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SURFACE TRANSPORTATION BOARD

DECISION

STB Docket No. 42101

E.I. DUPONT DE NEMOURS AND COMPANY

v.

CSX TRANSPORTATION, INC.

The Board finds that the defendant railroad has market dominance over the transportation at issue and that the challenged rate is unreasonably high. The railroad is directed to establish a new rate that does not exceed the maximum reasonable rates prescribed herein and to pay reparations (with interest) to the shipper.

Decided: June 27, 2008

**BY THE BOARD:**

By an amended complaint filed on October 30, 2007, E.I. du Pont de Nemours and Company (DuPont) challenges the reasonableness of rates charged by CSX Transportation, Inc. (CSXT) for the movement of nitrobenzene by tank car from Pascagoula, MS, to Neuse, NC, a distance of approximately 817 miles. DuPont seeks relief pursuant to the simplified procedures set forth in Simplified Standards for Rail Rate Cases, STB Ex Parte No. 646 (Sub-No. 1) (STB served Sept. 5, 2007) (Simplified Standards).<sup>1</sup>

DuPont has elected to proceed under the Three-Benchmark method, under which the total available rate relief is limited to \$1 million over a 5-year period. In its opening evidence, CSXT seeks to relitigate various methodological issues related to the application of the Three-Benchmark approach. CSXT Open at 8-14. However, those arguments were presented and rejected in Simplified Standards. CSXT may not collaterally attack Simplified Standards in this proceeding.

Based on the record presented, we find that the rate challenged here is unreasonably high under the Three-Benchmark method. Accordingly, maximum reasonable rates are prescribed and reparations (with interest) are awarded to DuPont.

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<sup>1</sup> Pet. for review docketed, No. 07-1369, et al. (D.C. Cir. Sept. 18, 2007).

## MARKET DOMINANCE

We can consider the reasonableness of a challenged rail rate only if the carrier has market dominance over the traffic involved. 49 U.S.C. 10707. Market dominance is “an absence of effective competition from other rail carriers or modes of transportation for the transportation to which a rate applies.” 49 U.S.C. 10707(a). Where a railroad has market dominance, its transportation rate must be reasonable. 49 U.S.C. 10701(d)(1), 10702.

There are two components to the Board’s market dominance inquiry. The first component is quantitative. The statute establishes a conclusive presumption that a railroad does not have market dominance if the rate it charges produces revenues that are less than 180% of its variable costs<sup>2</sup> of providing the service. 49 U.S.C. 10707(d)(1)(A). Thus, the 180% revenue-to-variable-cost (R/VC) ratio is the floor for regulatory scrutiny of rail rates. That statutory 180% R/VC level is also the floor for any rate relief. *See Burlington N.R.R. v. STB*, 114 F.3d 206, 210 (D.C. Cir. 1997).

If the quantitative threshold is met, we move to the second component. In this qualitative analysis, we determine whether there are any feasible transportation alternatives that could be used to ship the issue traffic. The Board considers both intramodal competition (from other railroads) and intermodal competition (from other modes of transportation such as trucks, transload arrangements, barges or pipelines).

Here, the parties agree that CSXT’s R/VC ratio exceeds the 180% threshold for the movement of nitrobenzene from Pascagoula to Neuse.<sup>3</sup> Therefore, DuPont has satisfied the quantitative prong of the market dominance inquiry. The parties disagree, however, on whether the qualitative market dominance test has been met.

In the qualitative market dominance inquiry, the complainant bears the burden of establishing the absence of effective competition from other rail carriers or modes of transportation for the traffic to which the challenged rate applies.<sup>4</sup> *See* 49 U.S.C. 10707. Even where an alternative mode or modes of transportation exists, a complainant can establish market dominance by demonstrating that the alternate modes of transportation are not effectively constraining the carrier’s ability to increase the rates of the issue traffic.<sup>5</sup>

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<sup>2</sup> Variable costs are those railroad costs which vary with the level of output.

<sup>3</sup> *See* CSXT Reply at 3 n.4.

<sup>4</sup> *See CSX Corp. et al. – Control – Conrail Inc. et al.*, 3 S.T.B. 196 (1998); *Government of the Territory of Guam v. Sea-Land Serv., Inc.*, STB Docket No. WCC-101, slip op. at 6 (STB served Feb. 2, 2007) (“In rail cases, because a finding of market dominance is a threshold jurisdictional requirement, we place the burden of proof on the shipper to show that there is not effective competition.”).

<sup>5</sup> *See Market Dominance Determinations*, 365 I.C.C. 118, 129 (1981) (“Effective competition for a firm providing a good or service means that there must be pressures on that firm to perform up to standards and at reasonable prices, or lose desirable business.”).

## 1. Position of the Parties

DuPont asserts that CSXT is not constrained by intramodal or intermodal competition. DuPont points out that the destination in Neuse is served by rail only by CSXT, so there is no alternative rail service. DuPont also asserts that rail is the preferred mode of transportation because it is the safest for shipment of nitrobenzene. It claims that only a small amount of its nitrobenzene traffic is shipped by truck, and then usually only because the customer does not have rail access. DuPont compares CSXT's rate (plus the cost to DuPont to lease and maintain rail equipment) to quotes DuPont solicited from three trucking companies. DuPont points out that the quotes are much higher than CSXT's rate, further demonstrating a lack of effective competition. Finally, DuPont states that its contract with its customer at Neuse requires DuPont to ship nitrobenzene by rail.

In its reply, CSXT challenges DuPont's assertion that trucks are not a competitive alternative. CSXT states that in the course of its negotiations for a master contract with DuPont in 2007, DuPont made a presentation to CSXT asserting that it had been quoted a rate to truck the nitrobenzene that was slightly lower (per the volume of a rail car) than CSXT's rate. CSXT states that DuPont also claimed that by switching to trucks DuPont could save additional costs, such as leasing and equipment costs, inventory costs, and labor costs. CSXT claims that, after confirming the accuracy of this competitive threat, it proposed a lower rate (which it claims DuPont declined). According to CSXT, the fact that it actually lowered its proposed rate based on an alternative service option demonstrates the presence of effective competition.

