

March 1, 2013

233892

*Via Electronic Filing*

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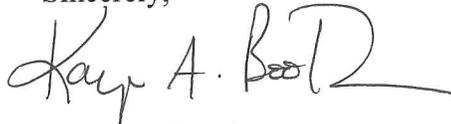
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**RE: Ex Parte 711—Petition for Rulemaking to Adopt Revised  
Competitive Switching Rules, Opening Submission of The National  
Industrial Transportation League**

Dear Ms. Brown:

Enclosed for filing in the above-captioned proceeding please find the Public version of the Opening Submission of The National Industrial Transportation League (League). To assist the Board in understanding the redactions made to the public version of the League's filing, the League notes that it has redacted Appendices B-L from the Verified Statement of Mr. Henry Julian Roman, which is attached to the League's filing as Exhibit 2.

Sincerely,



Karyn A. Booth

Enclosures

*Public Version*

BEFORE THE  
SURFACE TRANSPORTATION BOARD

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Docket No. Ex Parte 711

*PETITION FOR RULEMAKING TO ADOPT REVISED  
COMPETITIVE SWITCHING RULES*

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OPENING SUBMISSION

of

THE NATIONAL INDUSTRIAL TRANSPORTATION LEAGUE

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March 1, 2013

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THE NATIONAL INDUSTRIAL TRANSPORTATION LEAGUE

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The National Industrial Transportation League (“NITL” or “League”) hereby presents its Opening Submission in response to the Surface Transportation Board’s (“STB” or “Board”) decision commencing this proceeding to evaluate a proposal for new railroad competitive switching rules submitted by the League in a Petition for Rulemaking, filed on July 7, 2011 (“Competitive Switching Proposal” or “CSP”).<sup>1</sup> In its decision, dated July 25, 2012 (“Decision”), the Board solicited empirical information regarding the potential impact that increased rail competition derived from the Competitive Switching Proposal would have on shippers’ rates and service and on the railroad industry’s finances and networks. The Board also requested that commenting parties employ an “assumed access fee” which, the Board believed, would be necessary to perform the CSP impact analysis.

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<sup>1</sup> The League is filing simultaneously with the Board both Public and Highly Confidential versions of its Opening Submission.

In its Decision, the Board offered to make the 2010 Confidential Waybill (“Waybill”) available to conduct the study and requested that analyses be performed on a variety of issues. In this submission, the League fully responds to the Board’s request for information based on an analysis of the Waybill data and other publicly available information. The League’s study and comments specifically address the following tasks identified by the Board:

1. Identify the existing terminals and shippers located within the boundaries of those terminals, and explain whether the shippers within those terminals can obtain competitive switching and any restrictions or limitations on the shippers’ competitive switching rights.
2. Develop an “assumed access pricing methodology” in order to analyze the financial impact of the CSP on the rates of qualifying shippers and railroad revenue.
3. Identify the shippers, and revenue earned by Class I carriers from those shippers, that would be subject to competitive switching under the CSP. In performing this task, and due to limitations in the Waybill data, it was necessary to “identify shippers” based on calculations of the total number of carloads that originate or terminate at rail stations identified in the Waybill and that would otherwise qualify for access under the terms of the CSP. The League’s analysis also calculates the revenue currently earned by the incumbent Class I rail carrier from those impacted carloads. In response to the Board’s request, our expert also calculated an estimate of the total carloads and revenue if the CSP were changed as follows: (a) if the 240% revenue to variable cost ratio (“R/VC”) conclusive

presumption were changed to the RSAM;<sup>2</sup> and (b) if the 30-mile conclusive presumption were changed.

4. Estimate the rates that would be paid by shippers who qualify under the CSP and calculate the savings to such shippers. This calculation also estimates the total carloads and revenue that would be impacted if the CSP were changed as follows:
  - (a) if the 240% R/VC conclusive presumption were changed to the RSAM; and,
  - (b) if the 30-mile conclusive presumption were changed.
5. Estimate the “static” revenue reduction that would accrue to the four major Class I rail carriers if the CSP were adopted by the Board, and discuss sources of possible traffic/revenue gains that might accrue to Class I rail carriers from increased rail competition.
6. Discuss the impacts on shippers that would not qualify for competitive switching under the CSP.
7. Discuss the impact of the CSP on rail network efficiency.

In order to perform the detailed analyses requested by the Board, the League engaged two respected experts with substantial experience with both the U.S. and Canadian railroad industries and regulatory systems. Specifically, the League engaged Mr. Jay Roman, President of Escalation Consultants, Inc. to perform the economic analyses encompassed within Tasks 2-4 and to address Task 5 and 6 as described above. Mr. Roman is highly experienced in performing economic analyses of the rail industry, and his work routinely involves studies of rail rates and rail competition.<sup>3</sup> The League also engaged Mr. Tom Maville, President of TL Maville &

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<sup>2</sup> The Revenue Shortfall Allocation Method (“RSAM”) measures the average markup that a railroad would need to charge all of its potential captive traffic in order for the railroad to earn adequate revenues. The STB publishes the RSAM for each Class I railroad at [www.stb.dot.gov](http://www.stb.dot.gov).

<sup>3</sup> Roman V.S. at 1-2.

Associates, Inc., to address Task 7 above (impacts on railroad efficiencies and networks), based on an in-depth review of the existing Canadian interswitching regime and the impact of interswitching on the network efficiency and productivity of Canada's two largest railroads, the Canadian National Railway ("CN") and the Canadian Pacific Railway Company ("CP"). Mr. Maville has more than 40 years of experience in rail freight transportation in both the private and public sectors and has played a major role in the development of Canada's federal rail policies and legislation.<sup>4</sup>

Accordingly, in this submission, the League summarizes and sets forth the results of the studies performed by its experts and provides additional information and recommendations in response to the Board's requests. The League also addresses the need for reform of the current reciprocal switching rules, as well as implementation of the Competitive Switching Proposal and related procedural matters. This submission is specifically comprised of the following parts:

1. Opening Comments of the League.
2. Verified Statement of Mr. Jay Roman, President of Escalation Consultants, Inc., Gaithersburg, Maryland, attached as Exhibit 1.
3. Verified Statement of Mr. Tom Maville, President of TL Maville & Associates Inc., Ottawa and Vancouver, British Columbia, attached as Exhibit 2.

