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ASSOCIATION
OF AMERICAN
RAILROADS



June 5, 2002

Craig F. Rocky
Vice President - Policy & Economics

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

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Office of the Secretary

JUN 05 2002

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Public Record

Dear Mr. Williams:

This submission is the AAR forecast of the third quarter 2002 All-Inclusive Index and Rail Cost Adjustment Factor, filed in Ex Parte No. 290 (Sub-No. 5) (2002-3), *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 third quarter 2002 results, and shows the percentage changes from the previous quarter.

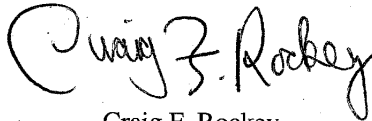
	<u>2002Q2</u>	<u>2002Q3</u>	<u>% Change</u>
All-Inclusive Index	106.4	107.2	0.8
Preliminary RCAF	1.064	1.072	0.8
Forecast Error Adjustment	-0.002	-0.010	
RCAF (Unadjusted)	1.062	1.062	0.0
Productivity Adjustment Factor	1.8878	1.9072	
RCAF (Adjusted)	0.563	0.557	-1.1
PAF-5	1.9648	1.9784	
RCAF-5	0.541	0.537	-0.7

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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 cursive script that reads "Craig F. Rockey". The signature is written in dark ink and is positioned above the printed name.

Craig F. Rockey

Attachments

**Third Quarter 2002
All-Inclusive Index**

Ex Parte No. 290 (Sub-No. 5) (2002-3)

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

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

June 5, 2002

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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 third quarter of 2002.

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 (1999) weights were used for the fourth quarter of 2000 through the third quarter of 2001. Beginning with the fourth quarter of 2001, the 2000 weights are used. The major changes in the weights were for Fuel and Labor as the railroads experienced lower labor expenses while fuel prices soared. The changes for the remaining components were by one half of a percentage point or less. The 2000 (current) and 1999 (previous) weights are shown below.

RCAF Weights		
	Previous 1999	Current 2000
Labor	39.3 %	36.5 %
Fuel	7.1	10.7
Materials & Supplies	5.3	4.8
Equipment Rents	11.4	11.1
Depreciation	10.6	10.2
Interest	4.6	4.6
Other	21.7	22.1

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 Third Quarter 2002

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.

		Forecast		
	2000 Weights	Previous 2002Q2	Current 2002Q3	Percent Change
1. Labor	36.5%	257.3	257.1	-0.1 %
2. Fuel	10.7%	82.5	94.4	14.4
3. M&S	4.8%	150.0	149.9	-0.1
4. Equipment Rents	11.1%	176.6	177.0	0.2
5. Depreciation	10.2%	149.7	149.7	0.0
6. Interest	4.6%	108.8	108.8	0.0
7. Other	22.1%	159.2	160.1	0.6
8. Weighted Average				
a. 1980 = 100		185.0	186.4	
b. 1980 = 100 (linked)		184.2	185.6 ¹	
c. 4Q97 = 100		106.4	107.2 ²	0.8

¹ To calculate the 1980 = 100 Linked Index:

$$\begin{aligned} \text{Index}_{80} &= (\text{Current Index} / \text{Previous Index}) * \text{the Previous Quarter Linked Index} \\ &= 186.4 \text{ divided by } 185.0 \text{ times } 184.2 \\ &= 185.6 \end{aligned}$$

² To calculate the 4Q97 = 100 index:

$$\begin{aligned} \text{Index}_{4Q97} &= (\text{Current Linked Index} / 4Q97 \text{ Index}) * 100 \\ &= 185.6 \text{ divided by } 173.2 \text{ times } 100 \\ &= 107.2 \end{aligned}$$

4Q92 based index = 118.3

4Q87 based index = 140.4

Forecast vs. Actual All-Inclusive Index First Quarter 2002

As shown below, the first quarter actual index of 106.6 is 1.0 index points below the forecast value of 107.6. Thus, the forecast error adjustment in the third quarter 2002 is -1.0 index points.

