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**BEFORE THE
SURFACE TRANSPORTATION BOARD**

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Ex Parte No. 431 (Sub No. 4)

REVIEW OF THE GENERAL PURPOSE COSTING SYSTEM

**JOINT REPLY COMMENTS OF
THE AMERICAN CHEMISTRY COUNCIL;
THE CHLORINE INSTITUTE; AND
THE FERTILIZER INSTITUTE**

The American Chemistry Council, The Chlorine Institute, and The Fertilizer Institute, (collectively the “Interested Parties”) hereby submit these Joint Reply Comments in response to the August 4, 2016 Supplemental Notice of Proposed Rulemaking (“SNPR”) issued by the Surface Transportation Board (“STB” or “Board”) in the above-captioned proceeding. As with their opening comments, the Interested Parties submit these reply comments through the attached Reply Verified Statement of Robert D. Mulholland, Senior Vice President of L.E. Peabody & Associates, Inc.

It is particularly notable that, as occurred in response to the previous Notice of Proposed Rulemaking in this proceeding served on February 4, 2013, most stakeholders continue to be uniformly skeptical of the Board’s proposals. All commenting parties have expressed serious doubt regarding the Board’s claim that its proposals are “properly supported by reasonable economic judgments based on sound principles of cost causation and cost allocation,” because those proposals ignore the cost relationships that are reflected in the current URCS cost allocation formulas that were developed based on empirical studies. SNPR at 6.

There also is general agreement that the proposed Carload Weighted Block (“CWB”) model has two problems. First the model proposes to eliminate step functions from the cost curve even where step functions are appropriate. Second, the CWB cost curves do not actually eliminate step functions for single and multi-car movements, but instead shift the steps to the left on the cost curve without any support. Both shippers and railroads also object to the Board’s plan to implement the model without a phase-in period.

In one area of difference, rail stakeholders generally support the proposed definition of “unit trains” based upon 75 cars, while the Interested Parties have demonstrated that there remain some unit trains shorter than 75 cars. To address the primary concern of the Interested Parties, if the Board does adopt the 75 car threshold, it should permit smaller unit train shippers to cost their moves as unit trains in appropriate regulatory proceedings.

Finally, the AAR has questioned the Board’s decision not to propose a modification to URCS to “fix” an alleged “flaw” related to inter-terminal and intra-terminal switching costs. AAR proposes to “eliminate the over-assignment of switching costs within URCS to nonexistent interterminal and intraterminal switching events.”¹ But there is a difference between unreported activity and nonexistent activity, and it appears that AAR has conflated the two. All activity, even unreported activity, must incur some cost, and that cost should be considered in the URCS allocation.

In summary, the Interested Parties believe the Board’s overarching objective to eliminate all step functions between shipment types is misguided. The Board’s CWB model produces unverified results that raise serious doubts that the CWB adjustment is superior to the current make-whole adjustment. Moreover, the model does not actually eliminate step functions for single and multi-car movements so much as relocate them. It also eliminates the very real and

¹ AAR Comments, Baranowski/Fisher Opening V.S. at 21 (emphasis added).

appropriate cost differential between carload and unit train shipments. Therefore, absent compelling evidence that the efficiency and make-whole adjustments misallocate costs, the Board should refrain from attempting to replace them with an untested theoretical construct.

Respectfully submitted,



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November 7, 2016

CERTIFICATE OF SERVICE

I hereby certify that on this 7th day of November 2016, I served a copy of the foregoing upon all parties of record via U.S. first-class mail, postage prepaid.

A handwritten signature in black ink, appearing to read 'Jason Tutrone', written over a horizontal line.

Jason Tutrone

BEFORE THE
SURFACE TRANSPORTATION BOARD

Docket No. EP 431 (Sub-No. 4)

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**Review of the General
Purpose Costing System**

Reply
Verified Statement

Of

Robert D. Mulholland
Senior Vice President
L. E. Peabody & Associates, Inc.

On Behalf Of

The American Chemistry Council,
The Chlorine Institute, and
The Fertilizer Institute
(Collectively “the Interested Parties”)

Due Date: November 7, 2016

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I. INTRODUCTION

I am Robert D. Mulholland, economist and a Senior Vice President of L. E. Peabody & Associates, Inc. I am the same Robert D. Mulholland who submitted an Opening Verified Statement (“OVS”) in this proceeding on October 11, 2016. A copy of my credentials is included as Exhibit No. 1 to my OVS.