## **I. IDENTITY OF THE LEAGUE**

The League is one of the oldest and largest national associations representing companies engaged in the transportation of goods in both domestic and international commerce. The League was founded in 1907, and currently has over 500 company members. These company members range from some of the largest users of the nation's and the world's transportation system, to smaller companies engaged in the shipment and receipt of goods. The majority of the League's

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<sup>4</sup> Maville V.S. at 2-3.

members include shippers and receivers of goods; however, third party intermediaries, logistics companies, and other entities engaged in the transportation of goods are also members of the League. Rail transportation is vitally important for many League members and especially for those who ship chemicals, petroleum, agricultural, cement, paper and forest products, and other bulk commodities. Some of the League's members are "captive shippers" operating facilities or shipping to customers that have access to only a single rail carrier and would benefit from adoption of the CSP.

## **II. OVERVIEW OF THE LEAGUE'S COMPETITIVE SWITCHING PROPOSAL AND THE BOARD'S JULY 25, 2012 NOTICE**

### **A. BACKGROUND OF THE LEAGUE'S PETITION FOR RULEMAKING AND COMPETITIVE SWITCHING PROPOSAL**

On July 11, 2011, the League submitted a comprehensive Petition for Rulemaking at the STB requesting that the Board repeal the existing rules and precedent for obtaining competitive access to a second rail carrier via reciprocal switching arrangements. The League's Petition demonstrated that, despite the broad provisions in the Staggers Act which require the establishment of switching arrangements that are "practicable and in the public interest" or "necessary to provide competitive rail service,"<sup>5</sup> the existing reciprocal switching rules and precedent have *never* been successfully used to create rail competition.<sup>6</sup> The League reviewed the broad statutory language applicable to switching arrangements and its legislative history and reasonably concluded that the current rules have wholly failed to fulfill the intention of the Staggers Act to "encourage reciprocal switching as a way to encourage greater competition."<sup>7</sup>

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<sup>5</sup> 49 U.S.C. §11102(c).

<sup>6</sup> STB EP 711, NITL Petition for Rulemaking to Adopt Revised Competitive Switching Rules (July 7, 2011) at 10-16 (hereafter "Petition").

<sup>7</sup> Petition for Rulemaking at 11, citing, H.R. Rep. No. 96-1035, at 67 (1980).

Indeed, the League's Petition examined every competitive access decision considered by the Board's predecessor, the Interstate Commerce Commission, and determined in its Petition that the evidentiary burdens, complexity and costs associated with the current rules created insurmountable obstacles for shippers who have tried to pursue reciprocal switching arrangements. This onerous regulatory scheme has had a chilling effect on any future actions by shippers and not a single shipper has even attempted to obtain reciprocal switching for more than fifteen years, despite the loud cries from captive shippers for greater rail competition during the past decade. Thus, the current switching rules and precedent were shown by the League to be completely unworkable and contrary to Congressional intent.

The League's Petition also demonstrated that the Board has clear authority and broad discretion to adopt new rules on competitive switching,<sup>8</sup> based on the wording of the statute and long-standing case law. Moreover, the League established that substantial changes in the railroad transportation market have occurred since the existing switching rules were adopted in 1985, including increased consolidation of the rail industry and the substantially improved financial health of the industry, and that these factors justify the Board changing its competitive access policy.<sup>9</sup>

Against this backdrop, the League's Petition asked the Board to initiate a rulemaking proceeding to adopt new balanced competitive switching rules that would apply only to captive rail shippers that can meet certain conditions. The League's proposal is reasonably designed to restore rail competition in circumstances where railroads are shown to exercise market power over their captive customers and where access to a second rail carrier occurs within a reasonable

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<sup>8</sup> Petition at 16-23. See 49 U.S.C. §11102(c); *Motor Vehicles Mfrs. Ass'n v. State Farm*, 463 U.S. 29, 42, 57 (administrative agency may change its policies with adequate explanation).

<sup>9</sup> Petition for Rulemaking at 24-25.

distance of the shipper's captive facility(ies). The League's proposal is founded on four basic principles:

1. Competitive switching would be available only to shippers at facilities that are rail-served only by a single, Class I rail carrier. This first principle applies to both a shipper and a receiver or to a group of shippers or receivers.
2. Competitive switching would be available only for movements that are without effective inter- or intra-modal competition. This second principle includes the following two conclusive presumptions, either of which could be satisfied by the shipper to fulfill this condition: (a) the rail carrier has transported 75% or more of the traffic for a movement during the preceding 12 month period; or (b) the movement has a revenue to variable cost ratio ("R/VC") of 240% or more.<sup>10</sup> If a shipper is unable to qualify under either conclusive presumption, the shipper could still apply for competitive switching under the League's CSP but would need to litigate before the Board the issue of inter or intra-modal competition for its movements.
3. Competitive switching would be available only where there is or can be a working interchange between a Class I rail carrier and another carrier within a reasonable distance of the shipper's origin or destination facilities. This third principle includes the following two conclusive presumptions, either of which could be satisfied by a shipper to fulfill this condition: (a) the shipper's facilities and the lines of another carrier were within the boundaries of a "terminal" of the Class I rail carrier that currently exists as of July 7, 2011 or that the Class I carrier

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<sup>10</sup> The League notes that due to limitations in the Waybill data its analyses of the CSP include only the 240% R/VC conclusive presumption and not the 75% market share presumption, since a shipper's total traffic volume for a movement cannot be determined from the Waybill.

establishes in the future, at which cars are regularly switched; or (b) the shipper's facilities are within a radius of 30 miles of an interchange between the Class I rail carrier and another carrier, at which cars are regularly switched. If a shipper is unable to qualify under either conclusive presumption, the shipper could still apply for competitive switching under the League's CSP but would need to litigate before the Board the issue of access to a working interchange.

4. Competitive switching would not be available if the rail carrier can show that the switching would be infeasible or unsafe, or would unduly hamper the ability of that carrier to serve its existing shippers. This fourth principle is intended to insure that the new competitive switching regime would not compromise safety or operational feasibility, or would not undermine service to existing shippers.

A more detailed summary of the League's proposal is set forth in Exhibit 3 to this submission.