	2000	First Quarter 2002		Amt
	Weights	Forecast	Actual	Difference
1. Labor	36.5%	260.3	256.9	
2. Fuel	10.7%	87.4	75.9	
3. M&S	4.8%	155.5	155.5	
4. Equipment Rents ¹	11.1%	178.9	178.7	
5. Depreciation	10.2%	150.1	148.6	
6. Interest	4.6%	108.8	108.8	
7. Other	22.1%	159.2	159.5	
8. Weighted Average				
a. 1980 = 100		187.2	184.6	
b. 1980 = 100 (linked)		186.4	184.7 ²	
c. 4Q97 = 100 ³		107.6	106.6	-1.0

Forecast error —————> -1.0 index points

¹	2000	First Quarter 2002	
	Weights	Forecast	Actual
Car-Hire	52.8%	186.8	185.7
Lease Rentals	47.2%	159.2	159.5
Weighted Average		173.8	173.3
Weighted Average (linked)		178.9	178.7

² Linked actual index = (actual index / previous actual index) x previous linked actual index.
 $184.7 = 184.6 / 185.6 \times 185.7$

Note: the previous actual index has been recalculated using 2000 weights.

³ The 4Q97 based indexes are 1980 based indexes divided by the 4Q97 index (173.2/100).
 4Q92 based indexes are the 1980 based indexes divided by the 4Q92 index (156.9/100).
 2002Q1 actual index based on 4Q92: —————> 117.7

Productivity

On February 1, 2002, the STB served a decision in Ex Parte 290 (Sub-No. 4) which added the year 2000 to the Productivity Adjustment Factor (PAF) and deleted the year 1995. This creates an average annual productivity for 1996 through 2000 of 4.2 percent – an increase from the 1995 through 1999 average of 2.8 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			
1996 - 2000			
Year	Output Index (1)	Input Index (2)	Productivity Changes (3)
1996	1.038	0.913	1.137
1997	1.007	1.019	0.988
1998	1.005	1.018	0.987
1999	1.028	1.003	1.025
2000	1.028	0.950	1.082
Average			1.042
Previous Average (1995-1999)			1.028

Calculation of PAF and PAF-5			
For 1996-2000 use fourth root of avg. productivity change			1.0103
For 1995-1999 use fourth root of previous avg. change			1.0069
Quarter	Year	PAF	PAF-5
Q1	2002	1.8686	1.9513
Q2	2002	1.8878	1.9648
Q3	2002	1.9072	1.9784
Q4	2002	1.9268	1.9921
Q1	2003	1.9466	2.0126

1995-1999

1996-2000

Rail Cost Adjustment Factor

Third Quarter 2002

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 2002Q2	Current 2002Q3	Percent Change
All-Inclusive Index ¹	106.4	107.2	0.8
Preliminary RCAF ²	1.064	1.072	0.8
Forecast Error Adjustment ³	<u>-0.002</u>	<u>-0.010</u>	
RCAF (Unadjusted) ⁴	1.062	1.062	—
Productivity Adjustment Factor ⁵	1.8878	1.9072	
RCAF (Adjusted) ⁶	0.563	0.557	-1.1
PAF-5 ⁷	1.9648	1.9784	
RCAF-5 ⁸	0.541	0.537	-0.7

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

Third Quarter 2002

The third quarter 2002 Labor Index is forecast to decrease 0.1 percent, caused mostly by the completed amortization of 4 back pay amounts. Due to different calculation time frames, only the Brotherhood of Maintenance of Way Employees will receive a cost-of-living allowance (COLA) increase among the national unions.

Wage Index

The Wage Index is expected to decrease 0.1 percent. The most significant changes in the Wage Index were lower lump sum and back pay adjustments caused by the completion of the amortization of amounts from a year earlier.

National Contracts: The wage rates tied to national contracts, other than the Brotherhood of Maintenance of Way Employees, were unchanged for the third quarter. The current national agreements call for a cost-of-living allowance adjustment effective July 1, 2002. However, the change in the CPI-W from September 2001 to March 2002 caused this COLA adjustment to be 0 cents.

The national agreement with the BMW, which was settled about one year ago, calls for a COLA adjustment on July 1, 2002. This adjustment, calculated differently from the other national contracts, is 10 cents.

Independent Contracts: All but 3 of the CN/Illinois Central unions have contracts that call for 3 percent increases effective July 1, 2002. The three CN/IC unions not receiving the general wage increase are the United Transportation Union (UTU), the Brotherhood of Locomotive Engineers, and the UTU's Yardmaster Department. There were no CN/Grand Trunk Western increases, since those unions typically receive general wage increases at the beginning of the year.

Like the national versions, the CP/Soo Line unions other than the BMW received COLA adjustments of 0 cents, and therefore have unchanged wage rates. The CP/Soo BMW signed a new contract effective April 1, 2002, that replaced 48 cents of COLAs with two general wage increases. A 3.5 percent general wage increase was retroactive to January 1, 2001, and another 2 percent increase was retroactive to July 1, 2001. In addition, the new contract calls for a COLA effective July 1, 2002, which amounts to 10 cents.

