

SERVICE DATE – DECEMBER 20, 2017

SURFACE TRANSPORTATION BOARD

DECISION

Docket No. EP 290 (Sub-No. 5) (2018-1)

QUARTERLY RAIL COST ADJUSTMENT FACTOR

Digest:¹ The rail cost adjustment factor (RCAF) is an index formulated to represent changes in railroad costs incurred by the nation's largest railroads over a specified period of time. The Surface Transportation Board (Board) is required by law to publish the RCAF on at least a quarterly basis. Each quarter, the Association of American Railroads computes three types of RCAF figures and submits those figures to the Board for approval. In addition, a new base level for the index is calculated here, as the statute requires be done every five years. The Board has reviewed the submission and adopts the RCAF figures for the first quarter of 2018.

Decided: December 18, 2017

In Railroad Cost Recovery Procedures, 1 I.C.C.2d 207 (1984), the Interstate Commerce Commission (ICC) outlined the procedures for calculating the all-inclusive index of railroad input prices and the method for computing the rail cost adjustment factor (RCAF). Under the procedures, the Association of American Railroads (AAR) is required to calculate the index on a quarterly basis and submit it to the agency on the fifth day of the last month of each calendar quarter. In Railroad Cost Recovery Procedures—Productivity Adjustment, 5 I.C.C.2d 434 (1989), aff'd sub nom. Edison Electric Institute v. ICC, 969 F.2d 1221 (D.C. Cir. 1992), the ICC adopted procedures that require the adjustment of the quarterly index for a measure of productivity.

The provisions of 49 U.S.C. § 10708 direct the Surface Transportation Board (Board) to continue to publish both an unadjusted RCAF and a productivity-adjusted RCAF. In Productivity Adjustment—Implementation, 1 S.T.B. 739 (1996), the Board decided to publish a second productivity-adjusted RCAF called the RCAF-5. Consequently, three indices are now filed with the Board: the RCAF (Unadjusted); the RCAF (Adjusted); and the RCAF-5. The RCAF (Unadjusted) is an index reflecting cost changes experienced by the railroad industry, without reference to changes in rail productivity. The RCAF (Adjusted) is an index that reflects national average productivity changes as originally developed and applied by the ICC, the

¹ The digest constitutes no part of the decision of the Board but has been prepared for the convenience of the reader. It may not be cited to or relied upon as precedent. Policy Statement on Plain Language Digests in Decisions, EP 696 (STB served Sept. 2, 2010).

calculation of which is currently based on a five-year moving average. The RCAF-5 is an index that also reflects national average productivity changes; however, those productivity changes are calculated as if a five-year moving average had been applied consistently from the productivity adjustment's inception in 1989.

As required by statute, the denominator of the RCAF is to be rebased every five years. The Board has verified AAR's proposed rebasing calculations and they comply with the statute. The rebasing calculations are shown in Table C of the Appendix.

The index of railroad input prices, RCAF (Unadjusted), RCAF (Adjusted), and RCAF-5 for the first quarter of 2018 are shown in Table A of the Appendix to this decision. Table B shows the third quarter 2017 index and the RCAF calculated on both an actual and a forecasted basis. The difference between the actual calculation and the forecasted calculation is the forecast error adjustment.

AAR's calculations have been examined, and the Board finds that AAR has complied with agency procedures. The Board finds that the first quarter 2018 RCAF (Unadjusted) is 1.027, an increase of 2.7% from the fourth quarter 2017 RCAF (Unadjusted) of 1.000. The RCAF (Adjusted) is calculated, in part, using the RCAF (Unadjusted) and a five-year moving geometric average of productivity change for U.S. Class I railroads from 2011-2015, which is tentatively 1.020 (2.0% per year).² The RCAF (Adjusted) is 0.422, an increase of 2.2% from the fourth quarter 2017 RCAF (Adjusted) of 0.413.³

In accordance with Productivity Adjustment—Implementation, 1 S.T.B. at 748-49, the RCAF-5 for this quarter will use a productivity trend for the years 2011-2015, which is 1.020

² The Board's adoption of 1.020 (2.0% per year) as the productivity adjustment for the 2011-2015 period is tentative because this year's productivity adjustment calculation (for the 2011-2015 five-year period) was affected by a change in the way distances are measured in the Board's 2015 Waybill Sample. To ensure that the change did not skew the results of the 2011-2015 productivity adjustment, earlier this year the Board proposed a linking factor to account for the change. On September 29, 2017, the Board proposed a revised tentative productivity adjustment based on a new linking factor. See R.R. Cost Recovery Procedures—Productivity Adjustment, EP 290 (Sub-No. 4) (STB served Sept. 29, 2017). The Board is reviewing comments received in response to the September 29 decision and, therefore, the productivity adjustment is not yet final.

³ The first quarter 2018 RCAF Adjusted (0.422) is calculated by dividing the first quarter 2018 RCAF Unadjusted (1.027) by the first quarter productivity adjustment factor of 2.4313. The first quarter 2018 productivity adjustment factor is calculated by multiplying the fourth quarter 2017 productivity adjustment of 2.4192 by the fourth root (1.0050) of the 2011-2015 annual average productivity growth rate of 2.0%.

(2.0% per year). The RCAF-5 for the first quarter of 2018 is 0.402, an increase of 2.0% from the fourth quarter 2017 RCAF-5 of 0.394.⁴

This action is categorically excluded from environmental review under 49 C.F.R. § 1105.6(c).