My OVS addressed the Surface Transportation Board’s (“STB” or “Board”) proposal to modify its rules related to various aspects of its Uniform Railroad Costing System (“URCS”) as included in the Supplemental Notice of Proposed Rulemaking (“SNPR”) served by the Board in this docket on August 4, 2016.

I have been requested by counsel for The American Chemistry Council, The Chlorine Institute, and The Fertilizer Institute (collectively the “Interested Parties”) to address the Opening Comments of the Association of American Railroads (“AAR”)¹ and the Union Pacific Railroad Company (“UP”) (collectively “the railroads”) dated October 11, 2016. The proposed changes and the railroads’ Opening Comments are discussed below under the following topical headings:

- II. Lack of Empirical Support
- III. Asymptotic Curve vs. Step Function
- IV. I&I Switching
- V. Inter-Terminal and Intra-Terminal Switching
- VI. Phase-In Period
- VII. Unit Train Definition
- VIII. Conclusion

¹ I address the Opening Comments of the AAR and the Opening Verified Statement of Michael Baranowski and Benton Fisher (“Baranowski/Fisher VS”) included with the AAR’s Opening Comments.

II. LACK OF EMPIRICAL SUPPORT

As was the case in 2013, commenting shippers and railroads alike expressed strong reservations regarding the Board's willingness to institute significant changes to URCS without first conducting empirical studies to determine whether the cost allocation under the proposed new formulas reflected the actual costs incurred to move various shipments. A few examples follow:

The AAR... cannot support changes to URCS that change cost relationships without empirical support.²

* * *

The current break-points reflect an empirical observation that certain costs depend more on shipment type... than on the number of cars waybilled together.³

* * *

[T]he Board has not developed any empirical data that shows that the asymptotic curves reflect the true economies of scale in the railroad industry. Nor has the Board shown that the step functions derived from the Board's earlier studies are actually flawed.⁴

* * *

We already have a flawed cost model; changes should not be based on cursory analysis or guess work.⁵

All commenting parties expressed serious doubt regarding the Board's claim that its proposed changes are "properly supported by reasonable economic judgments based on sound principles of cost causation and cost allocation."⁶

² AAR Opening comments at page 4.

³ UP Opening comments at pages 3-4.

⁴ WCTL Opening comments at page 9.

⁵ Highroad Consulting Opening comments at pages 5-6.

⁶ SNPR at page 6.

The Board's proposed changes are particularly alarming because they ignore—and in many cases, obliterate—the cost relationships that are reflected in the current URCS cost allocation formulas—formulas that were developed based on empirical studies. I continue to believe it would be inappropriate for the Board to implement any new URCS model without conducting the studies needed to properly gauge the reasonableness of the proposed model with respect to the actual costs incurred to move various shipments.

However, should the Board choose to move forward without considering empirical data, it should, at a minimum, ensure that its new model reflects the cost relationships from the current model, which were developed based on empirical research. In my OVS, I proposed an alternate model that—while admittedly untested—comes far closer to achieving this benchmark than the Carload Weighted Block (“CWB”) model proposed by the Board.

III. ASYMPTOTIC CURVE VS. STEP FUNCTION

The Board expressed concern that the current URCS Phase III model does not reflect economies of scale within the shipment type groups (e.g., the unit cost for a single car (“SC”) shipment is the same whether it is a one-car or a five-car shipment.) Both shippers and railroads demonstrated in their Opening comments that, even if the Board’s concern regarding unit cost differentiation within the shipment type groups is valid, the proposed CWB model has two characteristics that require further analysis, evaluation, and validation before CWB is even considered for implementation.

First, the CWB model eliminates step functions from the cost curve where there is no doubt that step functions are appropriate: the break point between carload and unit train (“UT”) shipments. UT operations are the most efficient operations on the U.S. railroad network in every measurable way, and the cost metrics in URCS must reflect that reality. Step functions in the cost curve between shipment types are logical and reflective of railroad operating practices, e.g., I&I and interchange switching costs *are* incurred by SC and multi-car (“MC”) shipments but they *are not* incurred by UT shipments. Anything but a stepped cost curve for I&I switching is clearly out of alignment with actual railroad operations. There also should be pronounced steps between carload and UT unit costs associated with terminal and interchange switching due to the significantly more efficient UT operations, as I explained in my OVS.⁷

Although the Board acknowledged that the step functions reflect economies of scale between the three shipment types, it expressed doubt as to whether the steps between shipment types under the current model “reflect true efficiency differences between single-car and multi-car shipments, and between multi-car and unit train shipments”.⁸ With respect to the step

⁷ Mulholland OVS at pages 37-45.