Lump Sums: The lump sum adjustment decreased slightly as 2 adjustments were completely amortized and removed, and no new amounts were added. The lump sum amounts removed were for 3 CN/Illinois Central unions and the CN/GTW's carmen.

Labor Third Quarter 2002

Back Pay: The back pay adjustment decreased by 5 cents per hour. Two large amounts, including back pay for last year's new national BMWWE agreement, were completely amortized and removed. A smaller back pay amount was added to the wage rate for the new CP/Soo BMWWE contract that had two retroactive general wage increases and offsets for various COLA amounts already received.

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 2002 for performance in 2001. The payment is based on company performance in several categories, including financial and safety. The 2001 payment is now completely amortized, and the third quarter 2002 is the beginning of the amortization of the 2002 payment. The new profit sharing payment is significantly less than the payment for the prior year. The third quarter adjustment is \$0.002, half of last quarter's \$0.004 adjustment.

Supplements Index

The Supplements Index is forecast to decrease by 0.1 percent from the second quarter filing. The change is caused mostly by the slightly lower wage rate.

Health & Welfare: The Health and Welfare hourly rate is unchanged from the second quarter.

Railroad Retirement: The slight decrease in the wage rate caused the Railroad Retirement rate to also decrease slightly.

Supplemental Annuities: The Supplemental Annuity Tax rate was repealed by the Railroad Retirement and Survivors' Improvement Act of 2001, and continues to be zero.

Unemployment Insurance: The railroad Unemployment Insurance rate was unchanged from the prior quarter.

Other: The "Other" category, a reflection of a quarterly employer matching contribution by BNSF to certain BLE and BMWWE employees, is \$0.001 lower than the prior quarter.

Labor Index Calculation

As shown in table A-1 on the next page, the 0.1 percent decrease in both the Wage Index and the Supplements Index had a combined effect of a 0.1 percent decrease in the Labor Index.

Labor

Third Quarter 2002

Table A-1 Labor Index

	2002Q2	2002Q3	Change	
			Percent	Amount
<u>Base Wage</u> – Straight Time & Pay For Time Not Worked	\$26.705	\$26.728	0.1%	\$0.023
Adjustments:				
Lump Sum	0.058	0.055	-5.2%	-0.003
Back Pay	0.053	0.003	-94.3%	-0.050
Other	0.004	0.002	-50.0%	-0.002
Total Wages	<u>26.820</u>	<u>26.788</u>	-0.1%	-0.032
Health & Welfare Benefits	3.099	3.099	0.0%	0.000
RR Retirement & Medicare	6.487	6.482	-0.1%	-0.005
Supplemental Annuities	0.000	0.000		0.000
Unemployment Insurance	0.269	0.269	0.0%	0.000
Other	0.010	0.009	-10.0%	-0.001
Adjustments	<u>0.000</u>	<u>0.000</u>		
Total Supplements	<u>\$9.865</u>	<u>\$9.859</u>	-0.1%	-0.006
Total Labor	\$36.685	\$36.647		
Wage Index¹	229.5	229.3	-0.1%	
Supplements Index²	364.6	364.3	-0.1%	
Total labor Index, 2000 Weights³	265.4	265.2		
Labor Index (linked)⁴	257.3	257.1	-0.1%	

¹ 1980 wage rate \$11.685

² 1980 supplements rate \$2.706

³ 2000 weights: wages, supplements 73.4% 26.6%

⁴ 2002Q3 linked Index = 2002Q2 linked x (2002Q3 / 2002Q2)
 = 257.3 x 265.2 / 265.4

Fuel Third Quarter 2002

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.

Recent daily fluctuations in heating oil* prices have made fuel prices extremely difficult to forecast. Actual monthly railroad fuel prices decreased each month from October 2001 through February 2002, but then increased in March and April. The railroads expect third quarter (July) fuel prices to increase 3.1 percent from the second quarter (April) actual level, although this is a 14.4 percent increase from the second quarter forecast. (The second quarter forecast was lower than the actual.) This forecast for July reflects the highest price level so far in 2002, but is still below the actual fuel prices for the first 10 months of 2001.

Forecast fuel index	94.4
Change from previous quarter forecast	14.4%
Change from previous quarter actual	3.1%

* 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

Third Quarter 2002

The Materials & Supplies index changed only slightly in the third quarter 2002. Ballast prices continued to be unstable because of seasonal/regional purchases, but increases in one region were offset by decreases in another.

