

BEFORE THE
SURFACE TRANSPORTATION BOARD

Docket No. EP 715

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) Rate Regulation Reforms
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Rebuttal
Verified Statement

Of

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President

And

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L.E. Peabody & Associates, Inc.
On Behalf Of

The American Chemistry Council, The Fertilizer Institute, The National Transportation League,
Arkema, Inc., The Dow Chemical Company, Olin Corporation,
And Westlake Chemical Corporation

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I. INTRODUCTION

We are Thomas D. Crowley and Robert D. Mulholland. We are the same Thomas D. Crowley and Robert D. Mulholland that submitted an Opening Verified Statement in this proceeding on October 23, 2012. Copies of our credentials are included as Exhibit No. 1 and Exhibit No. 2 to our Opening Verified Statement, respectively. Our Opening Verified Statement addressed the Surface Transportation Board's ("STB" or "Board") proposal to modify its rules related to various aspects of its three maximum rate procedures as identified in *EP 715*.¹

We have been requested by counsel for the American Chemistry Council ("ACC"), The National Industrial Transportation League ("NITL"), The Fertilizer Institute ("TFI"), Arkema, Inc. ("Arkema"), The Dow Chemical Company ("Dow"), Olin Corporation ("Olin"), and Westlake Chemical Company ("Westlake") (collectively "Joint Chemical Companies") to address the railroads' reply comments dated December 7, 2012.²

The results of our review are summarized in the remainder of this Rebuttal Verified Statement and accompanying exhibits and are organized under the following topical headings:

- II. Modified ATC Is Superior To Both Original ATC And Alternate ATC
- III. A Sound And Reasonable Revenue Division Methodology Obviates The Need For Cross-Over Traffic Restrictions
- IV. The Disconnect Perceived By The Board Does Not Exist
- V. Crude And Overly Broad Cross-Over Traffic Restrictions Are Unnecessary
- VI. A SAC Test Based On Restricted Access To Cross-Over Traffic Is Meaningless
- VII. Conclusions

¹ STB Docket No. *EP 715, Rate Regulation Reforms*, decided July 25, 2012 ("*EP 715*").

² Specifically, we address the December 7, 2012 Reply Comments of the Association of American Railroads and the Reply Verified Statement of Michael Baranowski ("Baranowski VS") included with the AAR's Reply Comments, the Reply Comments of the Union Pacific Railroad Company ("UP"), the Reply Comments of the BNSF Railway Company ("BNSF"), and the Joint Reply Comments of CSX Transportation, Inc. and Norfolk Southern Railway Company ("CSXT/NS").

II. MODIFIED ATC IS SUPERIOR TO BOTH ORIGINAL ATC AND ALTERNATE ATC

In our Opening Verified Statement, we demonstrated that the STB's initial concerns that the application of the Original average total cost ("ATC") formula resulted in over allocation of revenues to low-density lines were valid. Specifically, we showed that Original ATC transforms movements for which real-world revenues do not exceed their end-to-end URCS variable costs (i.e., movements that make no contribution to defray the incumbents' joint and common costs) into movements that do make a contribution to defray the low-density segment's joint and common costs while failing to cover the high-density segment's variable costs. Stated differently, Original ATC unfairly benefits the low-density segment to the disadvantage of the high-density segment. The application of Modified ATC eliminated this glaring shortcoming inherent in Original ATC.

While we acknowledged in our Opening Verified Statement that the proposed Alternate ATC formula would partially correct this particular problem, we also demonstrated that, when the Alternate ATC formula is applied to a group of moves with a broad spectrum of R/VC ratios (i.e., a group of moves representative of the universe of shipments that move over Class I railroad systems in the real world), the Alternate ATC formula also produces nonsensical results in many of these circumstances. Specifically, application of Alternate ATC on some low-rated movements, where revenues are just above variable costs, can produce the illogical result that all of the movement's end-to-end contribution is allocated to a single line segment, and application of the formula on high-rated movements produces the counterintuitive result that the low-density segment earns more per-mile profit than the high-density segment after both segments have recovered their full (variable plus fixed) costs.