⁸ SNPR at page 4.

between MC and UT shipments, the Board's concern is misplaced. Specifically, there should be step functions in the switching cost curves between carload and unit train shipments, because every type of switching is more efficient for unit train shipments.

Therefore, the very characteristic of the Board's proposed CWB model that the Board holds up in support of the notion that its model is economically sound—the virtual elimination of the step function between carload and unit trains (at the 75-car shipment size) in its switching cost curves—is actually proof that the CWB model fails to reflect the relative efficiency of unit trains compared to carload shipments.

Second, despite the Board's claims, the CWB cost curves do not actually eliminate the step functions for carload (SC and MC) traffic, they merely shift the steps to the left on the cost curve.⁹ Specifically, in its efforts to eliminate the hard break point between five- and six-car shipments, the Board created hard break points between one- and two-car shipments, and between two- and three car shipments. The Board offered no explanation as to why steps are acceptable on the far-left side of the scale but problematic and unacceptable anywhere else.

Moreover, as UP noted in its Opening comments:

When Union Pacific pulls cars from an industry, it typically pulls all available outbound cars, regardless of how they are waybilled. Consequently, a car that is waybilled as a 1-car shipment is often switched along with other cars that are also waybilled as 1-car shipments.¹⁰

This means that even shipments that are waybilled individually often share costs at industry with other small shipments. This is also true for interchange and I&I switching, because many individually waybilled shipments are placed together in blocks for movement over the railroad network. As a result, multiple small shipments share costs associated with switch events

⁹ Mulholland OVS at pages 15-16, AAR Opening comments at page 13, Baranowski/Fisher OVS at page 10, and UP Opening comments at page 3.

¹⁰ UP Opening comments at pages 3-4.

along their routes. These real-world railroading operations call into question the very large cost step between one- and two-car shipments that is implicit in the Board's CWB model.

The make-whole adjustment and the corresponding efficiency adjustments, while not perfect, are meant to reflect the economies of scale inherent in the railroad industry. There are significant differences in the way different shipment types are handled by the railroads. Moving UT traffic is significantly more efficient than moving MC traffic, which is marginally more efficient than moving SC traffic. The Board has made no demonstration that the three shipment types should be abandoned, but its model does just that.

The Board's proposed CWB model completely discards the cost relationships reflected in the current efficiency adjustments in URCS Phase III for carload shipments, which the Board recognizes were developed using empirical data.¹¹ The Board's claim that it retained the cost relationships "by maintaining the percentage reduction for unit train traffic currently embodied in the Phase III efficiency adjustments"¹² is meritless. Although the cost relationship is maintained for 75-car shipments, it is abandoned for all other shipments, particularly for SC and MC traffic. Specifically, switching costs for most MC shipments of six to 49 carloads are more than cut in half, i.e., the percentage reduction increased significantly—it has not been "maintained." For SC shipments, the Board's proposed CWB model results in many SC shipments being allocated less than system average costs, i.e., receiving an efficiency adjustment. This is a complete departure from the current model, in which all SC carloads receive the make-whole adjustment, which reflects greater than system average costs on a per-unit basis.

In the Board's proposed model, only one- and two-car shipments are assumed to cost more than the system average to switch. The Board offers no proof that its reshuffling of the

¹¹ AAR Opening comments at page 17 and Baranowski/Fisher OVS at page 8.

¹² SNPR at pages 8-9.

cost relationships is valid. Nor did it acknowledge that its CWB model would exacerbate a problem it first recognized in a 2010 Report to Congress.¹³ There, the STB expressed concern that the trend toward larger shipments and more unit train traffic meant that ever fewer single car shipments would be left to absorb the shortfall, and that the current model may overstate single car shipment costs. Yet the CWB model significantly increases costs for one-car shipments.¹⁴

¹³ *Surface Transportation Board Report to Congress Regarding the Uniform Rail Costing System*, May 27, 2010 at pages 18-19.

¹⁴ Baranowski/Fisher OVS at page 3.

IV. I&I SWITCHING

In the current URCS model, I&I switching costs are allocated to SC and MC shipments based on an assumption that all SC and MC shipments receive I&I switching every 200 miles on average. The 200-mile assumption is used to develop system average switch engine minute (“SEM”) unit costs in URCS Phase II, and those unit costs are applied in URCS Phase III (along with efficiency and make-whole adjustments) to develop variable costs for individual movements.