CSXT also argues that DuPont's comparison of the challenged rate to the three trucking quotes is distorted. First, CSXT claims that DuPont did not properly account for the savings that DuPont would incur by switching to trucks, including the elimination of car lease and maintenance costs. Second, CSXT claims that one of the trucking quotes that DuPont submitted here was for a low volume commitment, and that if the volume commitment were higher, the quote would likely be lower. In any event, CSXT states that the trucking quotes are not so high as to be considered an impractical alternative, after accounting for the savings to DuPont. Finally, CSXT claims that, contrary to DuPont's assertion, nitrobenzene can be transported safely by truck, and it cites to a DuPont document in support.

DuPont does not deny that, during contract negotiations, it presented CSXT with a quote to ship by truck that was lower than the rate being offered by CSXT. However, DuPont states that it bluffed and there was no factual basis for the quote.<sup>6</sup> DuPont claims that, in reality, there is no rate for trucking nitrobenzene that is comparable to CSXT's rate, as demonstrated by the three trucking quotes. Finally, DuPont disputes CSXT's claim that DuPont has not accounted for the supposed additional savings that would be incurred by switching to trucks. DuPont also disputes CSXT's claim that nitrobenzene is safe to transport by truck, and notes that CSXT misquoted the DuPont document on which CSXT relied.<sup>7</sup>

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<sup>6</sup> See DuPont Reb. at 7; Reb. V.S. of Pileggi at 2.

<sup>7</sup> On April 9, 2008, CSXT submitted a letter (filed under seal) acknowledging that it misquoted this document and that it was the result of an error, not an attempt to mislead the

(continued . . .)

## 2. Analysis

We find that DuPont has demonstrated that CSXT is market dominant for this movement. We do not doubt that DuPont's posturing during negotiations caused CSXT to reduce the level of its intended rate increase. It does not follow, however, that the threat of trucking is evidence of effective competition. After all, even a monopolist finds that there is a profit-maximizing price beyond which it cannot raise prices without adversely affecting its bottom line. A carrier possessing market power might set its rates so high that it would begin to lose business to a higher-cost competitor (such as a trucking company).<sup>8</sup> As the Board has previously noted, while this may create an "outer limit" constraint, it does not necessarily mean that effective competition is present.<sup>9</sup>

In FMC, the Board found a carrier had market dominance over soda ash traffic despite prior statements from the complainant that a transloading option was a competitive option. The Board determined that the statements, made during the course of rate negotiations, could only be regarded as posturing in aid of the complainant's negotiating position.<sup>10</sup> The situation here is no different. There is no effective competition from trucking if that competition is nothing more than an ephemeral threat that is not grounded in economic reality.<sup>11</sup> Were we to base our market dominance determinations solely on the fact that a carrier responded to a threat of competition – no matter how small the response or how high the rail rates were in comparison to alternative providers – carriers would be able to insulate themselves from rate challenges by offering insignificant or manipulative rate reductions during negotiations. And shippers would be afraid

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(. . . continued)

Board. Accordingly, we ignore the quote in making our determination.

<sup>8</sup> See FMC Wyoming Corp. & FMC Corp. v. Union Pacific RR Co., 4 S.T.B. 699, 718 & n.38 (FMC) (noting that a monopolist will raise prices so long as it is profitable to do so and concluding that "the fact that [carrier] matches prices set by alternatives with significantly higher costs, while maintaining a dominant market share, is not enough to demonstrate effective competition for the traffic at issue.").

<sup>9</sup> See id. at 718 ("[An] alternative does impose an outer limit on the rate that [a carrier] can charge, although [the carrier] can exercise considerable market power before reaching that outer limit. In other words, there is a competitive constraint, even though there is not effective competition.") (footnote omitted); see also Arizona Pub. Serv. Co., 742 F.2d at 651 (noting that at some rail price point, competitive pressure from a horse and buggy or people carrying commodities in buckets prevents a railroad from raising its rates beyond an "outer bound").

<sup>10</sup> FMC, 4 S.T.B. at 718.

<sup>11</sup> CSXT's witness states that, after being presented with the competitive rate by DuPont, it conducted its own investigation and found that truck rates were in fact competitive. See CSXT Reply, V.S. Kumza at 2. Yet CSXT has not supplied a quote from a trucking company showing this to be the case. The only evidence in the record of trucking rates are those presented by DuPont, and as DuPont notes, those quoted rates are significantly higher than the challenged rate.

to even mention other transportation modes during negotiations lest they foreclose a future rate challenge.

Here, DuPont has provided evidence that trucking rates are significantly higher than the challenged rates. CSXT argues that the trucking rates DuPont has proffered are not so much higher than the challenged rate as to be considered non-competitive. We disagree. The three quotations it offered were decidedly higher than CSXT's rates, and two of them were extremely high in comparison. Moreover, as DuPont notes, even with the lower rate that CSXT offered in response to DuPont's threat of switching to truck service, CSXT still increased DuPont's rate for this move significantly (compared to the rate DuPont was being charged under the expired contract) without any apparent concern that it would lose this traffic.<sup>12</sup> And the resulting rate (even after having been lowered modestly by CSXT) is 369% of the variable cost of providing rail service. Evidence that rail revenues substantially exceed variable costs by itself does not indicate market dominance,<sup>13</sup> but when, as here, those data are supported by other evidence, they may serve to buttress a finding that the existing level of competition may not be effective to constrain rail rates to a reasonable level.<sup>14</sup>

CSXT also overstates the potential cost savings to DuPont were it to switch from rail to trucks. Contrary to CSXT's claim, DuPont clearly added the costs of leasing and maintaining rail equipment to CSXT's rate, and then compared that adjusted rate to the trucking rates, thus making a proper apples-to-apples comparison.<sup>15</sup> As for the other savings that CSXT claims would be incurred by a switch to trucks (such as labor costs), DuPont has demonstrated that these costs would still apply if the nitrobenzene moved by truck. DuPont has also demonstrated that its quote from at least one trucking company would not be lower, regardless of a higher volume commitment.