The railroads, led by the Association of American Railroads (“AAR”), replied to our Opening Verified Statement with several unfounded and unsupported criticisms, and mischaracterizations of our argument. Our responses to the railroads’ critique are summarized below under the following topical headings:

- A. Modified ATC *Does* Allocate Relatively More Revenue To Light Density Lines Than To High Density Lines
- B. Original And Alternate ATC Bias The Revenue Division Results In Favor Of Light Density Segments
- C. The Railroads’ Characterization Of Our Profitability Analysis Is Erroneous
- D. The Revenue Division Methodology Should Continue To Be Based On The Incumbent’s Relative Costs

A. MODIFIED ATC *DOES* ALLOCATE RELATIVELY MORE REVENUE TO LIGHT DENSITY LINES THAN TO HIGH DENSITY LINES

In its Reply Comments, AAR cites *Major Issues*³ in support of the use of Original ATC or Alternate ATC over Modified ATC. Specifically, AAR argues that:

By allocating revenues based on average total cost, the Board’s intent was to ensure that low density segments, with their higher average total costs, are allocated relatively more revenue from each individual movement than the high density segments, because low density segments have fewer movements to help cover fixed costs.⁴

We agree with the AAR’s statement. What the AAR failed to mention, however, is that all three ATC formulae meet this requirement. Low-density segments are allocated relatively more revenue than the corresponding high-density segments under Modified ATC just as they are under Original and Alternate ATC. The key difference is that Modified ATC makes this

³ STB Ex Parte No. 657 (Sub-No. 1), *Major Issues In Rail Rate Cases*, served October 30, 2006 (“*Major Issues*”).

⁴ AAR Reply Comments, p. 10.

allocation while also adhering to other important economic axioms, whereas Original and Alternate ATC adhere only to this single principle.

AAR further claims that, “Modified ATC... fails to achieve the Board’s goals in allocating cross-over traffic revenue in relation to the defendant carrier’s relative costs of providing service.”⁵

As discussed above, what distinguishes Modified ATC as the superior alternative to both Original and Alternate ATC is that Modified ATC allocates greater revenues to lower density line segments while also adhering to other important axioms, whereas Original and Alternate ATC adhere only to this single purpose regardless of the resulting violations of other equally relevant economic principles. Modified ATC ensures that all segments’ variable costs are covered before allocating revenues to defray joint and common costs to any segment. Original ATC does not. Modified ATC ensures that revenues in excess of variable plus fixed costs (i.e., profits) are allocated in a reasonable, equitable, and rational manner. Alternate ATC does not.

**B. ORIGINAL AND ALTERNATE
ATC BIAS THE REVENUE
DIVISION RESULTS IN FAVOR
OF LIGHT DENSITY SEGMENTS**

The AAR claims that Modified ATC “systematically biases revenue allocation in favor of high-density segments, apportioning them a larger share of revenues than is warranted.”⁶

This statement is self-serving and patently false. Modified ATC does not bias revenue allocation because it produces reasonable and predictable results when applied to the entire population (i.e., universe) of railroad movements. In contrast, both Original and Alternate ATC display clear bias when applied to different portions of the universe of railroad movements. Original ATC is demonstrably biased in favor of low-density segments when applied to low-

⁵ AAR Reply Comments, p. 9.

⁶ AAR Reply Comments, p. 8.

rated movements, and Alternate ATC is demonstrably biased in favor of low-density segments when applied to some low-rated, and all high-rated movements.

Indeed, the fact that Alternate ATC is being considered as a viable replacement for Original ATC is a classic example of detection bias. Detection bias arises when a narrow segment of the population is observed. The classic example involves diabetes and obesity. Doctors are more likely to screen for diabetes in patients who are overweight than in patients who are not. The skewed detection efforts lead to inflated diabetes rates among obese patients and deflated diabetes rates among patients who are not obese. Similarly, when Alternate ATC is applied to the low-rated movements for which Original ATC is known to be a problem, it appears to be a viable solution to the problem.

However, when Alternate ATC is applied to the full population of railroad moves, it becomes apparent that, while Alternate ATC effectively masks the bias inherent in the Original ATC on a narrow band of movements, yet another mask would be required to hide the bias inherent in Alternate ATC when applied to movements on the opposite end of the spectrum.