The Board proposes to increase the assumed miles between I&I switching events from 200 miles to 268 miles based on the ratio of the average shipment length on the Class I railroads in 2011 to the average shipment length on the Class I predecessor railroads in 1990. This assumption may or may not be accurate, because the total length of movement is not necessarily a good indicator of the amount of intermediate switching. The number and location of gathering yards and major classification yards is more relevant, but was not considered by the Board. The railroads did not object to the proposed change, and UP conducted a study that seems to support the Board’s result, but UP also stated it believes the I&I switching mileage interval should be railroad-specific.¹⁵

Regardless of whether the Board’s proposed mileage increase more accurately reflects current railroad operations, its proposed cost model only uses the updated mileage to develop system average SEM unit costs in URCS Phase II. The Board’s CWB model explicitly discards its proposed updated mileage interval in allocating I&I costs for individual shipments.

As I demonstrated in my OVS, the Board’s CWB model implicitly assumes the number of I&I switch events decreases, and the mileage between I&I switches increases, as the number

¹⁵ UP Opening comments at pages 5-6.

of cars in a shipment increases.¹⁶ The Board acknowledged this result—but not the reason for it—when it stated its model “results in decreasing total I&I switching costs as shipment size increases. In other words, the total I&I costs for a two-car shipment would be slightly less than for a one-car shipment.”¹⁷

The railroads agreed that this result is illogical and does not reflect real world railroading. AAR witnesses Baranowski and Fisher stated that the CWB model results are “arbitrary and should be rejected.”¹⁸ I agree. Messrs. Baranowski and Fisher believe the Board should retain its current methodology, but apply the 100 percent reduction (efficiency adjustment) to UT shipments of 75 cars or more (the proposed new UT demarcation point), while recalculating the make-whole adjustment and applying it to SC and MC shipments of less than 75 carloads.¹⁹

In my alternate model, I also applied a 100 percent reduction (efficiency adjustment) to UT shipments of 57 or more carloads (the demarcation point based on my evaluation of way and through train data), and applied a variable make-whole adjustment²⁰ to all carload (SC and MC) shipments of 56 or fewer carloads.²¹ The Baranowski/Fisher approach retains the current

¹⁶ Mulholland OVS at Table 4.

¹⁷ SNPR at page 10.

¹⁸ Baranowski/Fisher OVS at page 11.

¹⁹ The Baranowski/Fisher workpapers contain an error that should be corrected. Specifically, Messrs. Baranowski and Fisher developed their recalculated make-whole factor of {{ [REDACTED] }} based on a formula that applied the efficiency adjustment to shipments of 76 or more carloads. To correct this error, the recalculated make-whole factor should be developed based on applying the efficiency adjustment to shipments of 75 or more carloads. Specifically, {{ [REDACTED] }}. When this correction is made, the Baranowski/Fisher recalculated make-whole factor is reset to {{ [REDACTED] }}.

²⁰ Although the variable make-whole adjustment in my alternate model theoretically accounts for the event and time components associated with switching, it has not been field tested.

²¹ My OVS workpapers also contain a small error that should be corrected. Specifically, I inadvertently copied a carload formula to the intermodal block of shipments that resulted in some I&I switching costs being reallocated from carload to intermodal shipments. To correct this small error, I have adjusted the formula in my Reply workpapers. See {{ [REDACTED] }}.

methodology, which was based on empirical studies. Furthermore, the current methodology comports with UP's statements regarding the way SC shipments are handled in practice: for terminal, interchange, and I&I switching, SC shipments are often handled in blocks with other SC shipments. One-car shipments are handled in the same manner as two-car shipments moving between the same origin and destination, moving on the same trains and receiving the same switching at the same yards.

A step function in the I&I switching cost curve is both logical and necessary, because I&I switching is—by definition—performed on every non-unit train shipment and is not performed on any unit train shipments. Therefore, any cost curve that does not have a pronounced step down to zero for unit trains is simply not credible.

}}. See also {{
}}.

