SURFACE TRANSPORTATION BOARD

DECISION

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

(2023-4)

QUARTERLY RAIL COST ADJUSTMENT FACTOR

Digest: 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. The Board has reviewed the submission and adopts the RCAF figures for the fourth quarter of 2023.

Decided: September 18, 2023

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 calculation of which is currently based on a five-year moving average. The RCAF-5 is an index

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. See Pol’y Statement on Plain Language Digs. in Decisions, EP 696 (STB served Sept. 2, 2010).
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.

The index of railroad input prices, RCAF (Unadjusted), RCAF (Adjusted), and RCAF-5
for the fourth quarter of 2023 are shown in Table A of the Appendix to this decision. Table B
shows the second quarter 2023 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.

The weights for each major cost component of the all-inclusive cost index, on which the
RCAF is based, are updated annually to reflect the changing mix of index components.
See 49 U.S.C. § 10708. This includes re-benchmarking the wages and supplemental rates used
in the labor index in the fourth quarter of each year. The weights used by AAR are based on the
distribution of railway expenses for the year 2022. Similarly, AAR has used wage and
supplemental rates for the year 2022 to calculate hourly labor rates that reflect the changing mix
of employees.

AAR’s calculations, including its re-weighting and re-benchmarking calculations, have
been examined by the Board’s Office of Economics, and the Board finds that AAR has complied
with agency procedures with respect to the available data for 2022. The Board finds that the
fourth quarter 2023 RCAF (Unadjusted) is 1.012, an increase of 3.8% from the third quarter
2023 RCAF (Unadjusted) of 0.975. 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 2017-2021, which is 1.028 (2.8% per year). The fourth quarter 2023 RCAF
(Adjusted) is 0.401, an increase of 3.1% from the third quarter 2023 RCAF (Adjusted) of 0.389.²

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 2016-2020, which is 1.025
(2.5% per year). The RCAF-5 for the fourth quarter of 2023 is 0.384, an increase of 3.2% from
the third quarter 2023 RCAF-5 of 0.372.³

² The fourth quarter 2023 RCAF Adjusted (0.401) is calculated by dividing the fourth
quarter 2023 RCAF Unadjusted (1.012) by the fourth quarter productivity adjustment factor
(PAF) of 2.5256. The fourth quarter 2023 PAF is calculated by multiplying the third quarter
2023 productivity adjustment of 2.5083 by the fourth root (1.0069) of the 2017-2021 annual
average productivity growth rate of 2.8%.

³ The fourth quarter 2023 RCAF-5 (0.384) is calculated by dividing the fourth quarter
2023 RCAF Unadjusted (1.012) by the fourth quarter productivity adjustment factor-5 (PAF-5)
of 2.6384. The fourth quarter 2023 PAF-5 is calculated by multiplying the third quarter 2023
PAF-5 of 2.6221 by the fourth root (1.0062) of the 2016-2020 annual average productivity
growth rate of 2.5%.
This action is categorically excluded from environmental review under 49 C.F.R. § 1105.6(c).

It is ordered:

1. The Board finds that the fourth quarter 2023 RCAF (Unadjusted) is 1.012, RCAF (Adjusted) is 0.401, and RCAF-5 is 0.384.

2. Notice of this decision will be published in the Federal Register.

3. The effective date of this decision is October 1, 2023.

By the Board, Board Members Fuchs, Hedlund, Oberman, Primus, and Schultz.
### APPENDIX

#### TABLE A

**EP 290 (Sub-No. 5) (2023-4)**

**All Inclusive Index of Railroad Input Costs**

(Endnotes Following Table B)