2002Q3 Materials & Supplies Index = 149.9

2002Q2 Materials & Supplies Index = 150.0

Difference	-0.1 basis points
	or
	-0.1 %

Equipment Rents

Third Quarter 2002

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. Higher auto rack rates for railroad-owned cars plus higher tank car rates contributed to the slight increase in the Car Hire index portion.

	2000 Weight	2002Q2	2002Q3	Percent Change
Car Hire	52.8%	182.6	182.7	0.1 %
Lease Rentals	47.2%	159.2	160.1	0.6
Weighted Average		171.6	172.0	0.2
Weighted Average (Linked)		176.6	177.0	0.2

Depreciation

Third Quarter 2002

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, unchanged from the previous quarter's forecast, reflects a PPI-RE that had been decreasing, but jumped higher in the most recent month.

Forecasted depreciation index (1982=100)	135.3
Forecasted depreciation index (1980=100)	149.7
Change from previous quarter forecast	0.0%
Change from actual first month of previous quarter	0.2%
Change from same quarter of prior year (actual)	-0.2%

Depreciation Third Quarter 2002

PPI RAIL EQUIPMENT

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

Term	Coefficient	Std. Error	t-Statistic	Significance
a[1]	0.5886	0.0923	6.3809	1.0000
_CONST	55.6697			

Within-Sample Statistics

Sample size 72	Number of parameters 1
Mean 135.3	Standard deviation 1.345
R-square 0.3434	Adjusted R-square 0.3434
Durbin-Watson 1.852	Ljung-Box(18)=12.44 P=0.1761
Forecast error 1.09	BIC 1.115
MAPE 0.004135	RMSE 1.082
MAD 0.5624	

Actual Values for the Most Recent 6 Periods:

Date	Actual
2001-11	134.500
2001-12	134.500
2002-01	134.100
2002-02	134.400
2002-03	134.400
2002-04	135.100

Forecasted Values

Date	2.5 Lower	Forecast	97.5 Upper
2002-05	133.074	135.195	137.317
2002-06	132.790	135.252	137.713
2002-07	132.716	135.285	137.854
2002-08	132.699	135.304	137.909
2002-09	132.698	135.316	137.933
QTR AVG	132.704	135.302	137.899
2002-10	132.701	135.322	137.944
2002-11	132.703	135.326	137.950
2002-12	132.705	135.329	137.952

Interest

Third Quarter 2002

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

2000	Interest Rate	8.54%
1980	Interest Rate	7.85%
2002Q3	Interest Index	108.8
2002Q2	Interest Index	108.8
	Percent Change	0.0%

Other Expenses

Third Quarter 2002

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 is higher than the previous quarter forecast, the same as the actual first month of the previous quarter.

Forecasted Other Expense (1982=100)	142.8
Forecasted Other Expense (1980=100)	160.1
Change from previous quarter forecast	0.6%
Change from actual first month of previous quarter	0.0%
Change from same quarter of prior year (actual)	-0.1%

Other Expenses

Third Quarter 2002

PPI INDUSTRIAL COMMODITIES LESS FUEL AND RELATED PRODUCTS AND POWER

Forecast Model for PPILF
ARIMA(1,1,1)*(1,0,0) with log transform

Term	Coefficient	Std. Error	t-Statistic	Significance
a[1]	0.8292	0.1159	7.1540	1.0000
b[1]	0.4801	0.1835	2.6163	0.9891
A[12]	0.4193	0.1118	3.7513	0.9996

Within-Sample Statistics

Sample size 72	Number of parameters 3
Mean 4.945	Standard deviation 0.0134
R-square 0.9893	Adjusted R-square 0.989
Durbin-Watson 2.001	Ljung-Box(18)=21.35 P=0.738
Forecast error 0.001407	BIC 0.2115
MAPE 0.001065	RMSE 0.194
MAD 0.1498	

Actual Values for the Most Recent 6 Periods:

Date	Actual
2001-11	142.300
2001-12	142.200
2002-01	142.200
2002-02	142.200
2002-03	142.500
2002-04	142.800

Forecasted Values

Date	2.5 Lower	Forecast	97.5 Upper
2002-05	142.530	142.918	143.307
2002-06	142.323	142.974	143.628
2002-07	141.980	142.888	143.802
2002-08	141.626	142.788	143.959
2002-09	141.432	142.844	144.269
QTR AVG	141.679	142.840	144.010
2002-10	141.152	142.806	144.480
2002-11	140.829	142.718	144.633
2002-12	140.590	142.708	144.858