**B. THERE IS BROAD SUPPORT FOR COMPETITIVE SWITCHING REFORM AND FOR THE BOARD TO INITIATE A RULEMAKING PROCEEDING ON THE CSP**

The League's Petition was filed on the heels of the Board's public hearing in STB Ex Parte No. 705, *Competition in the Railroad Industry*, a proceeding in which the Board itself recognized that the rail industry has experienced substantial changes since passage of the Staggers Act, and that such changes warranted an inquiry as to the current state of rail competition in the United States. In Ex Parte 705, the Board solicited comments and testimony regarding *specific* policy changes that could facilitate competitive rail service and the impact of such changes on shippers and carriers. As clearly demonstrated in the League's Petition, the record developed in Ex Parte 705 showed that there is substantial support among a broad cross-section of shippers and government interests for the Board to revise its current reciprocal

switching rules.<sup>11</sup> Specifically, the United States Department of Agriculture (“USDA”) and shippers representing agriculture, clay, chemicals, coal, fertilizer, glass, paper, petroleum, and other industries strongly advocated reform of the existing switching regulations. Furthermore, many of these same interests, as well as other parties, filed replies to the League’s Petition for Rulemaking expressly supporting affirmative action by the Board to open a rulemaking on the League’s CSP:

◦ Alliance of Automobile Manufactures (“AAM”): “The Alliance strongly urges the Board to grant the League’s Petition and to issue a Notice of Proposed Rulemaking on the proposal detailed by the League.”<sup>12</sup>

◦ American Chemistry Council (“ACC”): “NITL’s competitive switching proposal represents a reasonable, workable and predictable standard for granting competitive reciprocal switching. The need for such competitive access was amply demonstrated by the comments and testimony provided to the Board in Ex Parte No. 705, Competition in the Rail Industry. ACC therefore urges the Board to issue a notice of proposed rulemaking to establish a record for comment on the NITL proposal.”<sup>13</sup>

◦ Consumers United for Rail Equity (“CURE”): “CURE encourages the Board to grant the League’s Petition, institute a rulemaking proceeding by issuing for comment the proposed new Part 1145 of the Code of Federal Regulations, and, after notice and opportunity for

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<sup>11</sup> Petition at 26-28, citing to Comments by the U.S. Dept. of Agriculture, the Interested Parties (comprised of a group of 25 associations representing agriculture, clay, chemicals, coal, glass, paper, petroleum, and other shippers), American Chemistry Council, The Fertilizer Institute, Consumers United for Rail Equity, E.I. du Pont de Nemours & Co., Olin Corp., Westlake Chemical Corp., Total Petrochemicals USA, Inc., PPG Industries, Inc., and Dow Chemical Co.

<sup>12</sup> AAM Reply at 2.

<sup>13</sup> ACC Reply at 2.

comment, adopt the new Part 1145 of the Code of Federal Regulations in lieu of the current Ex Parte No. 445 rules.”<sup>14</sup>

° Glass Producers Transportation Council (“GPTC”): “GPTC strongly urges the Board to grant the League’s Petition and to issue a Notice of Proposed Rulemaking on the proposal detailed by the League. GPTC believes that the League’s proposal represents a fair and balanced effort to improve the state of competition in the rail transportation industry, and would provide increased competition for captive shippers without harming carriers.”<sup>15</sup>

° Interstate Asphalt Corp. (“IAC”): “IAC provides enthusiastic support for the Petition filed by NITL. The Board should institute a proceeding to consider that Petition, providing an opportunity for all concerned to submit evidence and argument on the subject matter.” IAC Reply at 2.

° Olin Chemical: “NITL’s proposal is a serious attempt to encourage natural competition where it is possible, while taking into account the concerns and needs of the railroads.”<sup>16</sup>

° Paper & Forest Industry Transportation Committee (“PFITC”): “Issuance of a Notice of Proposed Rulemaking on the League’s proposal would permit the industry as a whole to comment on the proposal and to guide the Board in its effort to improve the state of competition in the rail industry.”<sup>17</sup>

° PPL Corporation (“PPL”): “Coal is currently shipped via NS to PPL generating stations under a rail transportation contract. Once that contract expires, PPL will be able to file a rate case challenging the level of NS coal rates as excessive. However, if it is possible to bring

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<sup>14</sup> CURE Reply at 2.

<sup>15</sup> GPTC Reply at 2.

<sup>16</sup> Olin Reply at 1.

<sup>17</sup> PFITC Reply at 1.

competitive pressures to bear, either through competitive switching or in other ways, and if such competition is effective, constraining NS rates to reasonable levels and possibly resulting in improved service, PPL wants to explore such alternatives to rate litigation. Accordingly, the Board should initiate the requested rulemaking proceeding.”<sup>18</sup>

° The Fertilizer Institute (“TFI”): TFI strongly urges the Board to grant the League’s Petition and to issue a Notice of Proposed Rulemaking on the proposal detailed by the League. TFI believes that the League’s proposal represents a fair and balanced effort to improve the state of competition in the rail transportation industry, and would provide increased competition for captive shippers without harming carriers.”<sup>19</sup>

° Steel Manufacturers Association (“SMA”): “SMA views expanded access to reciprocal switching as a necessary method to promote competition in rail markets in which competition is too often severely strained. We support NITL’s proposal for elimination of the current rules and precedent for reciprocal switching, along with the establishment of new rules for competitive switching, with conditions outlined by the NITL.”<sup>20</sup>

° US Department of Agriculture: “The Department of Agriculture supports the National Industrial Transportation League’s petition for a rulemaking to adopt revised competitive switching rules and urges the Board to hold a proceeding on this issue. USDA believes that reciprocal switching was intended to be broadly available to shippers by the Staggers Act and Interstate Commerce Commission Termination Act, under 49 U.S.C. 11102(c).....”<sup>21</sup>

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<sup>18</sup> PPL Reply at 2.

<sup>19</sup> TFI Reply at 1.

<sup>20</sup> SMA Reply at 1.

<sup>21</sup> USDA Reply at 1.

Accordingly, the League's Competitive Switching Proposal responded directly to the Board's request for specific concepts for facilitating rail competition that it could evaluate and implement. It also included reforms and proposed rules that are widely desired and supported by a broad variety of industries and government interests.