Finally, DuPont provided evidence that its customer in Neuse will only accept nitrobenzene by rail and that its contract with that customer requires rail service.<sup>16</sup> CSXT did not rebut this evidence. The fact that DuPont had no contractual flexibility to switch to trucks confirms that its threat was a bluff. The contractual evidence also undercuts CSXT's argument

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<sup>12</sup> See CF Industries v. STB, 255 F.3d 816, 823-24 (D.C. Cir. 2001) (fact that carrier could significantly raise rates without losing traffic was an important factor in market dominance inquiry); McCarty Farms, et al. v. Burlington Northern Inc., 3 I.C.C.2d 822, 832 (1987) remanded on other grounds, Burlington Northern R. Co. v. ICC., 985 F.2d 589 (D.C. Cir. 1993) (even with truck and barge competition, it was relevant to market dominance inquiry that the carrier was still able to "capture the vast majority of the transportation market," despite significant rate increases).

<sup>13</sup> 49 U.S.C. 10709(d)(2)(A) (a finding that a rate exceeds 180% of variable cost does not establish a presumption of market dominance).

<sup>14</sup> McCarty Farms, 3 I.C.C.2d at 832.

<sup>15</sup> DuPont Open. at 12.

<sup>16</sup> Id. at 11; Open. V.S. of Pileggi at 4-5.

that the trucking of nitrobenzene is feasible. DuPont acknowledged that trucking was feasible from a physical standpoint, stating that it trucks small amounts of this commodity to other customers despite its overall preference to ship by rail due to the flammability and skin absorption risks.<sup>17</sup> But DuPont's contractual requirement to provide nitrobenzene to this particular customer by rail makes a switch to trucks highly infeasible from an economic standpoint due to the risk of losing its customer or incurring breach-of-contract liability.

In summary, the factors we typically consider to determine whether intermodal competition exists weigh in favor of a finding of market dominance – higher truck rates, only small amounts of nitrobenzene moving by truck, larger rate increase and rates substantially above cost, and a contractual requirement to ship via rail. The one factor that might otherwise support a finding of effective competition – a response by CSXT after DuPont threatened to switch to trucks during rate negotiations – is discounted in this case given the unrealistic prospect of the threat being carried out, the magnitude of the rate increase CSXT did impose notwithstanding DuPont's threats, and the continued cost disparity between rail and trucking, even after CSXT reduced its rate. Weighing all the evidence submitted by the parties, we find that CSXT has market dominance over the movement of nitrobenzene traffic from Pascagoula to Neuse.

### **RATE REASONABLENESS STANDARDS**

Under the Three-Benchmark method, the reasonableness of the challenged rate is addressed by examining the R/VC ratio that is produced by the challenged rate in relation to three benchmark figures, each of which is also expressed as an R/VC ratio. The first benchmark, the Revenue Shortfall Allocation Method (RSAM), measures the average markup over variable cost that the defendant railroad would need to charge all of its “potentially captive” traffic (traffic priced above the 180% R/VC level) in order for the railroad to earn adequate revenues as measured by the Board under 49 U.S.C. 10704(a)(2). The second benchmark,  $R/VC_{>180}$ , measures the average markup over variable cost currently earned by the defendant railroad on its potentially captive traffic. The third benchmark, the  $R/VC_{COMP}$ , is used to compare the markup being paid by the challenged traffic to the average markup assessed on other comparable potentially captive traffic.

Once we select the appropriate comparison group for the  $R/VC_{COMP}$  benchmark(s), each movement in the comparison group is adjusted by the ratio of  $RSAM \div R/VC_{>180}$ . We then calculate the mean and standard deviation of the resulting R/VC ratios (weighted in accordance with the appropriate sampling factors). If the challenged rate is above a reasonable confidence interval around the estimate of the mean for the adjusted comparison group, it is presumed unreasonable and, absent any “other relevant factors,” the maximum lawful rate is prescribed at that boundary level.

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<sup>17</sup> DuPont Open. at 10-11; Open. V.S. of Pileggi at 3.

## THREE-BENCHMARK ANALYSIS

### A. R/VC<sub>COMP</sub> Benchmark

#### 1. *Comparability Factors*

The purpose of the R/VC<sub>COMP</sub> benchmark is to use the R/VC ratios of comparable traffic as evidence of the reasonable R/VC levels for traffic of that sort. Comparability is determined by reviewing a variety of factors, such as length of movement, commodity type, traffic densities of the likely routes involved, and demand elasticity (although the comparison group need not have movements with identical demand). Movements with different cost characteristics may be included in the comparison group, because what we are comparing are the mark-ups over variable cost to determine the reasonable level of contribution to joint and common costs for a particular movement. The comparison group should consist of only captive traffic over which the carrier has market power, as the rates available to traffic with competitive alternatives would provide little evidence on the degree of permissible demand-based differential pricing needed to provide a reasonable return on the investment. Thus, no movements priced below the 180% R/VC level may be included in the comparison group.

#### 2. *Comparison Group*

DuPont and CSXT simultaneously tendered their initial evidence regarding appropriate comparison groups. On reply, each party then tendered its “final offer” groups of movements it believed should comprise the comparison groups.<sup>18</sup> In simultaneous rebuttal filings, the parties presented their arguments challenging the other party’s comparison groups and supporting their own.

In selecting the comparison group to use, we must decide which group is more similar in the aggregate to the relevant issue movement. This is an “either/or” selection, with no modifications by the Board. We reviewed each movement individually, assessing whether the comparison groups consisted of commodities and operating characteristics that were similar to the issue movements. For the reasons discussed below, we select DuPont’s comparison group for the movement at issue in this proceeding.

Although the parties used differing comparability factors in their opening submissions, on reply—when the parties submitted their final tender offers—they had come to agreement on most of the comparability factors that should be used.<sup>19</sup> Specifically, in their final tender offers, the parties applied the following selection criteria: include only traffic that had R/VC ratios

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<sup>18</sup> Under Simplified Standards, at 18, only movements that had previously been submitted by one of the parties in its initial tender can be included in the final offer groups. Any movement set forth in both sides’ initial tenders is required to be included in each side’s final comparison group, unless the parties agreed to exclude the movement.