V. INTER-TERMINAL AND INTRA-TERMINAL SWITCHING

AAR complained that the Board declined to propose a modification to URCS to “fix” an alleged “flaw” related to interterminal and intraterminal switching costs. Specifically:

Railroads do not report interterminal and intraterminal switching activity, yet the URCS model currently assigns a portion of total switching time—and, as a result, switching costs—to this type of switching. In addition, only a small fraction of these costs is actually assigned to shipments in the waybill sample meeting special criteria.²²

In their Opening VS, Messrs. Baranowski and Fisher further assert that the Board should “eliminate the over-assignment of switching costs within URCS to nonexistent interterminal and intraterminal switching events.”²³

There is a difference between unreported activity and nonexistent activity, and it appears that AAR may be conflating the two. Certainly, switching activity can occur and not be reported. Yet AAR claims that the current model creates a “disconnect” between the Phase II input assumptions and the “actual occurrences of intraterminal and interterminal switches.”²⁴ As a result, AAR claims that:

URCS Phase II is improperly allocating costs to intraterminal and interterminal switches that should be allocated to other types of switches in URCS. Messrs. Baranowski and Fisher show that the Board can correct this flaw without unduly expanding the scope of this proceeding by simply replacing the intraterminal and interterminal switch ratios with actual calculated values from the CWS.²⁵

Messrs. Baranowski and Fisher actually offer two alternatives for implementing their proposed new treatment of intraterminal and interterminal switching costs:

The Board can either eliminate entirely the Phase II allocation to intraterminal and interterminal switching, or it can simply replace the Worktable A1 Part 5A and 5B ratios by which the intraterminal and

²² AAR Opening Comments at page 18, emphasis added.

²³ Baranowski/Fisher OVS at page 21, emphasis added.

²⁴ *Id.*, AAR Opening Comments at page 19, emphasis added.

²⁵ *Id.*

interterminal switch events are estimated with the actual calculated values from the carload waybill sample.²⁶

All activity, even unreported activity, must incur some cost, and that cost should be considered in the URCS allocation. Furthermore, Messrs. Baranowski and Fisher's proposal to replace the worktable ratios, which they describe as "decades-old defaults"²⁷ appears to be at odds with their desire to retain all other cost relationships in URCS, which are also decades old.

²⁶ Baranowski/Fisher OVS at page 23.

²⁷ *Id.*

VI. PHASE-IN PERIOD

In discussing how it would implement its proposed changes to the URCS calculations, the STB acknowledges that its URCS adjustment proposals would impact calculations that rely upon URCS cost information from multiple years.²⁸ Both shippers and the railroads objected to the Board's plan to implement the proposed model without a phase-in period, and without retroactive application. In my OVS, I discussed two issues related to how the Board's proposal would affect rate prescriptions. First, the change would allocate different variable costs to every shipment, which would move some shipments above or below the jurisdictional threshold ("JT") of 180 percent revenue-to-variable cost ("R/VC") ratio. This would arbitrarily remove some shippers' ability to challenge tariff rates. It would also affect the prescribed rates of shippers that have won rate cases.

Second, the change would alter the variable cost determinations that are used to develop benchmarks in the models used to determine maximum reasonable rates. The railroads cite several analyses in which multi-year averages are critical, including multiple components of the Revenue Shortfall Allocation Method ("RSAM") analyses, the Stand-Alone Cost ("SAC") model, the Three-Benchmark ("3BM") model, and other STB proceedings.²⁹ The only way to avoid these mismatch issues is by using URCS variable costs calculated using the same methodologies on both sides of the equation.

²⁸ SNPR at page 30, "The proposal here would impact calculations that use multiple years of URCS data."

²⁹ AAR Opening comments at pages 6-7 and UP Opening comments at pages 6-7.

VII. UNIT TRAIN DEFINITION

As discussed in my OVS, UT shipments are inherently more efficient than carload (SC and MC) shipments. The cars in a unit train are handled (switched) only at origin and destination; local train gathering operations are not required for UT shipments; the route of a unit train is optimized for the specific shipment origin/destination pair; and the loading and unloading facilities where unit trains originate and terminate are designed and built for maximum unit train handling efficiency.

The Board proposed to change the definition of a UT shipment in URCS from a shipment of 50 or more cars (the current model) to a shipment of 75 or more cars (the proposed model).³⁰ This cut-off point is applied universally across all commodities, all equipment types, and all railroads. It is the point at which shipments are considered to move in UT service for purposes of developing movement variable costs in URCS, regardless of the actual type of service used to move the shipment.

The Board's selection of 75 cars as the proposed point at which a shipment must be assumed to move in UT service is based on two questionable analyses. First, the Board developed a weighted average of through and unit train car counts from the railroads' Annual Report Form R-1's, and assumed that this weighted average "determine[s] the break point between these two train lengths and, accordingly, determine[s] the lower-end size of unit train service."³¹ In my OVS, I demonstrated the flaws in the Board's methodology and proclamation. Specifically, the aggregated industry-wide system average of unit train and through train size does not accurately represent the operating characteristics of the individual railroads.