C. ISSUANCE OF THE STB'S NOTICE IN EX PARTE 711

On July 25, 2012, the Board issued its Decision commencing this proceeding to evaluate more thoroughly the League's Competitive Switching Proposal, requesting empirical analyses on the impact of the proposal on shippers' rates and services and railroad revenue and network efficiencies. The Board specifically requested information on (1) the impact on rates and service for shippers that would qualify under the competitive switching proposal; (2) the impact on rates and service for captive shippers that would not qualify under the proposal because they are not located in a terminal area or within 30 miles of a working interchange; (3) the impact on the railroad industry, including its financial condition, and network efficiencies (including the potential for increased traffic); and (4) an assumed access pricing methodology which the Board believed was needed to determine the impact of the proposal.<sup>22</sup>

The Board also expressed its interest in analyses that consider modifications to certain conclusive presumptions in the League's proposal, for example, by changing the 30-mile distance to a working interchange or changing the 240% R/VC that would conclusively establish railroad market power over a movement.<sup>23</sup> The Board specifically expressed its curiosity in an analysis that replaces the 240% R/VC with the railroads' 4-year average Revenue Shortfall Allocation Methodology ("RSAM") benchmark.<sup>24</sup> As noted at the very beginning of this

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<sup>22</sup> Decision at 2.

<sup>23</sup> *Id.*

<sup>24</sup> *Id.*

submission, the League has conducted all of the analyses requested by the Board, including data runs on both mileage and the RSAM alternatives. The results of those analyses are summarized in Section IV below.

Although the League requested that a Notice of Proposed Rulemaking be initiated, based on the substantial evidence in the Ex Parte 705 record and the League's comprehensive Petition, the Board chose instead to initiate this proceeding to study the impact of the League's Competitive Switching Proposal. Although the League understands the Board's desire for a data-driven analysis of the Competitive Switching Proposal as a preliminary matter, the League strongly believes that at the conclusion of this study phase, the Board will have more than sufficient information to justify the prompt opening of a Notice of Proposed Rulemaking on the Competitive Switching Proposal. Indeed, the League believes that the vast information provided to the Board in this initial study phase regarding the CSP is the functional equivalent of an Advance Notice of Proposed Rulemaking, and requests that the Board clarify this as a procedural matter in any future decision in this proceeding.

Furthermore, as previously explained, the existing records in both this Ex Parte 711 proceeding and the Ex Parte 705 proceeding clearly demonstrate the substantial need for increased rail competition, as well as broad and substantial support for adoption of new competitive switching rules to address that need. In its Petition for Rulemaking, the League provided a concrete proposal with detailed regulatory text and legal analysis, and in this proceeding the League is providing the Board with detailed empirical analyses that reasonably estimate the impact of the League's CSP. Shippers have been waiting three decades for the Staggers Act's promise of competitive switching to become a reality and the Board should not delay needed reforms by creating additional regulatory hoops and costly legal proceedings before

implementing the required changes. The League strongly believes that it would not be necessary to require an additional phase of information gathering once this study phase is concluded, given the tremendous amount of information that the Board will have already collected on competitive switching in both Ex Parte 711 and Ex Parte 705. In other words, at the conclusion of this study nothing more will be needed for the Board to proceed to a rulemaking on competitive switching and, thus, the League respectfully urges the Board to act swiftly to publish a Notice of Proposed Rulemaking on the League's CSP.

D. THE BOARD SHOULD CLARIFY THAT THE CSP IS INTENDED TO SUPPLEMENT AND NOT REPLACE OTHER REGULATORY REMEDIES

In the Board's Decision, it is suggested that the competitive access created under the CSP could foreclose a rate case remedy for any eligible shipper because there "may be no market dominance": "[u]nder this proposal because both Railroad 1 and Railroad 2 could quote rates from Origin to Destination there may be no market dominance, and hence the Board may not regulate the reasonableness of those rates."<sup>25</sup> Further, the Board stated that "[u]nder the assumption that competition between Railroad 1 and Railroad 2 would ensure reasonable rates and service between Origin and Destination, we could focus our resources only on the access price for the first 30 miles of the movement under NITL's proposal."<sup>26</sup>

Although the CSP could result in authorized switching arrangements, it is critical for the Board to recognize that the proposal only creates *opportunities* for railroads to compete but it does not guarantee that they will compete. Many shippers have concerns that the competitive opportunities that could be derived from the CSP may never come to fruition because the effectiveness of competitive switching is dependent upon the level of the switching rate charged

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<sup>25</sup> Decision at 6.

<sup>26</sup> *Id.*

by the incumbent railroad and the willingness of the competitive railroad to compete. Neither the Board's current rules nor the CSP establish the switching rate to be assessed and, thus, an incumbent railroad could undermine the effectiveness of competitive switching by refusing to agree upon a reasonable switch rate. Additionally, because competitive switching is a less direct form of competition, it is even more susceptible to the outside rail carrier choosing not to compete for business despite switching access.

Indeed, these concerns are not simply theoretical, since the Ex Parte 705 record is replete with examples of the railroads no longer competing even when two railroads have direct access to a shipper.<sup>27</sup> Moreover, the pending rail fuel surcharge class action litigation includes evidence of the railroads not competing.<sup>28</sup> In that litigation, the railroads themselves have contended that captive shippers have limited-to-no competition, directly contradicting their Ex Parte 705 testimony in which they claimed that shippers' competitive concerns are exaggerated and that rail competition is robustly available.<sup>29</sup> Thus, the Board's "assumption" that competitive switching will guarantee reasonable rates may not be true. Because there is no assurance that

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<sup>27</sup> See, e.g., Comments filed in STB Ex Parte No. 705, *Competition in the Railroad Industry*, by Ameren Corporation at p. 3-5 (filed April 12, 2011); Alliance for Rail Competition, American Chemistry Council, American Forest and Paper Association, et al. at p. 9-16 (filed April 12, 2011); Concerned Captive Coal Shippers at p. 70 and 95-96 (filed April 12, 2011); Consumers United for Rail Equity at p. 15 (filed April 12, 2011); The Fertilizer Institute at p. 4 (filed April 12, 2011); Roseburg Forest Products at p. 4 (filed April 4, 2011); and TOTAL Petrochemicals USA, Inc. (written testimony) at p. 5 (filed April 12, 2011).

<sup>28</sup> See, e.g., Plaintiffs' Memorandum in Support of Motion for Class Certification at p. 3, 13-15, and 45-47, MDL Docket No. 1869, Case No. 1:07-mc-00489-PLF-JMF, U.S. District Court for the District of Columbia, *In Re: Rail Freight Fuel Surcharge Antitrust Litigation* (filed March 30, 2010); Transcript of Class Certification Hearing, Day 1, at p. 74, 90-91, 98-114, 121, and 124, MDL Docket No. 1869, Case No. 1:07-mc-00489-PLF-JMF, U.S. District Court for the District of Columbia, *In Re: Rail Freight Fuel Surcharge Antitrust Litigation* (hearing Oct. 6, 2010).