In our Opening Verified Statement, we clearly demonstrated that Alternate ATC, which closely resembles a formula developed by BNSF for litigation purposes, does not fully address the Original ATC formula shortcomings (bias), but rather hides them when applied to a narrow segment of the overall railroad movement population.

When the STB first discovered the bias inherent in the Original ATC formula, it developed a sound remedy for the unforeseen problem – the Modified ATC formula. There is no need or justification for abandoning Modified ATC for an obviously flawed Alternate ATC. The AAR simply wishes for low-density segments to be allocated as much revenue as possible. It

has not, nor can it demonstrate that any specific amount of revenue is “warranted” on any move or set of moves.

**C. THE RAILROADS’
CHARACTERIZATION OF
OUR PROFITABILITY
ANALYSIS IS ERRONEOUS**

In an attempt to discredit shippers’ opening statements and supporting analyses, the railroads repeatedly mischaracterize shippers’ statements. Specifically, the AAR’s Witness Baranowski states that, after a movement’s calculated fixed cost allocation has been covered, “The remaining contribution above variable cost – which Crowley/Fapp refer to as ‘profit’ (but is really contribution to fixed costs) – is allocated again based on variable cost.”⁷ Mr. Baranowski goes on:

The revenues that a railroad earns on a movement in excess of the movement’s variable costs are not a railroad’s economic “profits.” They are the movement’s contribution towards the railroad’s fixed costs. If and only if a railroads’ revenue exceeds its total variable and total fixed costs, including its cost of capital, does a railroad earn an economic profit. Thus, “profit” cannot be measured by comparing revenue to variable costs for individual movements.⁸

Mr. Baranowski apparently misunderstood the term “profit” as included in our Opening Verified Statement. However, it is clear that we were in fact treating revenue in excess of total variable plus total fixed costs as profits in our discussion and analyses. We never stated or implied that revenue in excess of variable costs is or should be considered profit, nor did we measure profit by “comparing revenue to variable costs for individual movements.”⁹

We refer to revenue above variable costs as contribution, costs above variable costs as fixed costs, and variable plus fixed costs as total costs. Our definitions of variable cost, fixed

⁷ Baranowski VS, pp. 9-10. See also related statements at AAR Reply Comments, p. 9; BNSF Reply Comments, pp. 19-22; UP Reply Comments, pp. 8-9.

⁸ Baranowski VS, p. 9, fn 7.

⁹ *Id.*

cost, total cost, revenue, and contribution are therefore consistent with the definitions the STB has used to frame the issue from its first discussions of the ATC methodology. If revenue exceeds variable costs, there is contribution. If contribution exceeds fixed costs, there is profit.

Mr. Baranowski's injection of cost of capital into the equation implies that he is dissatisfied with the STB's definition of total costs. We accept the STB's definition and reference it in our discussion of the ATC model.

BNSF puts forward an equally weak objection to our profitability analyses. Specifically, BNSF states:

[I]t makes no sense to think about the relative profitability of two segments of an integrated through movement. BNSF does not set segment-specific prices. It sets a single through rate for service from origin to destination.¹⁰

The very same statements could be made with respect to the fixed cost weighting argument put forward by the railroads, where they argue that Modified ATC "under weights" the impact of fixed costs on light-density segments. One could argue that it makes no sense to think about the relative fixed cost components of two segments of an integrated through movement, because the railroads do not set segment-specific prices. They set a single through rate for service from origin to destination. But the Board's implementation of the ATC model demonstrates that the Board does believe it makes sense to think about the relative fixed cost components of two segments of an integrated through movement. Therefore, it makes perfect sense to think about the relative profitability of two segments of an integrated through movement. If segment-specific cost requirements can and should be teased out of through rates, then it is completely appropriate to tease out segment-specific profitability, as the two items represent both sides of the same coin.

¹⁰ BNSF Reply Comments, p. 21.