³⁰ The railroads do not oppose the Board's proposed change. *See*, AAR Comments at page 4, footnote 6 and Baranowski/Fisher VS at page 19.

³¹ *SNPR* at page 25, citing STB workpaper "EP431S4_Unit Train Definition.xlsx".

Furthermore, the Board's analysis completely disregards the way train category, which is the single best indicator of the size of SC and MC shipments.³²

Second, the Board developed an industry-wide distribution chart of shipment sizes that showed a large number of 75-car shipments (a "peak.") The Board concluded that this peak indicated a changeover in type of service. As I discussed in my OVS, the number of shipments of any given size has no bearing on the type of service that is offered. Furthermore, the Board ignored other spikes at 50, 60, 65, and 72 cars.

Even if the Board refrains from implementing its CWB model—as it should—its proposed assumption that all shipments of less than 75 cars move in carload service has the potential to cause real harm to certain shippers. The Interested Parties include shippers that move some commodities in unit train service. The size of their UT shipments varies by commodity, region, railroad, and season. Although many of their UT shipments are 75 cars or more, a considerable number of their unit train shipments are less than 75 cars.³³

Therefore, the Board's proposed 75-car cut-off point would improperly result in many unit train shipments being costed as carload shipments, which would overstate the cost of service. If the Board adopts its 75-car minimum UT shipment size for purposes of calibrating URCS—either under a modified URCS Phase III model or in some other model, including CWB—the Board must allow parties in rate cases involving shipments of less than 75 cars to adjust the URCS formula for purposes of developing the issue movement variable costs and jurisdictional threshold. For example, if a captive shipper of a regulated commodity wishes to

³² As the Board noted in its *SNPR* at page 24, footnote 63, "The R-1 Schedule 755 instructions define 'way train' as 'trains operated primarily to gather and distribute cars in road service and move them between way stations or way points.'"

³³ At least three member shippers confirmed moving significant volumes in unit train shipments of less than 75 cars in 2016.

challenge a tariff rate on a 65-car movement that actually moves in unit trains, it must be allowed to cost that movement as a UT movement in the rate reasonableness proceeding.

VIII. CONCLUSION

The Board's overarching objective of eliminating all step functions between shipment types is misguided. Step functions in the cost curve reflect the realities of real world railroading in many cases. The unverified results produced by the Board's model raise serious doubts about its claim that the CWB adjustment is "more appropriate" than the current make-whole adjustment. The Board should not implement major changes to the URCS cost allocation formulae without first conducting empirical studies to validate the accuracy of the proposed changes.

Through its proposed CWB model, the Board would unwittingly create substantial steps within the SC shipment type, which is contrary to its stated objective of eliminating step functions. There is no practical difference between a one-car SC shipment and a two-car SC shipment in terms of the way they are handled between origin and destination, but the Board's proposed model imposes a substantial unit cost step between them.

More concerning, however, is that the Board's model essentially obliterates the very real cost differential between carload and unit train shipments. There is a significant difference in efficiency associated with handling cars in carload (SC and MC) service compared to UT service, but the CWB cost curve shows no break point (i.e., step) at the border between carload (SC and MC) and UT shipments. In practice, the CWB model would illogically assume there is no material cost differential between a 74-car shipment moved in manifest service and a 75-car shipment moved in unit train service under CWB.

The efficiency and make-whole adjustments are meant to recognize that certain operations are more efficient than the system average while others are less efficient than the system average. The Board's goal should be to determine the extent to which the operations are

more or less efficient than system average, but it should not discard the groups entirely or disregard the side of the equation on which they have been placed based on empirical studies.

Absent compelling proof that the efficiency and make-whole adjustments misallocate costs, the Board should not abandon them in favor of an untested theoretical construct. If the Board insists on implementing a change, it should implement a model that retains the cost relationships currently reflected in URCS Phase III, which were developed based on empirical studies, to the maximum extent practicable. Whatever URCS cost formula is in place, for purposes of maximum reasonable rate proceedings, all issue traffic shipments that actually move in UT service should be costed as UT shipments regardless of the number of cars in the shipment.

The STB's proposed plan of applying the new URCS variable costs only prospectively should be abandoned, and the Board should develop variable costs for all time periods on an apples-to-apples basis.