<sup>19</sup> The parties’ ultimate agreement on the majority of comparability factors demonstrates the effectiveness of the final tender selection process.

above 180%; include only traffic that moved by private tank cars, include only traffic that moved in single-car shipments;<sup>20</sup> exclude the issue traffic; include only traffic that is “local” to CSXT (i.e., no other rail carrier participates in the movement); exclude contract moves; include only traffic moving a similar distance;<sup>21</sup> and include only traffic that moved under the same standard commodity code.

The only significant factor on which the parties disagree involves fuel surcharges. DuPont included both movements where a fuel surcharge was imposed and movements where it was not. CSXT, in contrast, included only movements where a fuel surcharge was imposed.

CSXT claims that rates without the fuel surcharge were negotiated pursuant to an arrangement under which, due to market and commercial factors, CSXT agreed to forgo a fuel surcharge.<sup>22</sup> CSXT thus argues that, because there are market-based reasons why fuel surcharges were applied only to some movements, those same market conditions should be reflected in the comparison group by excluding non-fuel-surcharged movements.<sup>23</sup>

DuPont notes that, in Rail Fuel Surcharges, STB Ex Parte No. 661 (STB served Jan. 26, 2007), the Board concluded that carriers, including CSXT, may have been over-recovering fuel costs on traffic that was subject to a fuel surcharge. DuPont argues that, because of this possible over-recovery, movements with a fuel surcharge ideally should be *excluded* from the comparison groups. But DuPont notes that, if the comparison groups were limited to only movements without a fuel surcharge, then the groups might possibly reflect an under-recovery of fuel costs.<sup>24</sup>

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<sup>20</sup> Although DuPont did not expressly limit its comparison group to only single-car shipments, once the other selection criteria were applied only single-car shipments were included. Similarly, although CSXT used a criterion that included both domestic and cross-border movements, once the other selection criteria were applied no cross-border movements were included. And although CSXT does not agree with the methodology that DuPont used to identify traffic local to CSXT, it accepted DuPont’s methodology for convenience.

<sup>21</sup> The parties agree generally on how to calculate distance. However, DuPont took the length of haul for the issue movement, rounded to the nearest 50 miles, and then selected movements within a range of 150 miles on each side. CSXT objects to rounding the mileage of the issue movement. Additionally, CSXT uses the actual loaded miles of the issue traffic movement, while DuPont uses the estimated miles from the Waybill Sample. We use the actual length of haul for calculating the issue movements’ distance. But the minor rounding dispute is immaterial. Even if we were inclined to agree with CSXT, we would select DuPont’s comparison groups in any event because of the more significant differences over the role of fuel surcharges.

<sup>22</sup> CSXT Reb. at 13.

<sup>23</sup> Id.

<sup>24</sup> DuPont also questions whether CSXT was actually forgoing recovery of its fuel costs on movements where no fuel surcharge was imposed, and thus whether there would in fact be an under-recovery. DuPont’s witness asserts that the fuel cost was being recovered in the Rail Cost Adjustment Factor that railroads use to adjust their rates. DuPont Reb. V.S. of Crowley at 15-16.

Accordingly, DuPont argues that both movements with a fuel surcharge and movements without such a surcharge should be included in the groups, and that together, any over-recoveries and under-recoveries from these movements should be offset.<sup>25</sup>

In this case, we do not believe that the presence or absence of a fuel surcharge would be an appropriate selection criterion for the comparison group. In Rail Fuel Surcharges, we addressed the fuel surcharge programs then used by CSXT and other rail carriers, in which the surcharge was computed as a percentage of the base rate. We explained that, because railroads rely on differential pricing, under which rate levels can be dependent on factors other than costs, a surcharge that is tied to the level of the base rate cannot fairly be described as merely a cost recovery mechanism. Rail Fuel Surcharges at 6. We explained that two shippers' traffic may use an identical amount of fuel, but if one started out with a higher base rate (because it is captive), it would pay dramatically more in fuel surcharges. In those circumstances, the fuel surcharge program could be forcing captive shippers with higher base rates to cross-subsidize the fuel costs of shippers with lower base rates. Accordingly, we found the fuel surcharge programs in place at that time to be an unreasonable practice and directed the carriers to modify their programs.

Here, if we were to compare the issue movements to a comparison group comprised solely of movements with a fuel surcharge that was calculated as a percentage of the base rate, the comparison groups (composed of potentially captive traffic with high base rates) could reflect a collective over-recovery of fuel costs. Because we concluded that captive traffic that was incurring these surcharges was likely cross-subsidizing the fuel costs of other, non-captive traffic, the railroad is effectively arguing here for the comparison groups to be limited to movements that are cross-subsidizing the fuel costs of other movements. We conclude that comparison groups that consist of movements both with and without a fuel surcharge provide a better aggregate picture of the reasonable contribution to joint and common costs that the issue movements should bear.<sup>26</sup> Accordingly, we use DuPont's comparison groups in our analysis.

## **B. RSAM and R/VC<sub>>180</sub> Benchmarks**

The R/VC<sub>>180</sub> benchmark measures the average markup over variable cost currently earned by the defendant railroad on its potentially captive traffic. The RSAM benchmark measures the average markup above variable cost that the carrier would need to charge its potentially captive traffic to meet its revenue needs. In accordance with Simplified Standards, we use the following formula to calculate RSAM:

$$\text{RSAM} = (\text{REV}_{>180} + \text{REV}_{\text{short/overage}}) \div \text{VC}_{>180}$$

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<sup>25</sup> DuPont Reb. at 18.