**D. THE REVENUE DIVISION
METHODOLOGY SHOULD
CONTINUE TO BE BASED ON
THE INCUMBENT'S RELATIVE COSTS**

CSXT/NS state that:

[A] proper cost-based cross-over revenue allocation methodology would use the SARR's variable costs rather than the carrier's system average URCS costs. This would require additional effort by the parties and the Board, but done properly could form the basis for a more reasonable and coherent allocation of cross-over traffic revenues.¹¹

What CSX/NS appear to advocate is the return of movement-specific adjustments to the URCS Phase III variable cost model results to account for operational and investment differences between the incumbent's and the SARR's systems.¹² For reasons clearly articulated by the Board in its decision in *Major Issues*, based on its experience and observations over the preceding decades, manual movement-specific adjustments to URCS variable costs simply had not proven to produce results that were demonstrably more reliable than those produced by the URCS Phase III costing program. More importantly, the Board found that, while the model results were not perfect, they were unbiased, easy to apply, and worked in practice for their intended purpose. Furthermore, if the Board were to implement movement-specific URCS adjustments to reflect SARR operating costs for revenue division purposes, it would also need to make similar fixed cost adjustments to reflect SARR densities for the same purpose.

¹¹ CSXT/NS Reply Comments, p. 21.

¹² It is possible that CSXT/NS advocate for the development of SARR URCS from the ground-up, which would be an even more laborious and contentious approach than adjusting the incumbent's URCS.

III. A SOUND AND REASONABLE REVENUE DIVISION METHODOLOGY OBVIATES THE NEED FOR CROSS-OVER TRAFFIC RESTRICTIONS

Although we disagree with the railroads on many of the subjects at issue in this proceeding, we agree with CSXT/NS on one critical item as it relates to the Board's proposed restrictions on cross-over traffic in Full SAC cases. Specifically, we agree with the following CSXT/NS statement.

Several shipper commenters and CSXT/NS appear to be in general agreement that cross-over traffic could be allowed without additional limits, *if* revenue allocations between the SARR and the residual incumbent were done properly.¹³

As we demonstrated in our Opening Verified Statement, the goal of cross-over traffic revenue allocation should be to ensure that, for any given incumbent movement, both the SARR and the residual incumbent will receive a fair and reasonable allocation regardless of which segment of the movement is included in the SARR footprint. Modified ATC is clearly the only option under consideration that possesses no inherent bias when applied to the full spectrum of railroad movements (low-rated, high-rated, and everywhere in between).

If the Board continues to rely on Modified ATC for revenue division purposes, there is no reason to limit SARR access to cross-over traffic. If the Board reverts to either the clearly flawed Original or Alternate ATC formula, it will bias the formula in favor of light density lines. This distortion could be further compounded if the Board were to also decide to limit SARR access to the full complement of traffic densities.

¹³ CSXT/NS Reply Comments, p. 21.

IV. THE DISCONNECT PERCEIVED BY THE BOARD DOES NOT EXIST

BNSF contends that the inclusion of carload cross-over traffic together with the use of incumbent's URCS variable costs in the ATC revenue division formula necessarily leads to distortions that result in over allocation of revenues to the SARR. BNSF opines that:

Complainants typically assume that the SARR will operate as a "hook-and-haul" railroad and therefore will not incur costs associated with gathering carload traffic for placement on trains, switching carload traffic in yards, train assembly and disassembly, and delivery of cars to their final destination, among others costs incurred by the incumbent railroad to provide carload service. While the SARR avoids these costs for carload traffic, ATC allocates revenues as if the SARR did incur these costs and MMM assigns responsibility for stand-alone costs among shippers on the SARR, including carload shippers, as if the SARR incurred these costs.¹⁴

BNSF's observation is that, in circumstances where the SARR (or the residual incumbent) operates trains in "hook-and-haul" overhead service, it does not incur costs associated with gathering carload traffic for placement on trains, train assembly and disassembly, and delivery of cars to their final destination (i.e., origin and termination switching activities). BNSF's statement that ATC allocates revenues as if the SARR did incur these costs is flatly incorrect. ATC allocates revenues based on URCS costs. URCS allocates origin and destination terminal costs to the carrier that performs the terminal switching operations. As shown in our Exhibit No. 3 to our Opening Verified Statement, the terminal switching costs assigned to carload traffic are more than four-and-a-half times greater than the terminal switching costs assigned to unit train traffic.¹⁵

BNSF's observation that costs associated with switching carload traffic in yards may be allocated to rail segments where no such switching occurs is, in certain instances, correct. As we discussed in detail in our Opening Verified Statement, URCS allocates inter/intra train ("I&I")

¹⁴ BNSF Reply Comments, p. 16.

