SURFACE TRANSPORTATION BOARD

DECISION

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

(2021-1)

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 first quarter of 2021.

Decided: December 14, 2020

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 Digests 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 first quarter of 2021 are shown in Table A of the Appendix to this decision. Table B
shows the third quarter 2020 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 by the Board’s Office of Economics, and the
Board finds that AAR has complied with agency procedures. The Board finds that the first
quarter 2021 RCAF (Unadjusted) is 1.040, an increase of 10.5% from the fourth quarter 2020
RCAF (Unadjusted) of 0.941. 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 2014-2018, which is 1.010 (1.0% per year). The first quarter 2021 RCAF
(Adjusted) is 0.434, an increase of 10.2% from the fourth quarter 2020 RCAF (Adjusted) of
0.394.\(^2\)

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 2014-2018, which is 1.010
(1.0% per year). The RCAF-5 for the first quarter of 2021 is 0.410, an increase of 10.2% from
the fourth quarter 2020 RCAF-5 of 0.372.\(^3\)

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 first quarter 2021 RCAF (Unadjusted) is 1.040, RCAF
(Adjusted) is 0.434, and RCAF-5 is 0.410.

\(^2\) The first quarter 2021 RCAF Adjusted (0.434) is calculated by dividing the first quarter
2021 RCAF Unadjusted (1.040) by the first quarter productivity adjustment factor (PAF) of
2.3943. The first quarter 2021 PAF is calculated by multiplying the fourth quarter 2020
productivity adjustment of 2.3883 by the fourth root (1.0025) of the 2014-2018 annual average
productivity growth rate of 1.0%.

\(^3\) The first quarter 2021 RCAF-5 (0.410) is calculated by dividing the first quarter 2021
RCAF Unadjusted (1.040) by the first quarter productivity adjustment factor-5 (PAF-5) of
2.5343. The first quarter 2021 PAF-5 is calculated by multiplying the fourth quarter 2020 PAF-5
of 2.5280 by the fourth root (1.0025) of the 2014-2018 annual average productivity growth rate
of 1.0%.
2. Notice of this decision will be published in the Federal Register.

3. The effective date of this decision is January 1, 2021.

By the Board, Board Members Begeman, Fuchs, and Oberman.
### APPENDIX

#### TABLE A

**EP 290 (Sub-No. 5) (2021-1)**

All Inclusive Index of Railroad Input Costs

(Endnotes Following Table B)

<table>
<thead>
<tr>
<th>LINE NO.</th>
<th>INDEX COMPONENT</th>
<th>2019 WEIGHTS</th>
<th>FOURTH QUARTER 2020 FORECAST</th>
<th>FIRST QUARTER 2021 FORECAST</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>LABOR</td>
<td>32.6%</td>
<td>437.1</td>
<td>448.9</td>
</tr>
<tr>
<td>2</td>
<td>FUEL</td>
<td>14.2%</td>
<td>171.2</td>
<td>164.7</td>
</tr>
<tr>
<td>3</td>
<td>MATERIALS AND SUPPLIES</td>
<td>4.9%</td>
<td>258.8</td>
<td>264.9</td>
</tr>
<tr>
<td>4</td>
<td>EQUIPMENT RENTS</td>
<td>5.2%</td>
<td>234.1</td>
<td>236.4</td>
</tr>
<tr>
<td>5</td>
<td>DEPRECIATION</td>
<td>15.9%</td>
<td>226.1</td>
<td>226.2</td>
</tr>
<tr>
<td>6</td>
<td>INTEREST</td>
<td>2.5%</td>
<td>55.7</td>
<td>55.7</td>
</tr>
<tr>
<td>7</td>
<td>OTHER ITEMS(^1)</td>
<td>24.7%</td>
<td>232.1</td>
<td>237.0</td>
</tr>
<tr>
<td>8</td>
<td>WEIGHTED AVERAGE</td>
<td>100.0%</td>
<td>286.3</td>
<td>290.9</td>
</tr>
<tr>
<td>9</td>
<td>LINKED INDEX(^2)</td>
<td></td>
<td>267.4</td>
<td>271.7</td>
</tr>
<tr>
<td>10</td>
<td>PRELIMINARY RAIL COST ADJUSTMENT FACTOR(^3)</td>
<td></td>
<td>101.1</td>
<td>102.7</td>
</tr>
<tr>
<td>11</td>
<td>FORECAST ERROR ADJUSTMENT(^4)</td>
<td></td>
<td>-0.070</td>
<td>0.013</td>
</tr>
<tr>
<td>12</td>
<td>RCAF (UNADJUSTED) (LINE 10 +LINE 11)</td>
<td></td>
<td>0.941</td>
<td>1.040</td>
</tr>
<tr>
<td>13</td>
<td>RCAF (ADJUSTED)</td>
<td></td>
<td>0.394</td>
<td>0.434</td>
</tr>
<tr>
<td>14</td>
<td>RCAF-5</td>
<td></td>
<td>0.372</td>
<td>0.410</td>
</tr>
</tbody>
</table>
TABLE B