<sup>26</sup> We offer no opinion on whether this might be a more reasonable selection criteria in future cases where the movements in the Waybill Sample are subject to a different fuel surcharge program.

where  $REV_{>180}$  is an estimate of the total revenue earned by the carrier on potentially captive traffic, and  $VC_{>180}$  is an estimate of the total variable costs of the railroad to handle that traffic. (The confidential Waybill Sample is used to estimate these components.) To calculate RSAM, we add to the numerator the carrier's revenue shortfall (or subtract any overage) as shown in our annual revenue adequacy determination ( $REV_{\text{short/overage}}$ ). In applying the Three-Benchmark approach, the ratio of the two benchmarks is used to adjust the R/VC ratios of the selected comparison group. Thus, the relationship between RSAM and  $R/VC_{>180}$  serves as a revenue need adjustment factor, when applied to comparison group movements, to reflect demand-based differential pricing principles.<sup>27</sup>

The RSAM and  $R/VC_{>180}$  benchmarks are published annually by the Board. In this case, the parties used the benchmark figures for the years 2002 through 2005, which were published in Rate Guidelines—Non-Coal Proceedings, STB Ex Parte No. 347 (Sub-No. 2) (STB served Apr. 25, 2006). Both parties ask us to modify those published figures here.

CSXT argues that the RSAM benchmarks are too low because the RSAM formula fails to incorporate the effect of taxes. As observed by CSXT, the RSAM formula proposed and adopted in Simplified Standards uses a revenue shortfall ( $REV_{\text{short/overage}}$ ) that is calculated on an after-tax basis, while  $REV_{>180}$  is calculated on a pre-tax basis.<sup>28</sup> CSXT argues that the RSAM calculation must take into account not just the additional revenue that a carrier would need to earn to achieve revenue adequacy, but also the taxes it would need to pay on that revenue. CSXT proposes that we change the RSAM formula to use a pre-tax revenue shortfall that includes both state taxes and the statutory federal tax rate of 35%, which would raise the RSAM benchmark.

In contrast, DuPont argues that the RSAM benchmarks are too high, because they rely on the Board's cost-of-capital calculations for 2002 through 2005, which DuPont argues are overstated. We have recently changed the methodology used to calculate the rail industry's cost of capital, adopting a Capital Asset Pricing Model (CAPM) for the 2006 cost-of-capital determination.<sup>29</sup> DuPont contends that we should recalculate RSAM to reflect the new cost-of-capital methodology in this case. It argues that all of the inputs to develop a cost of capital based on the new methodology are readily available and easy to apply and that the cost of capital is central to the calculation of RSAM and  $R/VC_{>180}$ .

We note that, paradoxically, each party objects to the other's proposed changes to RSAM as inappropriate to make in the context of an individual rate case handled under the Simplified Standards. The Simplified Standards are designed to sacrifice some precision in the rate analysis in order to have an expedited, simplified, and less costly process to resolve smaller rail rate disputes. DuPont notes that CSXT did not point out the tax problem with RSAM during the four rounds of pleadings in Simplified Standards, in which the Board considered changes to its

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<sup>27</sup> See Rate Guidelines—Non-Coal Proceedings, 1 S.T.B. 1004, 1042 (1996).

<sup>28</sup> CSXT Open. at 19-20.

<sup>29</sup> See Methodology to be Employed in Determining the Railroad Industry's Cost of Capital, STB Ex Parte No. 664 (STB served Jan. 17, 2008).

RSAM methodology.<sup>30</sup> Thus, DuPont argues that if CSXT wishes to challenge the RSAM methodology, it may only do so in a petition to reopen Simplified Standards.<sup>31</sup> Similarly, CSXT argues that DuPont's proposed recalculation would constitute a retroactive application of the new cost-of-capital method and that an individual rate case, particularly one handled under the streamlined procedures of Simplified Standards, is not the proper forum to consider such a far-reaching change.

DuPont also objects to the manner in which CSXT proposes to change the RSAM benchmarks. CSXT would use the statutory tax levels. DuPont argues that RSAM should be adjusted using CSXT's "effective tax rate," i.e., the level of taxes that CSXT actually pays.<sup>32</sup> DuPont further argues that there is a countervailing adjustment that should also be made. It claims that URCS overstates the tax component in the variable costs of movements because it includes a cost for taxes based on the statutory tax rate, not the carrier's effective rate. DuPont argues that this overstatement results in too few movements being shown to have R/VC ratios greater than 180% and that it affects both the RSAM and R/VC<sub>>180</sub> benchmarks.<sup>33</sup>

It appears that the changes proposed by the parties would largely offset each other. However, even if that were not the case, we would not make any adjustments here, as this is not the proper forum for collateral attacks on the Board's methodology. The Three-Benchmark method was intended to serve as a simplified and expedited tool to evaluate the reasonableness of a challenged rate based on the Board's existing measures of the rail industry. The hallmark of this approach is the reliance on prior Board findings to expedite and simplify the rate reasonableness determination. Two of the three key benchmarks are pre-determined by the agency on an annual basis. Those benchmarks in turn rely on our annual cost-of-capital and revenue-adequacy determinations. We also rely on use of our Uniform Rail Costing System and data from the STB Carload Waybill Sample (Waybill Sample).<sup>34</sup> Considerable effort is expended by this agency in making each of these findings, and by doing much of the work in

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<sup>30</sup> CSXT seeks to excuse its failure to draw this issue to the Board's attention in the rulemaking proceeding due to a lack of access to the Board's workpapers. CSXT Reb. at 327-27. However, the Board made it clear at the outset of that proceeding that the RSAM proposal would use a revenue shortfall ( $REV_{\text{short/overage}}$ ) that would be calculated on an after-tax basis. See Simplified Standards for Rail Rate Cases, STB Ex Parte No. 646 (Sub-No. 1), slip op. at 24 (STB served July 28, 2006) (illustrating the RSAM proposal for one carrier); Simplified Standards for Rail Rate Cases, STB Ex Parte No. 646 (Sub-No. 1), slip op. at 4 (STB served Oct. 20, 2006) (Table 1) (illustrating RSAM proposal for all Class I carriers). Moreover, since it was originally adopted in 1996, the RSAM formula has never addressed taxes, and CSXT has had over a decade to present its proposal to the agency for broader consideration.