¹⁵ East Line 11, Column (3) $\$0.83 \div \text{Column (9)} \$0.18 = 4.61$ and West Line 32, Column (3) $\$0.97 \div \text{Column (9)} \$0.21 = 4.62$.

switching costs on a per-mile basis. As a result, some segments are over allocated I&I costs and other segments are under allocated I&I costs. However, as we clearly demonstrated in Exhibit No. 3 and Table 4 to our Opening Verified Statement, the impact of those costs on the variable cost allocation among segments is minimal.

Furthermore, BNSF's statement that "the incumbent's costs for the portion of the through movement replicated by the SARR will necessarily be overstated when average costs associated with the through movement are used"¹⁶ is also incorrect. Whether the incumbent's costs are overstated or understated depends entirely on the SARR configuration and operations replicated by the SARR. In our Opening Verified Statement, we posited several different scenarios where the SARR may be under compensated for performing yard switching activities on moves where the residual incumbent performs none. In fact, depending on the issue movements' requirements, this is just as likely as the opposite scenario that BNSF claims (with no proof or attempt at demonstration) will necessarily be present in a SAC analysis.

¹⁶ BNSF Reply Comments, p. 17.

V. CRUDE AND OVERLY BROAD CROSS-OVER TRAFFIC RESTRICTIONS ARE UNNECESSARY

As we discussed in our Opening Verified Statement, if the Board perceives a problem with the way its revenue allocation methodology allocates revenues to incumbent segments, it should address the perceived methodological shortcomings rather than avoiding the problem through the implementation of broad cross-over traffic restrictions in an effort to render the issue moot. In fact, we also demonstrated that the Board's proposed cross-over traffic restrictions are likely to result in the unintended creation of even larger disconnects between the incumbents' densities included in the fixed cost calculation in the ATC formula and the density restrictions its rules would impose on SARRs.

A. THE BOARD'S PROPOSED "SOLUTION" IS DISPROPORTIONATE TO THE "PROBLEM" IT PERCEIVES

Based on the supposed distortions BNSF perceives are caused by the use of system-average URCS variable costs to allocate revenues to the SARR and residual incumbent, BNSF concludes that "[E]liminating cross-over traffic in Full-SAC cases is also the simplest and most straight-forward way of dealing with the particular distortions created by the use of carload traffic as cross-over traffic."¹⁷ Similarly, UP asserts that "the Board should prohibit the use of cross-over traffic entirely because any method of allocating cross-over revenue is necessarily arbitrary."¹⁸ The railroads' proposed self-serving solutions may be clean and easy to implement, but they are an overreaction to a relatively minor "problem" and are wildly disproportionate to any small disconnect they are intended to avoid. Eliminating cross-over traffic altogether because, in certain limited situations, the revenue allocation may not perfectly

¹⁷ BNSF Reply Comments, p. 14.

¹⁸ UP Reply Comments, p 6.

reflect the incumbent's real-world operations "would be like using a cannon to stop a feeding mosquito."¹⁹

**B. THE BOARD'S PROPOSAL
DEPARTS FROM PRECEDENT**

In our Opening Verified Statement, we showed that the Board has never demonstrated that the disconnect it perceives actually exists. The perceived disconnect is merely a recognition that the Board's URCS Phase III costing model develops individual movement costs based on unit costs that reflect the incumbent's system-average operations. We further demonstrated that if any disconnects between URCS phase III costs and costs actually incurred to move traffic actually do exist, they are just as likely to be present on the off-SARR segments as on the on-SARR segments, and thus do not inherently bias the allocation of cross-over revenue in favor of either the complainant or the defendant.

Review of the filed Reply comments reveals that none of the commenting parties have demonstrated (or even attempted to demonstrate) that the perceived disconnect exists. The railroads simply assert that it does and further that the alleged disconnect creates distortions. The railroads offer no proof of these distortions or make any attempt to quantify them. Just because the railroads claim a distortion exists does not make it so. The Board should first demonstrate and quantify any supposed distortion before it makes drastic changes regarding SARR access to cross-over traffic in Full-SAC cases.