<table>
<thead>
<tr>
<th>LINE NO.</th>
<th>INDEX COMPONENT</th>
<th>2022 WEIGTS</th>
<th>THIRD QUARTER 2023 FORECAST</th>
<th>FOURTH QUARTER 2023 FORECAST</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>LABOR</td>
<td>29.4%</td>
<td>584.1</td>
<td>581.2</td>
</tr>
<tr>
<td>2</td>
<td>FUEL</td>
<td>20.4%</td>
<td>330.3</td>
<td>387.9</td>
</tr>
<tr>
<td>3</td>
<td>MATERIALS AND SUPPLIES</td>
<td>4.7%</td>
<td>336.2</td>
<td>342.5</td>
</tr>
<tr>
<td>4</td>
<td>EQUIPMENT RENTS</td>
<td>4.4%</td>
<td>261.0</td>
<td>263.6</td>
</tr>
<tr>
<td>5</td>
<td>DEPRECIATION</td>
<td>15.2%</td>
<td>237.6</td>
<td>238.4</td>
</tr>
<tr>
<td>6</td>
<td>INTEREST</td>
<td>2.1%</td>
<td>50.1</td>
<td>51.0</td>
</tr>
<tr>
<td>7</td>
<td>OTHER ITEMS&lt;sup&gt;1&lt;/sup&gt;</td>
<td>23.8%</td>
<td>287.7</td>
<td>283.9</td>
</tr>
<tr>
<td>8</td>
<td>WEIGHTED AVERAGE</td>
<td>100.0%</td>
<td>372.0</td>
<td>382.6</td>
</tr>
<tr>
<td>9</td>
<td>LINKED INDEX&lt;sup&gt;2&lt;/sup&gt;</td>
<td></td>
<td>342.9</td>
<td>352.7</td>
</tr>
<tr>
<td>10</td>
<td>PRELIMINARY RAIL COST</td>
<td></td>
<td>100.2</td>
<td>103.0</td>
</tr>
<tr>
<td></td>
<td>ADJUSTMENT FACTOR&lt;sup&gt;3&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>FORECAST ERROR ADJUSTMENT&lt;sup&gt;4&lt;/sup&gt;</td>
<td>-0.027</td>
<td>-0.018</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>RCAF (UNADJUSTED)</td>
<td></td>
<td>0.975</td>
<td>1.012</td>
</tr>
<tr>
<td></td>
<td>(LINE 10 + LINE 11)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>RCAF (ADJUSTED)</td>
<td></td>
<td>0.389</td>
<td>0.401</td>
</tr>
<tr>
<td>14</td>
<td>RCAF-5</td>
<td></td>
<td>0.372</td>
<td>0.384</td>
</tr>
</tbody>
</table>
### TABLE B

**EP 290 (Sub-No. 5) (2023-4)**

Comparison of Second Quarter 2023 Index Calculated on Both a Forecasted and an Actual Basis

<table>
<thead>
<tr>
<th>LINE NO.</th>
<th>INDEX COMPONENT</th>
<th>2021 WEIGHTS</th>
<th>SECOND QUARTER 2023 FORECAST</th>
<th>SECOND QUARTER 2023 ACTUAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>LABOR</td>
<td>31.4%</td>
<td>570.2</td>
<td>570.2</td>
</tr>
<tr>
<td>2</td>
<td>FUEL</td>
<td>14.2%</td>
<td>378.2</td>
<td>341.9</td>
</tr>
<tr>
<td>3</td>
<td>MATERIALS AND SUPPLIES</td>
<td>4.5%</td>
<td>322.6</td>
<td>322.6</td>
</tr>
<tr>
<td>4</td>
<td>EQUIPMENT RENTS</td>
<td>4.9%</td>
<td>261.4</td>
<td>258.3</td>
</tr>
<tr>
<td>5</td>
<td>DEPRECIATION</td>
<td>17.5%</td>
<td>235.5</td>
<td>237.5</td>
</tr>
<tr>
<td>6</td>
<td>INTEREST</td>
<td>2.4%</td>
<td>50.1</td>
<td>50.1</td>
</tr>
<tr>
<td>7</td>
<td>OTHER ITEMS</td>
<td>25.1%</td>
<td>290.4</td>
<td>289.7</td>
</tr>
<tr>
<td>8</td>
<td>WEIGHTED AVERAGE</td>
<td>100.0%</td>
<td>375.4</td>
<td>370.2</td>
</tr>
<tr>
<td>9</td>
<td>LINKED INDEX</td>
<td></td>
<td>344.9</td>
<td>338.9</td>
</tr>
<tr>
<td>10</td>
<td>RAIL COST ADJUSTMENT FACTOR</td>
<td></td>
<td>100.8</td>
<td>99.0</td>
</tr>
</tbody>
</table>
Endnotes:

1 “Other Items” is a combination of Purchased Services, Casualties and Insurance, General and Administrative, Other Taxes, Loss and Damage, Lease Rentals, 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 2022 weights beginning in the fourth quarter of 2023. The following formula was used for the current quarter’s index:

\[
\text{4th Qr. 2023 Index} \times \text{3rd Quarter Linked Index} = \text{Linked Index (Current Quarter)}
\]

Or

\[
\frac{382.6 \times 342.9}{372.0} = 352.7
\]

3 The first quarter 2023 RCAF was rebased using the October 1, 2022 level of 342.3 in accordance with the requirements of the Staggers Rail Act of 1980 (10/1/2022 = 100).

4 The fourth quarter 2023 forecast error adjustment was calculated as follows: (a) second quarter 2023 RCAF using forecasted data equals 100.8; (b) second quarter 2023 RCAF using actual data equals 99.0; and (c) the difference equals the forecast error (b-a) of -1.8. Because the actual second quarter value is less than the forecast value, the difference is subtracted from the Preliminary RCAF.