<sup>31</sup> DuPont Reply at 24.

<sup>32</sup> Id. at 22-23; V.S. of Crowley at 24-25.

<sup>33</sup> DuPont Reply at 23-24; V.S. of Crowley at 26-27.

<sup>34</sup> The Waybill Sample is a stratified sample of carload waybills for terminated shipments by railroad carriers.

advance (and then relying on those findings in the Three-Benchmark approach), we offer shippers with smaller rate disputes a practical means of obtaining expedited relief.

Making the adjustments proposed by the parties would go well beyond the intended scope of an individual simplified rate proceeding. The complexity of allowing the parties to litigate the appropriate methodologies to be applied in an individual proceeding (such as challenging prior Board findings on issues like the cost of capital, revenue adequacy, or RSAM; challenging the information contained in the Waybill Sample; or challenging the URCS model) would quickly consume the cases and inevitably lead to protracted litigation. Accord Simplified Standards at 84 (no evidence on movement-specific adjustments to URCS allowed); at 22 (no evidence of product or geographic competition allowed); at 83 (evidence on comparability must be drawn only from the Waybill Sample or other publicly available sources).

The proper forum for considering these methodological issues is in an appropriate rulemaking proceeding, where we can obtain the benefit of broader public input.<sup>35</sup> Accordingly, we have instituted a rulemaking proceeding, in STB Ex Parte No. 646 (Sub-No. 2), to obtain public comments on whether and how to change the RSAM formula to reflect taxes. In the meantime, we will use the formula adopted in Simplified Standards.

It would be premature to initiate a rulemaking to consider the cost-of-capital issue raised by DuPont. The changes proposed by DuPont are premised on using CAPM alone. However, we are currently in the process of exploring whether to instead use an average of the CAPM figure and a multi-stage discounted cash flow (DCF) model.<sup>36</sup>

For all of these reasons, we rely here on the RSAM and  $R/VC_{>180}$  benchmark calculations as published in Rate Guidelines—Non-Coal Proceedings, STB Ex Parte No. 347 (Sub-No. 2) (STB served Apr. 25, 2006).

### C. Rate Reasonableness Presumption

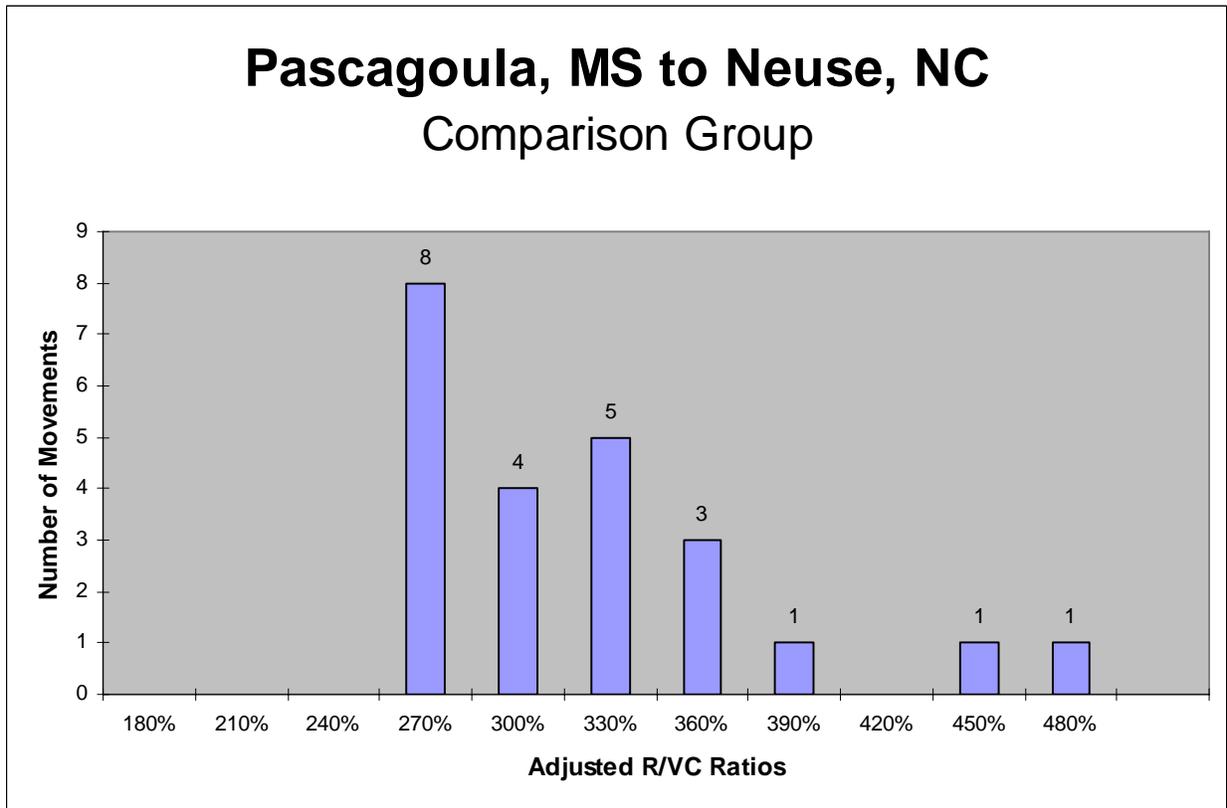
Having selected DuPont's comparison groups through the final-tender process described above, we adjust each movement in the comparison groups by the ratio of  $RSAM \div R/VC_{>180}$ .<sup>37</sup> The adjusted R/VC ratios of the comparison groups are illustrated below.<sup>38</sup>

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<sup>35</sup> CSXT contends that it is appropriate to make its proposed adjustment to RSAM here because "it simply seeks to correct an inadvertent error in the calculation of the RSAM," in contrast to DuPont's proposal, which "would make wholesale organic changes to the RSAM." CSXT Reb. at 31 n.24. We do not agree with CSXT's characterization of its own proposal. This is not a simple mathematical error in the implementation of the RSAM formula adopted in Simplified Standards. Rather, CSXT proposes that we use a *different* RSAM formula, one that increases the shortfall to include taxes.