<sup>29</sup> See, e.g., Defendants' Petition for Permission to Appeal Pursuant to Federal Rule of Civil Procedure 23(f) at p. 15-18, Case No. 12-8008, U.S. Court of Appeals for the D.C. Circuit, *In Re: Rail Freight Fuel Surcharge Antitrust Litigation* (filed July 5, 2012); Transcript of Class Certification Hearing, Day 1, at p. 30, MDL Docket No. 1869, Case No. 1:07-mc-00489-PLF-JMF, U.S. District Court for the District of Columbia, *In Re: Rail Freight Fuel Surcharge Antitrust Litigation* (hearing Oct. 6, 2010); Defendants' Memorandum of Law in Opposition to Plaintiffs' Motion for Class Certification at p. 4, MDL Docket No. 1869, Case No. 1:07-mc-00489-PLF-JMF, U.S. District Court for the District of Columbia, *In Re: Rail Freight Fuel Surcharge Antitrust Litigation* (filed Aug. 10, 2010) ("Many shippers are served by only one railroad. Where there is no railroad competition for a shipper's business, an alleged conspiracy among railroads cannot restrain competition, and it is unlikely that such a shipper would suffer impact.").

railroads will actually compete under the CSP, if a shipper chooses to pursue competitive switching, the STB should not automatically assume a lack of market dominance if the shipper later files a rate case. Rather, an analysis of the facts, including the switching rate established, would need to be reviewed to determine if the competition created by switching is “effective.”

Furthermore, even though a shipper may qualify for competitive switching under the CSP, it should not be required to pursue that remedy as a predicate to filing a rate case and establishing market dominance. Rather, shippers should retain their choice of remedy. In developing its CSP, the League did not intend to limit or foreclose captive shippers’ options to address railroad market power. The CSP is intended to operate as a supplement to, and not a replacement for, the existing remedies available to shippers. The League strongly believes that the intent of the Staggers Act was to allow shippers both rate and switching remedies, and that the existence of one option should not foreclose pursuit of the other. Accordingly, the League requests that the Board clarify this important issue in any future decision issued in this proceeding.

### **III. SUMMARY OF COMMENTS AND EVIDENCE**

The League’s Opening Submission fully responds to the Board’s requests for analyses on the impact of the League’s CSP. Most importantly, its comprehensive analyses of the Board’s Waybill data demonstrates that the CSP would inject reasonable competition into the captive freight rail market for the benefit of qualifying shippers, without economically harming the U.S. Class I railroads. The League strongly believes that the detailed analyses submitted to the Board fully support adoption of the CSP and the League urges the Board to promptly open a notice of proposed rulemaking in order to adopt the CSP. More specifically, this submission establishes the following:

- The Board’s current reciprocal switching rules, and its precedent implementing those rules, have utterly failed to fulfill the promise in the Staggers Act to encourage rail competition through the establishment of switching arrangements that are “practicable and in the public interest” or “necessary to provide competitive rail service.”
- The Board has obtained substantial evidence from captive shippers across multiple industries in both this Ex Parte 711 proceeding and its Ex Parte 705, *Competition in the Rail Industry*, proceeding which demonstrates a strong need for increased rail competition and a strong preference that competitive switching arrangements be created to allow facilities that are served by only one Class I rail carrier access to a second rail carrier.
- The League’s CSP would provide captive shippers who are obviously subject to railroad market power (i.e. rail captive movements with R/VC ratios of 240% or more and/or a 75% market share) with access to a second rail carrier via competitive switching, under certain clearly-defined conditions that account for a lack of effective rail competition, as well as railroad operations and efficiencies. Thus, the CSP does not overreach; it is a balanced and reasonable solution to address the needs of those shippers who are the most severely disadvantaged; and it is not “open access.”
- By proposing to increase competitive switching arrangements, the League’s CSP would expand usage of an existing practice that occurs on a daily basis between railroads and, thus, the League’s proposal does not require carriers to engage in “new” or unfamiliar operations to increase rail competition to captive shippers.
- For the purpose of performing the analysis of the CSP, the League has developed an assumed access fee methodology that is reasonably based on the existing Canadian interswitching cost-based methodology, with appropriate adjustments and simplifications.
- The League’s analyses of the CSP were focused on the four major Class I railroads (BNSF, UP, CSXT, and NS) and were performed under two scenarios of (i) full competition; and (ii) reduced competition. The results under both scenarios establish that only a small percentage of traffic, i.e. carloads, will be subject to the CSP. Specifically, only 4% of all carloads under full competition and even less under reduced competition. Further, the savings that would accrue to shippers and, thus, the revenue reduction that would result for the major Class I carriers is less than \$1.3 billion or only 2.4% of those carriers’ gross revenue (\$52.9 billion) under the full competition scenario and the impact is even less, approximately \$908 million, under the reduced competition scenario. In light of the benefits of competition, these revenue reductions will not cause undue financial harm to the railroad industry. Moreover, the impact of the League’s proposal on

railroad revenue is likely to be reduced even further based on increased traffic volumes that can reasonably be expected to accrue to the Class I railroads once rates are reduced to more competitive levels.

- As requested by the Board, the League’s analyses include results for alternatives to the 30-mile conclusive presumption and the 240% R/VC conclusive presumption contained in the CSP. Specifically, the League’s study includes analyses that were run at 40 and 20 miles and that applied the RSAM. However, the League *strongly* believes that both the 20-mile and RSAM alternatives would result in too few shippers being able to benefit from the CSP and that use of such alternatives is wholly unnecessary given the limited impact of the CSP on railroad revenue as originally proposed. Thus, the League does not believe that the Board should seriously consider those alternatives.
- The League determined that there would be no meaningful impact on captive shippers that do not qualify under the CSP and that the CSP would not adversely impact rail network efficiencies and, in fact, could possibly increase such efficiencies. To the extent that any application for competitive switching under the CSP might impact operating efficiency, the CSP directly accounts for such impact in its very standards of applicability.
- The Board should clarify in any future decision that this initial phase to study the impact of the League’s CSP is akin to an Advanced Notice of Proposed Rulemaking and that no further information gathering will be needed to proceed to a Notice of Proposed Rulemaking. Indeed, the League believes that the Board is fully justified in opening a rulemaking proceeding to implement the CSP and it respectfully urges the Board to do so promptly.
- Finally, the Board should also clarify that the League’s CSP would operate as a supplement to rather than a substitute for other existing regulatory remedies; that it would not defeat market dominance determinations required in rate cases; and that it would not require a shipper to pursue a CSP remedy prior to filing a rate complaint to address unreasonable railroad market power.

