter. For a first quarter forecast, the most recent month of data available would be for October of the prior year. For a second quarter forecast, January would be the most recent monthly data available. April and July would be the most recent months available for third and fourth quarter forecasts respectively. The output from the forecast model is shown on page 2 of this appendix for 1982=100. The figure forecast by the model reflects monthly PPI-LF figures that have held steady for the last three months.

Forecasted Other Expense (1982=100)	145.0
Forecasted Other Expense (1980=100)	162.6
Change from previous quarter forecast	-0.4%
Change from actual first month of previous quarter	0.2%
Change from same quarter of prior year (actual)	0.9%

Other Expenses

Fourth Quarter 2003

PPI INDUSTRIAL COMMODITIES LESS FUEL AND RELATED PRODUCTS AND POWER

Forecast Model for PPILF

Multiplicative Winters: Linear trend, Multiplicative seasonality

Confidence limits proportional to indexes and level

Copmponent	Smoothing Weight	Final Value
Level	0.92481	144.78
Trend	0.26919	0.046877
Seasonal	0.99763	

Seasonal Indexes

January - March	1.00021	0.99987	1.00000
April - June	0.99987	0.99969	1.00004
July - September	1.00014	0.99980	0.99973
October - December	1.00119	0.99997	0.99950

Within-Sample Statistics

Sample size 72	Number of parameters 3
Mean 141.6	Standard deviation 2.105
R-square 0.9855	Adjusted R-square 0.9851
Durbin-Watson 1.629	Ljung-Box(18)=20.21 P=0.6791
Forecast error 0.2572	BIC 0.2753
MAPE 0.001332	RMSE 0.2518
MAD 0.1896	

Actual Values for the Most Recent 6 Periods:

Date	Actual
2003-02	144.700
2003-03	145.300
2003-04	144.900
2003-05	144.800
2003-06	144.800
2003-07	144.800

Forecasted Values

Date	2.5 Lower	Forecast	97.5 Upper
2003-08	144.251	144.798	145.344
2003-09	143.991	144.834	145.677
2003-10	144.033	145.093	146.153
2003-11	143.725	144.964	146.203
2003-12	143.546	144.941	146.337
QTR AVG	143.768	144.999	146.231