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 2017.

Decided: December 19, 2016

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 that also reflects national average productivity changes; however, those productivity changes are

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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).
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 2017 are shown in Table A of the Appendix to this decision. Table B shows the third quarter 2016 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 2017 RCAF (Unadjusted) is 0.888, an increase of 0.8% from the fourth quarter 2016 RCAF of 0.881. 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 2010-2014, which is 1.014 (1.4% per year). The RCAF (Adjusted) is 0.373, an increase of 0.5% from the fourth quarter 2016 RCAF (Adjusted) of 0.371.²

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 2010-2014, which is 1.014 (1.4% per year). The RCAF-5 for the first quarter of 2017 is 0.353, an increase of 0.3% from the fourth quarter 2016 RCAF-5 of 0.352.³

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 2017 RCAF (Unadjusted) is 0.888, RCAF (Adjusted) is 0.373, and RCAF-5 is 0.353.

² The first quarter 2017 RCAF Adjusted (0.373) is calculated by dividing the first quarter 2017 RCAF Unadjusted (0.888) by the first quarter productivity adjustment factor of 2.3833. The first quarter 2017 productivity adjustment factor is calculated by multiplying the fourth quarter 2016 productivity adjustment of 2.3750 by the fourth root (1.0035) of the 2010-2014 annual average productivity growth rate of 1.4%.

³ The first quarter 2017 RCAF-5 (0.353) is calculated by dividing the first quarter 2017 RCAF Unadjusted (0.888) by the first quarter productivity adjustment factor-5 (PAF-5) of 2.5147. The first quarter 2017 PAF-5 is calculated by multiplying the fourth quarter 2016 PAF-5 of 2.5059 by the fourth root (1.0035) of the 2010-2014 annual average productivity growth rate of 1.4%.
2. Notice of this decision will be published in the Federal Register.

3. The effective date of this decision is January 1, 2017.

By the Board, Chairman Elliott, Vice Chairman Miller, and Commissioner Begeman.
## APPENDIX

### TABLE A

**EP 290 (Sub-No. 5) (2017-1)**<br>**All Inclusive Index of Railroad Input Costs**<br>(Endnotes Following Table B)

<table>
<thead>
<tr>
<th>LINE NO.</th>
<th>INDEX COMPONENT</th>
<th>2015 WEIGHTS</th>
<th>FOURTH QUARTER 2016 FORECAST</th>
<th>FIRST QUARTER 2017 FORECAST</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>LABOR</td>
<td>35.0%</td>
<td>405.1</td>
<td>421.2</td>
</tr>
<tr>
<td>2</td>
<td>FUEL</td>
<td>13.4%</td>
<td>200.1</td>
<td>197.2</td>
</tr>
<tr>
<td>3</td>
<td>MATERIALS AND SUPPLIES</td>
<td>5.4%</td>
<td>245.8</td>
<td>274.3</td>
</tr>
<tr>
<td>4</td>
<td>EQUIPMENT RENTS</td>
<td>5.8%</td>
<td>223.4</td>
<td>224.3</td>
</tr>
<tr>
<td>5</td>
<td>DEPRECIATION</td>
<td>13.9%</td>
<td>225.1</td>
<td>225.3</td>
</tr>
<tr>
<td>6</td>
<td>INTEREST</td>
<td>1.9%</td>
<td>60.6</td>
<td>60.6</td>
</tr>
<tr>
<td>7</td>
<td>OTHER ITEMS¹</td>
<td>24.6%</td>
<td>216.9</td>
<td>218.4</td>
</tr>
<tr>
<td>8</td>
<td>WEIGHTED AVERAGE</td>
<td>100.0%</td>
<td>280.6</td>
<td>287.9</td>
</tr>
<tr>
<td>9</td>
<td>LINKED INDEX²</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>PRELIMINARY RAIL COST ADJUSTMENT FACTOR³</td>
<td></td>
<td>87.6</td>
<td>89.9</td>
</tr>
<tr>
<td>11</td>
<td>FORECAST ERROR ADJUSTMENT⁴</td>
<td></td>
<td>0.005</td>
<td>-0.011</td>
</tr>
<tr>
<td>12</td>
<td>RCAF (UNADJUSTED) (LINE 10 +LINE 11)</td>
<td></td>
<td>0.881</td>
<td>0.888</td>
</tr>
<tr>
<td>13</td>
<td>RCAF (ADJUSTED)</td>
<td></td>
<td>0.371</td>
<td>0.373</td>
</tr>
<tr>
<td>14</td>
<td>RCAF-5</td>
<td></td>
<td>0.352</td>
<td>0.353</td>
</tr>
</tbody>
</table>
# TABLE B