#### **IV. THE INFORMATION AND ANALYSES SUBMITTED BY THE LEAGUE FULLY SUPPORT ADOPTION OF THE LEAGUE’S COMPETITIVE SWITCHING PROPOSAL**

In its July 25, 2012 Decision, the Board indicated that the League’s Competitive Switching Proposal “has the potential to promote more rail-to-rail competition” and would “permit the agency to rely on competitive market forces to discipline railroad pricing from origin to destination,” thus permitting the agency to reduce its role in the direct regulation of railroad

prices.<sup>30</sup> The agency characterized the League’s proposal as “thoughtful,” and noted that it was “responsive” to the Board’s Ex Parte No. 705 proceeding. However, the Board indicated that it could not “fully gauge [the] potential impact of the proposal”, and called upon the League and other interested parties to “receive empirical evidence on the impact of the proposal on shippers and the railroad industry.”<sup>31</sup>

A. INFORMATION ON EXISTING RECIPROCAL SWITCHING AND SIMILAR ARRANGEMENTS

The first issue identified by the Board for the analysis of the CSP was to:

Identify the existing terminals and shippers located within the boundaries of those terminals, and to explain whether the shippers within those terminals can obtain competitive switching and any restrictions or limitations on the shippers’ competitive switching rights.<sup>32</sup>

1. Existing Reciprocal Switching Arrangements of Major U.S. Class I Carriers

As the Board well knows, rail carriers are required to publish tariffs that set forth the terms and conditions of their service. Each of the four major U.S. Class I carriers has published tariffs setting out the terms and charges for switching, including “reciprocal switching,” which tariffs can be accessed through each carrier’s website: (a) BNSF Switching Book 8005-C; (b) UP’s Reciprocal Switching Circular; (c) Sections I-D and III-C of CSXT Tariff 8100; and, (d) Sections 4 and 5 of NS’ Tariff 8001-A.<sup>33</sup> These tariffs set forth in detail the terminals that currently qualify for switching; the shippers’ facilities within those qualifying terminals; the commodities covered by reciprocal switching; the applicable switch fees; and any limitations on the shippers’ competitive switching rights.

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<sup>30</sup> Decision at 2.

<sup>31</sup> *Id.*

<sup>32</sup> Decision at 9.

<sup>33</sup> For BNSF, see <<http://domino.bnsf.com/website/prices.nsf/PriceRpt?Open&mp>>. For UP, see <[http://www.uprr.com/customers/shortline/attachments/current\\_uprsc.pdf](http://www.uprr.com/customers/shortline/attachments/current_uprsc.pdf)>. For CSXT, see <<http://www.csx.com/index.cfm/customers/prices-tariffs-fuel-surcharge/tariffs/the-csxt-8100-tariff/>>. For NS, see <<http://www.nscorp.com/nscorphtml/publications/NS8001-A.pdf>>.

Although it is not possible to determine from the Waybill the number of shipments originating at or destined to those terminals that qualify for reciprocal switching under the railroads' tariffs, that information would be readily available to the individual carriers operating at such terminals. However, an examination of the carriers' switching tariffs indicates that such arrangements are geographically widespread; cover a range of commodities and shippers; and set forth a relatively consistent range and average of switch fees.

Section 1 of BNSF Switching Book 8005-C names over 750 shippers' facilities in over 120 individual cities and communities across the entire western United States as BNSF-served "open industries." Section 2 of the same tariff lists the reciprocal switching charges for these locations, ranging in size from industries in large cities such as Chicago, IL (where 25 facilities are open to reciprocal switching), Kansas City MO/KS (53 facilities open to reciprocal switching), and Phoenix, AZ (31 industries open), to such communities as Devil's Lake, ND, Newton, KS, and Tupelo, MS, where just a couple of industries in each community qualify.<sup>34</sup> The charges in this tariff range from \$50 to \$1067 per car; and a review of the charges published in Section 2 of the BNSF's tariff indicates that the simple average reciprocal switching charge is a little less than \$250 per car. The most common charge listed in Section 2 is published in Item 50 of the BNSF's tariff, which lists a charge of \$160 per car for reciprocal switching involving the Union Pacific.<sup>35</sup> In setting forth the charges applicable, the BNSF reciprocal switching tariff does not reference mileage or any other factor that would appear to explain the difference in the charges to various industries. Moreover, switching charges apply to the geographic area of an

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<sup>34</sup> See BNSF Tariff 8005-C, including all revisions up to those effective January 9, 2013.

<sup>35</sup> In the UP/SP merger, the UP and BNSF agreed upon a maximum reciprocal switching charge of \$130 per car at both 2-1 points and non-2-to-1 points. This \$160 per car charge appears to be that charge, as increased over time. See, *Union Pacific Corporation, et al – Control and Merger – Southern Pacific Rail Corporation, et al.*, 1 S.T.B. 233, 416, fn 170 (1996).

entire city. There is no overt relationship between the tariff charge and the physical mileage over which the shipper's traffic must be moved to the connecting carrier.

The UP reciprocal switching tariff shows less detail than that of BNSF.<sup>36</sup> UP's stated reciprocal switching charges apply to an entire city, and like BNSF's tariff, there is no reference to mileage or any other factor that might explain the difference in charges between cities or in the distance that various shippers' goods must be moved. The UP's tariff also contains a list of the specific facilities where the reciprocal switch charge is absorbed by the UP. The UP tariff applies to over 100 different communities across the western United States and encompasses over 800 separate shippers' facilities in these communities. The charges are similar to those in the BNSF tariff: the switch fees range from \$100 to \$700 per car, with a simple average charge of less than \$250 per car, not including numerous "exceptions" listed with lower charges.