Authority: 49 U.S.C. § 10708.

It is ordered:

1. The Board finds that the first quarter 2018 RCAF (Unadjusted) is 1.027, RCAF (Adjusted) is 0.422, and RCAF-5 is 0.402.
2. Notice of this decision will be published in the Federal Register.
3. The effective date of this decision is January 1, 2018.

By the Board, Board Members Begeman and Miller.

⁴ The first quarter 2018 RCAF-5 (0.402) is calculated by dividing the first quarter 2018 RCAF Unadjusted (1.027) by the first quarter productivity adjustment factor-5 (PAF-5) of 2.5539. The first quarter 2018 PAF-5 is calculated by multiplying the fourth quarter 2017 PAF-5 of 2.5412 by the fourth root (1.0050) of the 2011-2015 annual average productivity growth rate of 2.0%.

APPENDIX**TABLE A**

EP 290 (Sub-No. 5) (2018-1)
All Inclusive Index of Railroad Input Costs
(Endnotes Following Table C)

LINE NO.	INDEX COMPONENT	2016 WEIGHTS	FOURTH QUARTER 2017 FORECAST	FIRST QUARTER 2018 FORECAST
1	LABOR	35.6%	415.1	423.8
2	FUEL	10.7%	215.5	248.4
3	MATERIALS AND SUPPLIES	5.0%	254.8	251.0
4	EQUIPMENT RENTS	5.9%	223.9	226.7
5	DEPRECIATION	15.6%	226.3	226.8
6	INTEREST	2.2%	60.5	60.5
7	OTHER ITEMS ¹	25.0%	221.4	226.9
8	WEIGHTED AVERAGE	100.0%	288.8	296.8
9	LINKED INDEX ²		267.1	274.5
10	PRELIMINARY RAIL COST ADJUSTMENT FACTOR ³		101.0	103.8
11	FORECAST ERROR ADJUSTMENT ⁴		-0.010	-0.011
12	RCAF (UNADJUSTED) (LINE 10 +LINE 11)		1.000	1.027
13	RCAF (ADJUSTED)		0.413	0.422
14	RCAF-5		0.394	0.402

TABLE B

EP 290 (Sub-No. 5) (2018-1)
Comparison of Third Quarter 2017 Index
Calculated on Both a Forecasted and an Actual Basis

LINE NO.	INDEX COMPONENT	2015 WEIGHT	THIRD QUARTER 2017 FORECAST	THIRD QUARTER 2017 ACTUAL
1	LABOR	35.0%	422.8	422.8
2	FUEL	13.4%	202.3	192.4
3	MATERIALS AND SUPPLIES	5.4%	252.6	252.6
4	EQUIPMENT RENTS	5.8%	223.8	224.2
5	DEPRECIATION	13.9%	225.1	226.3
6	INTEREST	1.9%	60.6	60.6
7	OTHER ITEMS	24.6%	224.3	223.5
8	WEIGHTED AVERAGE	100.0%	289.3	288.0
9	LINKED INDEX		268.7	265.7
10	RAIL COST ADJUSTMENT FACTOR		101.6	100.5

TABLE C

**Rebasing the Denominator of the RCAF
to the Fourth Quarter 2017 Level**

1.	Fourth Quarter 2017 Linked Index	267.1
2.	Second Quarter 2017 Linked Index Calculated Using Actual Data	267.4
3.	Second Quarter 2017 Linked Index Calculated Using Forecasted Data	270.1
4.	Difference	-2.7
5.	Rounding Adjustment to Force 1.000	0.1
6.	Fourth Quarter 2017 Linked Index Adjusted for Second Quarter 2017 Forecast Error (Line 1 plus Line 4 plus Line 5)	264.5

Endnotes:

¹ “Other Items” is a combination of Purchased Services, Casualties and Insurance, General and Administrative, Other Taxes, Loss and Damage, and Special Charges, price changes for all of which are measured by the Producer Price Index for Industrial Commodities Less Fuel and Related Products and Power.

² Linking is necessitated by a change to the 2016 weights beginning in the fourth quarter of 2017. The following formula was used for the current quarter’s index:

$$\frac{\text{1st Qr. 2018 Index (2016 Weights)}}{\text{4th Qr. 2017 Index (2016 Weights)}} \text{ Times 4th Quarter Linked Index (1980 = 100 Linked)} = \text{Equals Linked Index (Current Quarter)}$$

Or

$$\frac{296.8}{288.8} \times 267.1 = 274.5$$

³ The first quarter 2018 RCAF was rebased using the October 1, 2017 level of 264.5 in accordance with the requirements of the Staggers Rail Act of 1980 (10/1/2017 = 100). For the purpose of calculating the fourth quarter 2017 linked index (2017Q4 = 100), where the fourth quarter 2017 linked index equals 100 after the forecast error adjustment, the fourth quarter 2017 RCAF is also recalculated using the October 1, 2017 level of 264.5.

⁴ The first quarter 2018 forecast error adjustment was calculated as follows: (a) third quarter 2017 RCAF using forecasted data equals 101.6; (b) third quarter 2017 RCAF using actual data equals 100.5; and (c) the difference equals the forecast error (b-a) of -1.1. Because the actual third quarter value is less than the forecast value, the difference is subtracted from the Preliminary RCAF. The October 1, 2017 level of 264.5 was used for the purpose of calculating the first quarter 2018 forecast error adjustment.