¹⁹ BNSF Petition for Review of a Final Order of the Surface Transportation Board in the US Court of Appeals for the DC Circuit, Filed 12/05/2012, page 27.

**C. CROSS-OVER TRAFFIC
SHOULD NOT BE RESTRICTED**

The Board concluded in *Major Issues* that results based on system-average URCS costs, while imperfect, were not discernibly less reliable than results based on movement-specific adjustment to URCS costs. The STB further concluded that the costs and time associated with the complex movement-specific adjustments served to unnecessarily complicate the analysis without producing materially different results.²⁰ Finally, the STB concluded that:

And in proposing to include additional inputs in URCS Phase III, or more generally, that we reexamine the entire URCS system, the carriers request a change to the URCS program. That should only be considered in a separate rulemaking proceeding, where the specific proposal(s) would be subjected to public comment and, if adopted, uniform application.²¹

The Board's sentiments and statements in its *Major Issues* decision are no less valid today than they were then. If the Board or the parties believe the URCS program inadequately reflects the costs for certain movements or movement segments, the solution to the problem is clear: the URCS program should be updated and adjusted to reflect more accurate cost allocation algorithms.

The Board's proposal to eschew the pursuit of the clear and obvious solution to its perceived problem (adjusting the URCS formula) in favor of taking actions designed to avoid the problem (limiting SARR access to cross-over traffic) is troubling.

Furthermore, the proposed cross-over traffic restrictions would introduce far more uncertainty and imprecision than it would solve. UP states that:

The Board remains free to prohibit the use of cross-over traffic when it lacks confidence that the benefits from that device outweigh the costs of

²⁰ *Major Issues*, pp. 51-60.

²¹ *Major Issues*, p. 59.

uncertainty and imprecision. By restricting the use of cross-over traffic, the Board can be confident that it will obtain more accurate, reliable results than if it tried to address its concerns through a less direct, more expensive effort to modify URCS.²²

UP's self-serving statements are clearly intended to obfuscate the issue in hopes that the Board cannot see the forest for the trees. UP's statement improperly couches the issue of obtaining accurate, reliable results in the narrow context of revenue divisions on cross-over traffic. The Board's objective should be to achieve accurate, reliable results *at the end of the SAC analysis*. The revenue division formula produces results that feed only a small part of the overall development of revenues and costs that ultimately determine the reasonable rate level applicable to the issue movement.

There are many individual revenue and cost components that are calculated independently and that feed into the larger SAC model. Any one of them could be scrutinized to the point where some input on some level could be called into question. If the Board were to simply discard any cost or revenue input that could potentially be construed as less than absolutely precise, there would be no components left in the SAC analysis framework. As we discussed in our Opening Verified Statement, all models inherently incorporate some level of imprecision. If the Board cannot accept some level of imprecision in its modeling exercise, the exercise is doomed from the start.

If one option is to include cross-over traffic whose revenue divisions may not be absolutely precise in every instance, and the other option is to exclude the cross-over traffic entirely, it is clear that retaining the traffic, even with imperfect revenue divisions, will produce far more accurate, reliable *SAC results* than eliminating the traffic.

²² UP Reply Comments, p. 7.

VI. A SAC TEST BASED ON RESTRICTED ACCESS TO CROSS-OVER TRAFFIC IS MEANINGLESS

As discussed in our Opening VS, the STB's proposed limitations on cross-over traffic would directly impact the SARR's ability to group traffic, and thus undermine the foundation of the SAC test. Cross-over traffic limitations would undermine the SARR's ability to group traffic, would severely and unfairly restrict the SARR from access to the same scale economies the incumbent enjoys, and would render the SAC test incomplete.²³

The Railroads assert that limiting the use of cross-over traffic in SAC presentations is consistent with the theory of contestable markets and CMP because cross-over traffic is just a simplifying device. Therefore, the railroads conclude, its limitation does not create a barrier to entry upon the SARR. The Railroads' positions contradict both the theory of contestable markets and Board precedent. The concept of entry barriers is not limited just to costs incurred by the SARR and not by the incumbent. Restricting the SARR from access to the same production techniques available to the incumbent also acts as a barrier to entry. The STB has previously articulated this point in *Coal Rate Guidelines* where it stated that the SAC constraint would be useless if a shipper could not employ the same production techniques used by the incumbent in grouping traffic to maximize economies of density.