<sup>36</sup> See Use Of A Multi-Stage Discounted Cash Flow Model In Determining The Railroad Industry's Cost Of Capital, STB Ex Parte No. 664 (Sub-No. 1) (STB served Feb. 11, 2008).

<sup>37</sup> In this case,  $RSAM \div R/VC_{>180}$  equals 1.24.



We then calculate the mean and standard deviation of the R/VC ratios for the adjusted comparison groups (weighted in accordance with the proper sampling factors). In this case, the mean R/VC ratio of the 23 movements is 304% and the standard deviation is 0.549.

Using the mean ( $R/VC_{COMP}$ ) and standard deviation ( $S$ ) of the adjusted comparison group, along with the number of movements in the comparison group ( $n$ ), the upper boundary of a reasonable confidence interval around the estimate of the mean is derived as follows:<sup>39</sup>

(... continued)

<sup>38</sup> The histogram counts the number of data points between the current bin number and the adjoining higher bin. A number is counted in a particular bin if it is equal to or less than the bin label. All values below the first bin value label are counted together, as are the values above the last bin value label.

<sup>39</sup> This formula for a confidence interval around a mean can be found in most statistics textbooks. We use a “one-sided” hypothesis test, such that we can have 90% confidence as to whether the challenged rate exceeds a reasonable norm. A 90% confidence interval is a standard level of confidence used in statistical analysis. The parameter  $t_{n-1}$  will range from 3.078 to 1.28 depending on the number of movements in the comparison group. In this case, the parameter  $t_{n-1}$  equals 1.32.

$$\text{upper boundary} = R/VC_{\text{COMP}} + t_{n-1} \times (S \div (n-1)^{1/2})$$

This confidence interval is a function of the number of movements in the comparison group and the standard deviation of those adjusted R/VC ratios. In this case, the upper boundary is 319% R/VC. As the challenged rate is above this boundary, it is presumed unreasonable and, absent any “other relevant factors,” the maximum lawful rate will be prescribed at that level.

#### **D. Other Relevant Factors**

Under the Three-Benchmark method, either party may submit evidence of “other relevant factors” to demonstrate that the maximum lawful rate should be higher or lower. Parties are required to quantify the impact of these “other relevant factors” on the maximum lawful rate.

In this case, both parties introduced evidence of “other relevant factors” that they argue would lower (according to DuPont) or raise (according to CSXT) the maximum lawful rate level. Their evidence is discussed below.

##### ***1. Regulatory Lag***

CSXT would have us take into account the regulatory lag between the 2002-2005 Waybill Sample data and the challenged 2007 rates by adjusting the Waybill Sample R/VC levels to 2007 levels. CSXT maintains that this adjustment is necessary because of significant market changes and dynamics (including increasing demand and tightening capacity) and railroad cost inflation for shipments of chemical traffic that have occurred over the last 5 years. CSXT would have us adjust revenues by publicly available data or, alternatively, by using current revenue information for chemicals traffic produced during discovery. It would have us adjust costs by using publicly available data and the indexing methods used in stand-alone cost cases. CSXT’s proposed adjustments would have the effect of raising the R/VC ratios in the comparison groups. DuPont objects to these proposed adjustments.

In Simplified Standards, at 84-85, we addressed the issue and discussed problems associated with making adjustments to the comparison group’s R/VC ratios to account for the lag in the data. First, we explained that in an R/VC ratio, price levels in the economy are reflected both in the numerator and denominator. Thus, the effects of price shifts on revenues should be largely offset by inflationary increases in costs, leaving the R/VC ratios generally unaffected. Moreover, the expansion ratio ( $RSAM \div R/VC_{>180}$ ) will also reflect price shifts, creating an offsetting effect to any rate increase or decrease that could be attributable to regulatory lag.

We note that, even though it would adjust the R/VC ratios in the comparison group, CSXT would apply the expansion ratio ( $RSAM \div R/VC_{>180}$ ) based on the 2002-2005 cost and revenue data. But if one were to apply similar adjustments to the R/VC ratios in the expansion ratio, RSAM (the numerator) would likely decrease. That is because a carrier with higher R/VC ratios from competitive traffic would require less revenue from its potentially captive traffic to achieve revenue adequacy. On the other hand, the  $R/VC_{>180}$  benchmark (the denominator) would likely increase as a result of the higher R/VC ratios. Thus, CSXT’s proposed adjustments

that would lead to higher R/VC ratios in the comparison group, indexed to 2007 levels, should also produce a lower expansion ratio.

We expressed concerns about an apple-to-oranges adjustment in Simplified Standards (at 84-85). Consider a hypothetical example where a carrier was revenue adequate in 2006, such that the  $RSAM \div R/VC_{>180}$  ratio shows the carrier earning 5% more from its potentially captive traffic than would be needed to earn adequate revenues in that time period. In that situation, the expansion ration would serve to reduce the R/VC ratios of the comparison group in 2006 by 5% to more accurately reflect reasonable rates. Assume further that the carrier had increased all revenues by 10% between 2006 and 2007. It does not follow that the comparison group R/VC ratios should be adjusted upward by 10%, as those R/VC ratios would already provide the carrier more than needed to achieve adequate revenues in 2006 and there is no evidence to suggest that higher rates would be proper. In fact, in this hypothetical, the evidence would suggest that an opposite adjustment should be made. That is, if a revenue adequate carrier had been raising rates, then it would need less (not more) differential pricing of potentially captive traffic. When the 2007 information becomes available, the RSAM and  $R/VC_{>180}$  benchmarks for 2007 would change accordingly and suggest that the comparison group R/VC levels should be adjusted downward, not upward as sought by the carrier.

Because CSXT's proposed adjustment would be incomplete, the maximum rate level based on this adjustment would be too high. Accordingly, CSXT has failed to meet its burden of demonstrating that its proposed adjustment is appropriate.