CSXT Tariff 8100 (with all revisions effective up to July 7, 2012) lists, in Section I-D, over 350 facilities located in over 80 separate cities and towns in the eastern United States that are covered by reciprocal switching. For example, Section I-D lists over 25 separate facilities in Buffalo, NY where the listed reciprocal switching charge applies, under which cars may be switched between CSXT and the CN, the NS, or the BPRR. Similarly, over 50 separate facilities are listed as subject to reciprocal switching service in Detroit, MI, with cars eligible for switching between the CSXT on the one hand and the CN or the NS on the other. Section III-C of the CSXT tariff lists over 120 separate tariff charges applicable to reciprocal switching on the CSXT system, ranging from \$100 to \$750 per car; the simple average charge is approximately \$400 per car. Again, there is no description of mileage or any other factor that would explain the

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<sup>36</sup> See UP Reciprocal Switching Circular (effective December 12, 2012).

development or level of switch fees applicable to each city. While the tariff in some cases restricts the switching to a particular commodity, in most instances no commodity is listed.

Similarly, the NS reciprocal switching tariff (NS Tariff 8001-A, Sections 4 and 5, including revisions effective January 1, 2013) applies a single reciprocal switching charge to an entire city, with a separate rate for each railroad within the city. Section 5 of the tariff lists the specific facilities in each city that are subject to the reciprocal switching charges. No mileages are listed, but occasionally the reciprocal switch charge is limited to certain commodities or facilities. The NS tariff lists over 100 cities and communities in which reciprocal switching takes place, including over 175 separate industries and rates applying to those industries, ranging from \$65 per car to \$700 per car; the simple average charge appears to be approximately \$400 per car.

## 2. Shared Asset Areas

In addition to reciprocal switching districts established by and between rail carriers, carriers have also established other forms of joint operation. Perhaps the most prominent of these is the “Shared Asset Areas” (“SAAs”) established by the NS and CSXT in STB Finance Docket No. 33388, *CSX Corporation and CST Transportation, Inc., Norfolk Southern Corporation and Norfolk Southern Railway Company – Control and Operating Leases/Agreements – Conrail, Inc. and Consolidated Rail Corporation*, 3 S.T.B. 196, 228 (1998). In that proceeding, CSXT and NS agreed to establish three extensive areas, to be operated by Conrail for the benefit of both carriers, in which shippers within these three areas would have access to both NS and CSXT, and where Conrail would provide switching to the carrier of the shippers’ choice. The North Jersey SAA encompasses all former Conrail Northern New Jersey trackage and other trackage extending south to Trenton, a total of about 470 miles of

track,<sup>37</sup> extending over about a 40-mile area. The South Jersey/Philadelphia SAA encompasses all stations within the city limits of Philadelphia as well as points south, about 372 miles of track,<sup>38</sup> extending over about a 30-mile area. The Detroit SAA encompasses all former Conrail trackage from Michigan Line Milepost 7.4 south to and including Detroit Line Milepost 20, or about 359 miles of track,<sup>39</sup> extending over about a 25-mile area.

### 3. Conclusions Regarding Existing Switching Arrangements

A number of conclusions can be derived from the reciprocal switching information contained in the four major carriers' switching tariffs and from existing switching arrangements.

First, reciprocal switching is a common practice. It is practiced today by all four major U.S. Class I railroads in various communities throughout the United States, and applies to a variety of industries and commodities.

Second, the application of switching in a particular community can cover a range of geographic areas.<sup>40</sup> Competitive switching within the SAAs established by the NS and CSXT covers a large geographic area – 30 or 40 miles across. Reciprocal switching operations take place in large urban cities in the United States, including Cleveland and Cincinnati, OH; Detroit, MI; Chicago, IL; Kansas City MO/KS; and others.

Third, published reciprocal switching charges extend over a fairly wide range, from a low of less than \$100 to a high of over \$1000 per car. However, a review of the published charges indicates that the frequency of charges in this range is concentrated much more narrowly: in the western United States, most BNSF and UP charges are from \$200 to \$300 per car. In the east,

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<sup>37</sup> Conrail Operations, <http://conrail.com/freight.htm>.

<sup>38</sup> *Id.*

<sup>39</sup> *Id.*

<sup>40</sup> However, the League would note that many shippers have serious concerns about actions by railroads to reduce the number of shipper facilities that are “open” to switching.

the charges are somewhat higher, with most charges published in the \$400 to \$500 range. The average charge in the West is less than \$300; in the East, the average charge is somewhat higher, and closer to \$400 per car.

Fourth, the tariff charges are not on their face conditioned on distance or appear to be established on the basis of any other objectively-determined factor, such as the type of commodity. While in a few cases there are separately-published rates for trainload “switches,” the tariffs do not generally establish different rates for “cuts” of cars less than trainload quantities. The distances over which reciprocal switching takes place do not seem to be the driving factor, evidenced by the fact that reciprocal switching tariff charges in the western United States, where distances are presumably greater, are generally less than such tariff charges in the East.

Finally, as will be discussed later, because the presumptions applicable to the League’s CSP make the CSP applicable to only the most “captive” situations (e.g., where the shipper is already served by just one Class I carrier; where the rates are above 240% R/VC; etc.), it is reasonable to assume that movements currently eligible for reciprocal switching under the carriers’ tariffs would not also be eligible for competitive switching under the CSP. This is because movements already subject to competition are likely to be paying rates that are well below the rate levels being paid by captive shippers who might qualify for relief under the CSP. Stated another way, it is likely that all movements eligible for the CSP would be in addition to movements currently eligible for reciprocal switching, and thus there is likely little or no “overlap” between movements currently eligible for reciprocal switching and the numbers developed in Section IV.C of this Opening Submission.