EP 290 (Sub-No. 5) (2021-1)
Comparison of Third Quarter 2020 Index
Calculated on Both a Forecasted and an Actual Basis

<table>
<thead>
<tr>
<th>LINE NO.</th>
<th>INDEX COMPONENT</th>
<th>2018 WEIGHTS</th>
<th>THIRD QUARTER 2020 FORECAST</th>
<th>THIRD QUARTER 2020 ACTUAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>LABOR</td>
<td>33.0%</td>
<td>442.8</td>
<td>442.8</td>
</tr>
<tr>
<td>2</td>
<td>FUEL</td>
<td>15.9%</td>
<td>142.8</td>
<td>159.7</td>
</tr>
<tr>
<td>3</td>
<td>MATERIALS AND SUPPLIES</td>
<td>5.1%</td>
<td>260.7</td>
<td>260.7</td>
</tr>
<tr>
<td>4</td>
<td>EQUIPMENT RENTS</td>
<td>5.3%</td>
<td>235.0</td>
<td>239.5</td>
</tr>
<tr>
<td>5</td>
<td>DEPRECIATION</td>
<td>15.0%</td>
<td>226.0</td>
<td>226.1</td>
</tr>
<tr>
<td>6</td>
<td>INTEREST</td>
<td>2.1%</td>
<td>57.2</td>
<td>57.2</td>
</tr>
<tr>
<td>7</td>
<td>OTHER ITEMS</td>
<td>23.6%</td>
<td>224.0</td>
<td>232.0</td>
</tr>
<tr>
<td>8</td>
<td>WEIGHTED AVERAGE</td>
<td>100.0%</td>
<td>282.5</td>
<td>287.4</td>
</tr>
<tr>
<td>9</td>
<td>LINKED INDEX</td>
<td></td>
<td>263.7</td>
<td>267.2</td>
</tr>
<tr>
<td>10</td>
<td>RAIL COST ADJUSTMENT FACTOR</td>
<td></td>
<td>99.7</td>
<td>101.0</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, 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 2019 weights beginning in the fourth quarter of 2020. The following formula was used for the current quarter’s index:

\[
\text{1st Qr. 2021 Index (2019 Weights) Times 4th Quarter Linked Index (1980 = 100 Linked) Equals Linked Index (Current Quarter)}
\]

\[
\frac{290.9}{286.3} \times 267.4 = 271.7
\]

3 The first quarter 2018 RCAF was re-based 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).

4 The first quarter 2021 forecast error adjustment was calculated as follows: (a) third quarter 2020 RCAF using forecasted data equals 99.7; (b) third quarter 2020 RCAF using actual data equals 101.0; and (c) the difference equals the forecast error (b-a) of 1.3. Because the actual third quarter value is greater than the forecast value, the difference is added to the Preliminary RCAF.