²³ Opening VS, pp. 38-39.

**A. THE RAILROADS' ASSERTIONS THAT
RESTRICTIONS ON CROSS-OVER TRAFFIC
ARE CONSISTENT WITH CONTESTABLE
MARKET THEORY ARE INCORRECT**

The railroads response to our argument was based on a misrepresentation of statements made by the Board regarding the use of cross-over traffic as it relates to contestable market theory. Specifically, BNSF opines that:

The Board's proposed restrictions do not affect whether traffic may be included but only how traffic that is included may be used. The restrictions would only prohibit the complainant from using specified traffic as *cross-over traffic*. A complainant would remain free to include the traffic on its SARR, but it would need to design the SARR so that the traffic would not be carried as cross-over traffic. Rather than limiting traffic selection, the Board is limiting the use of a simplification mechanism to those situation [sic] where it may actually provide simplification instead of exacerbating the complexities and distortions already created by the presence of cross-over traffic in the analysis.²⁴

This interpretation is exactly at odds with the Board's statements on the issue in *Major Issues* as cited by UP: "Cross-over traffic is merely a simplifying device that the Board has allowed complainants to use to reduce their litigation costs. In theory, a SAC analysis should produce the same result whether or not the complainant uses that device."²⁵

The Board's proposed restrictions would make it impossible to achieve the same result "whether or not the complainant uses that device." This is because a SARR that is configured to serve all of its traffic end-to-end will have access to traffic that is not available to a SARR that is configured, for example, to serve only the issue traffic end-to-end. Therefore, in the scenario where the SARR is configured to provide end-to-end service to the issue traffic, that traffic will be forced to bear more of the SARR cost burden over that segment than the same traffic would in the scenario where the SARR is configured to serve all of its traffic end-to-end. In other words,

²⁴ BNSF Reply Comments, p. 15.

²⁵ UP Reply Comments, p. 2, citing *Major Issues*.

the cross-over traffic restrictions will result in dramatically different SAC results depending on the SARR configuration (which will determine the volume of traffic available to the SARR if the restrictions are implemented). This is precisely the opposite of the Board's stated intent that a SAC analysis should produce the same result whether or not the SARR is configured to carry traffic as cross-over traffic or as local traffic.

Contestable markets are defined by the ability of new entrants to access the market. In contestable markets, new entrants can serve the same markets and use the same productive techniques as employed by the incumbent firms without restriction. Therefore, restricting cross-over traffic is inconsistent with the concept of contestable markets because it would restrict the new entrant's access to the same production techniques available to the market incumbent.

The Railroads disagree with this premise and instead state that restricting cross-over traffic is not a barrier to entry, and therefore not inconsistent with contestable market theory, based on their interpretation of a statement in *Major Issues* in which the STB provided a partial definition of the barriers to entry, while ignoring other instances where the Board, or its predecessor ICC, provided a full definition of entry barriers.

The statement cited by the railroads focuses on only one aspect of the definition of a barrier to entry – a cost that a new entrant incurs that is not incurred by the incumbent. However, the originators of contestable market theory defined entry barriers much more broadly. As explained by Baumol, Panzar and Willig, an entry barrier can be manifested as a cost or as restriction to a production technique.

We define a perfectly contestable market as one that is accessible to potential entrants and has the following two properties: First, the potential entrants can, without restriction, serve the same market demands and use

the same productive techniques as those available to the incumbent firms.²⁶

Other economists also define barriers to entry as including limited access to the production techniques used by the incumbent that would lead to efficiency disadvantages available to the SARR.

Very importantly for the theory of contestable markets, potential entrants are able to impose this strong discipline on the incumbent only if they are able to compete on equal terms with no cost or efficiency disadvantages that would impose barriers to entry.²⁷

When the ICC developed the SAC test in *Coal Rate Guidelines*, it recognized that barriers to entry could take many forms, including any limitation that would place the stand-alone entity in a subordinate position relative to the incumbent carrier:

The costs and other limitations associated with these entry and exit barriers must be omitted from the SAC analysis in order to approximate the cost structure of a contestable market.²⁸

The ability to group traffic of different shippers is essential to theory of contestability... Without [traffic] grouping, SAC would not be a very useful test, since the captive shipper would be deprived of the benefits of any inherent production economies.²⁹

The ICC recognized that restricting a stand-alone entrant from access to the same production techniques available to the incumbent carrier would effectively create a barrier and make the SAC test useless. The concept of a barrier to entry is clearly and simply not so narrowly defined as the railroads' imply in their Reply statements.