## ***2. Managerial Inefficiency***

DuPont argues that we should adjust the presumed maximum rate downward to give due consideration to the "Long-Cannon" factors at 49 U.S.C. 10701(d)(2)(A)-(C), particularly: (1) the amount of traffic which is transported at revenues which do not contribute to going concern value; and (2) the amount of traffic which contributes only marginally to fixed costs and the extent to which rates on such traffic can be changed to maximize the revenues from such traffic.<sup>40</sup> DuPont would have us apply the "efficiency adjustment" described in Rate Guidelines—Non-Coal Proceedings, 1 S.T.B. 1004, 1027-1030 (1996) (Simplified Guidelines), which excludes the revenue shortfall from traffic with an R/VC ratio below 100% from the RSAM calculation.<sup>41</sup> CSXT maintains that DuPont has not justified such an RSAM adjustment as an "other relevant factor," citing BP Amoco Chemical Company v. Norfolk Southern Railway Company, STB Docket No. 42093 (STB served June 6, 2005) and the Notice of Proposed Rulemaking in Simplified Standards for Rail Rate Cases, STB Ex Parte No. 646 (Sub-No. 1) (STB served July 28, 2006).<sup>42</sup>

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<sup>40</sup> DuPont Open. at 31-33.

<sup>41</sup> Id.

<sup>42</sup> CSXT Reply at 47-49.

We will not apply such an adjustment here. URCS is not a measure of short-run variable costs or the marginal cost of hauling rail traffic. Rather, it is a measure of intermediate variable costs, on a system-average basis, that includes costs (such as return on road property investment) that are fixed in the short term. Thus, an R/VC ratio below 100% does not necessarily reflect improper pricing or a money-losing service. See Simplified Guidelines at 1028. Competition from other railroads or other modes of transportation may force a carrier to price traffic below the measure of long-run variable costs from URCS.

DuPont argues that, as carriers are nearing capacity, there should no longer be any traffic with a revenue contribution below variable cost as calculated by URCS. Whether or not that is the case, the mere fact that a movement may be priced below URCS variable costs—an intermediate/long-run variable cost measure—does not mean that the revenues from the movement do not contribute to going concern value, which is a short-run cost measure.

By treating all movements with revenue below URCS variable costs as resulting from managerial inefficiency on the part of CSXT, DuPont has vastly overstated the likely degree of such pricing inefficiency. Accordingly, DuPont has failed to meet its burden of demonstrating that its proposed adjustment is appropriate.

#### **E. Maximum Rate Determination**

As neither party has carried its burden of demonstrating that there are “other relevant factors” that raise or lower the presumptive maximum lawful rate, we will prescribe the maximum lawful rate for the issue movement at the level produced by the formula, which in this case is an R/VC ratio of not more than 319% R/VC. The variable cost of the challenged movement must be calculated in accordance with Simplified Standards at 26, 84 (with no movement-specific adjustments to URCS).<sup>43</sup>

Based on our analysis, we conclude that DuPont has shown that CSXT's rate for this movement is unreasonable. CSXT is ordered to reimburse DuPont for amounts previously collected above the prescribed level, together with interest to be calculated in accordance with 49 CFR 1141. CSXT is also ordered to establish and maintain a rate for the movement of the issue traffic that does not exceed the maximum reasonable rate prescribed in this decision.

The record does not provide the data needed to calculate the total amount of reparations due to the shipper for past shipments. Following our standard practice in such circumstances, the parties are to calculate the total amount of reparations and interest due in accordance with this decision. If they cannot agree, the parties should bring the dispute to our attention for prompt resolution.

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<sup>43</sup> For purposes of calculating the variable cost of the issue movements, we use actual mileage (as used by the carrier), not the mileage from the “PC\*Miler|Rail” program (as used by the shipper).

## F. Limit on Relief

Cases that proceed under the Three-Benchmark method are limited to \$1 million in total rate relief over a 5-year period. Simplified Standards at 26-33. This limit applies to the difference between the challenged rate and the maximum lawful rate, whether in the form of reparations, a rate prescription, or a combination of the two. Accordingly, the rate prescription set in this decision will automatically terminate once DuPont has received the \$1 million of relief. (The length of the prescription may be less than 5 years if the limit on relief is reached in a shorter time.) DuPont will be barred from bringing another complaint against the same rate for the remainder of the 5-year period.<sup>44</sup>

Once the rate relief is exhausted, CSXT's rate-making freedom will be restored, with a regulatory safe harbor at the level of the challenged rate for the remainder of the 5-year period, with appropriate adjustments for inflation using the rail cost adjustment factor, that is adjusted for productivity (RCAF-A).<sup>45</sup> If, however, CSXT establishes a new common carrier rate once the rate prescription expires, and the new rate exceeds the inflation-adjusted challenged rate, DuPont may bring a new complaint against the higher rate.

This action will not significantly affect either the quality of the human environment or the conservation of energy resources.

### It is ordered:

1. Defendant shall, within 60 days, establish and maintain rates for the issue traffic that do not exceed the maximum reasonable rates prescribed by this decision.
2. Defendant shall pay reparations and interest, in accordance with this decision, for all shipments moving after the expiration of the contract between the parties and prior to the establishment of a reasonable rate pursuant to paragraph 1.

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<sup>44</sup> CSXT argues that the potential recovery should be distributed evenly over the 5-year period, lest DuPont obtain \$1 million in relief in the early years, then switch the source of its product and challenge that rate as unreasonable. CSXT Reb. 4. That would be inconsistent with Simplified Standards, at 28. Should DuPont re-source this product, CSXT may argue at that time that any rate complaint challenging the rate for the re-sourced product should be barred or brought under a more sophisticated rate standard.

<sup>45</sup> See Railroad Cost Recovery Procedures, 5 I.C.C.2d 434 (1989), aff'd sub nom. Edison Elec. Institute v. I.C.C., 969 F.2d 1221 (D.C. Cir. 1992).

3. This decision is effective on the date of service.

By the Board, Chairman Nottingham, Vice Chairman Mulvey, and Commissioner Buttrey.

Anne K. Quinlan  
Acting Secretary