**EP 290 (Sub-No. 5) (2017-1)**
Comparison of Third Quarter 2016 Index
Calculated on Both a Forecasted and an Actual Basis

<table>
<thead>
<tr>
<th>LINE NO.</th>
<th>INDEX COMPONENT</th>
<th>2014 WEIGHT</th>
<th>THIRD QUARTER 2016 FORECAST</th>
<th>THIRD QUARTER 2016 ACTUAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>LABOR</td>
<td>31.7%</td>
<td>415.2</td>
<td>415.2</td>
</tr>
<tr>
<td>2</td>
<td>FUEL</td>
<td>20.9%</td>
<td>195.6</td>
<td>183.1</td>
</tr>
<tr>
<td>3</td>
<td>MATERIALS AND SUPPLIES</td>
<td>5.2%</td>
<td>240.6</td>
<td>240.6</td>
</tr>
<tr>
<td>4</td>
<td>EQUIPMENT RENTS</td>
<td>5.4%</td>
<td>216.8</td>
<td>217.6</td>
</tr>
<tr>
<td>5</td>
<td>DEPRECIATION</td>
<td>12.6%</td>
<td>226.5</td>
<td>225.6</td>
</tr>
<tr>
<td>6</td>
<td>INTEREST</td>
<td>1.5%</td>
<td>57.5</td>
<td>57.5</td>
</tr>
<tr>
<td>7</td>
<td>OTHER ITEMS</td>
<td>22.7%</td>
<td>217.4</td>
<td>217.3</td>
</tr>
<tr>
<td>8</td>
<td>WEIGHTED AVERAGE</td>
<td>100.0%</td>
<td>275.5</td>
<td>272.8</td>
</tr>
<tr>
<td>9</td>
<td>LINKED INDEX</td>
<td></td>
<td>263.0</td>
<td>259.7</td>
</tr>
<tr>
<td>10</td>
<td>RAIL COST ADJUSTMENT FACTOR</td>
<td></td>
<td>88.4</td>
<td>87.3</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 2015 weights beginning in the fourth quarter of 2016. The following formula was used for the current quarter’s index:

\[
\begin{align*}
1\text{st Qr. 2017 Index} & \times 4\text{th Quarter Linked Index} = \text{Linked Index} \\
\frac{1\text{st Qr. 2017 Index}}{(2015 \text{ Weights})} & \times \frac{4\text{th Quarter Linked Index}}{(1980 = 100 \text{ Linked})} = \frac{\text{Linked Index}}{(\text{Current Quarter})} \\
287.9 \times 260.6 & = 267.4 \\
280.6 &
\end{align*}
\]

3 The first quarter 2013 RCAF was rebased using the October 1, 2012 level of 297.5 in accordance with the requirements of the Staggers Rail Act of 1980 (10/1/2012 = 100). In compliance with our November 27, 2013 decision, AAR has restated the October 1, 2012 level of 297.5 to 297.6.

4 The first quarter 2017 forecast error adjustment was calculated as follows: (a) third quarter 2016 RCAF using forecasted data equals 88.4; (b) third quarter 2016 RCAF using actual data equals 87.3; 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.