²⁶ Baumol, William J., John C. Panzar, and Robert D. Willig, "*Contestable Markets and the Theory of Industry Structure*," New York, Harcourt Brace Jovanovich (1982) ("Baumol, Panzar and Willig") at page 5. Stigler defined a barrier to entry as a cost of producing (at some or every level of output) that must be borne by firms seeking to enter an industry but not borne by the firms already in the industry. See Stigler, George, "The Organization of Industry," Chicago, IL: University of Chicago Press (1968) at page 67.

²⁷ Tye, William B., "The Applicability of the Theory of Contestable Markets to Rail/Water Carrier Mergers," *Logistics and Transportation Review*, Volume 21, Number 1, March 1985, 57-76, at page 58.

²⁸ *Coal Rate Guidelines*, p. 529.

²⁹ *Coal Rate Guidelines*, p. 544.

VII. CONCLUSIONS

Above, and in our Opening verified statement, we have shown that Modified ATC is superior to both Original and Alternate ATC because, while all three models take into account the impact of economies of density on the railroads' cost structure, only Modified ATC can be applied to all movements across the entire R/VC spectrum without ever producing biased or counterintuitive results. We showed (and CSXT/NS agreed) that if a logical and unbiased revenue allocation methodology is used, then both the SARR and the residual incumbent will receive "fair" revenue allocations regardless which segments are replicated by the SARR and there is no reason to restrict the use of cross-over traffic in SAC cases. We demonstrated that neither the Board nor any of the commenting railroads has ever demonstrated that the alleged disconnect exists or attempted to quantify it, although many parties claim it to be significant and "distorting" absent any such proof.

Further, we showed that, even if the perceived disconnect is real, it is as likely to exist on the off-SARR segments as the on-SARR segments, that its impact is minimal, and that it could be easily addressed through modifications to the revenue division formula rather than through crude cross-over traffic restrictions. We showed that restrictions to cross-over traffic would create a disconnect between the incumbent's fixed cost requirements (reflected in the ATC formulae) and the SARR fixed cost requirements caused by the reduced SARR densities imposed by the proposed cross-over traffic restrictions. This disconnect would be of similar nature to the alleged disconnect between the incumbent's variable costs (reflected in the ATC formulae) and the SARR operating costs that are used as justification to restrict SARR access to cross-over traffic in the first place. Finally, we showed that a SAC test based on restricted access to cross-

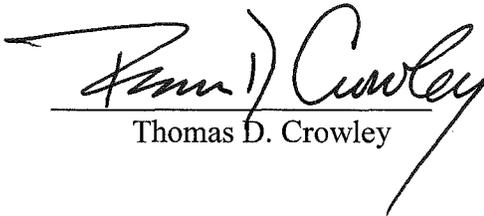
over traffic is inconsistent with contestable market theory, is not a true measure of stand-alone costs, and would bias the SAC results in favor of the incumbent.

For these reasons it is clear that the only justifiable action for the Board to take is to decide on the revenue allocation methodology that most fairly and reasonably allocates revenues to incumbent segments based on incumbent costs, and allows the SARR to replicate any segment and access all traffic, including all cross-over traffic, that moves over the replicated segment for inclusion in its SAC presentation.

VERIFICATION

COMMONWEALTH OF VIRGINIA)
)
CITY OF ALEXANDRIA)

I, THOMAS D. CROWLEY, verify under penalty of perjury that I have read the foregoing Verified Statement, that I know the contents thereof, and that the same are true and correct. Further, I certify that I am qualified and authorized to file this statement.



Thomas D. Crowley

Sworn to and subscribed
before me this 4th day of January, 2013



Diane R. Kavounis
Notary Public for the State of Virginia

My Commission Expires: November 30, 2016
Registration Number: 7160645