B. THE LEAGUE HAS BASED ITS ASSUMED ACCESS PRICING METHODOLOGY ON THE METHODOLOGY AND FIGURES USED UNDER CANADIAN INTERSWITCHING, WITH ADJUSTMENTS AND SIMPLIFICATIONS

1. Interswitching in Canada and the Development of Canadian Interswitching Charges

Section 127 of the Canada Transportation Act (“CTA”) allows the Canadian Transportation Agency (“Agency”) to order “interswitching” when a railway line of a railway company connects with the railway line of another railway company and lies within a certain distance of a shipper’s facility. Pursuant to Section 127 and 128 of the CTA, the Agency is authorized to make terms and conditions for the interswitching of traffic, and to establish interswitching.<sup>41</sup> Under the regulations, shippers have access to the lines of competing railway companies at rates that cover the cost of moving the traffic to or from the interchange point. In establishing interswitching rates, the Agency uses system-wide average company costs, which incorporate a contribution to constant costs, and which are derived from empirical data provided by the railway companies in Canada and verified by Agency staff.<sup>42</sup>

As discussed in detail in the Verified Statement of Mr. Thomas Maville, interswitching in Canada dates back to 1904, when a decision by the Board of Railway Commissioners, Canada’s rail regulator, first required interswitching.<sup>43</sup> In 1908, the Canadian government adopted the First General Order on Interswitching, requiring interswitching at a regulated rate within four (4) miles of an interchange.<sup>44</sup> Then, in 1987, with the support of both shippers and carriers, the National Transportation Act, 1987 (“NTA 1987”) expanded the interswitching limit to 30

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<sup>41</sup> See, Vol. 146, No. 26, June 30, 2012, Regulatory Impact Statement, *Regulations Amending the Railway Interswitching Regulations* at 1 (“2012 CTA Regulatory Impact Statement”).

<sup>42</sup> 2012 CTA Regulatory Impact Statement at 2.

<sup>43</sup> Maville V.S. at 6.

<sup>44</sup> *Id.* at 6-7.

kilometers.<sup>45</sup> The NTA 1987 granted the regulatory agency the power to promulgate regulations prescribing the terms and conditions subject to which the interswitching of traffic may occur and “prescribing the rate per car to be charged for interswitching traffic.”<sup>46</sup> The NTA 1987 required interswitching rates to be “compensatory,” *i.e.*, established at levels above Agency-approved long-run variable costs, and for the rates to reflect any reductions in costs that might result from transferring several cars to or from an interchange at the same time.<sup>47</sup> Finally, in 1996, the NTA 1987 was repealed and replaced by the CTA. The CTA was itself amended in 2008 and carried forward the interswitching provisions with only a single minor revision.<sup>48</sup> The 2008 amendments to the CTA permitted the regulator to prescribe the interswitching rates as maximum rates, and permitted the railways to charge rates lower than the maximum.<sup>49</sup> Under the CTA, the Agency is required to establish rates that are “commercially fair and reasonable” to all parties.<sup>50</sup>

The method for determining variable costs is set out in the Agency’s *Railway Costing Regulations* (SOR/80/310), and stipulate that variable costs shall include the increases and decreases in rail operating expenses resulting from changes in the volume of traffic.<sup>51</sup> To determine interswitching rates, the Agency obtains the actual costs for interswitching movements at all interchanges where interswitching is performed.<sup>52</sup> Actual costs are derived by determining, for each zone to which interswitched traffic is headed, the work activities required at each

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<sup>45</sup> *Id.* at 7-13.

<sup>46</sup> *Id.* at 12.

<sup>47</sup> *Id.* at 13.

<sup>48</sup> *Id.* at 14.

<sup>49</sup> *Id.*

<sup>50</sup> *Id.* at 15.

<sup>51</sup> 2012 CTA Regulatory Impact Statement at 4.

<sup>52</sup> Roman V.S. at 11.

interchange; the time required for each activity; and the costs associated with the work activities required.<sup>53</sup> The resulting average costs for each yard are then weighted by the traffic interswitched at each yard to produce a system average cost per car for each interswitching zone.<sup>54</sup> The respective system average costs for the Canadian National Railway (“CN”) and the Canadian Pacific Railway (“CP”) are then adjusted for inflation and productivity.<sup>55</sup> Costs are computed based on submittals by Canadian railroads reporting their revenues, operating expenses, and other statistics to the Agency, which then calculates railroad variable costs.<sup>56</sup> The Agency monitors these submissions by sending auditors out, so that over time, the auditors cover each yard at which interswitching is performed.

The Canadian interswitching fee (“CIF”) is calculated for a distance up to 30 radial kilometers. Regulated interswitching covers an area divided into four zones: Zone 1 includes sidings located wholly or partly within a rail distance of 6.4 km of an interchange; Zone 2 includes sidings located outside a rail distance of 6.4 km of an interchange and wholly or partly within a rail distance of 10 km of an interchange; Zone 3 includes sidings located outside a rail distance of 10 km of an interchange and wholly or partly within a rail distance of 20 km of an interchange; and Zone 4 includes sidings located outside a rail distance of 20 km of an interchange and wholly or partly within a 30-km radius of an interchange.<sup>57</sup> The agency is empowered to order interswitching for distances greater than 30 kilometers if it finds that the

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<sup>53</sup> *Id.*; 2012 CTA Regulatory Impact Statement at 6.

<sup>54</sup> Roman V.S. at 12. See also, Decision No. LET-R-66-2010, *Review of the Railway Interswitching Regulations*, April 21, 2010 at 2-3 (2010 CTA Review).

<sup>55</sup> Roman V.S. at 12.

<sup>56</sup> *Id.*

<sup>57</sup> Maville V.S. at 13-16.

point is “reasonably close” to an interchange.<sup>58</sup> Thus, the distances for the first three Canadian interswitching zones are based on rail distances from an interchange, while the limit of the fourth zone (up to 30 kilometers) is based upon a radial (“as-the-crow-flies”) distance from that interchange. Zone 4 fees for interchanges within the 30-kilometer radius and for rail distances up to 40 kilometers are charged a set fee; however, for linear rail distances over 40 kilometers, the fee is the set fee plus an incremental fee based on the linear rail distance beyond 40 kilometers.<sup>59</sup> Separate fees are calculated on a per-car basis for movements of up to 59 carloads and for movements of 60 cars or more for each zone.<sup>60</sup>

Since 2004 and at the present time, the prescribed interswitching rates in Canada have been established on the basis of a contribution level of 7.5% over railroad variable costs.<sup>61</sup> The currently-prescribed interswitching rates (in Canadian dollars) are as follows:

CTA Prescribed Interswitching Rates - Current<sup>62</sup>

Interswitching Distance Zone	Rates per single car (less than 60 cars)	Rate per car for a car block of 60 cars or more
Zone 1 – up to 6.4 km	\$185	\$50
Zone 2 – >6.4 to 10 km	\$200	\$60
Zone 3 – >10 km up to 20 km	\$240	\$75
Zone 4 – >20 km up to 30 km	\$315	\$90
Rate per km, to apply when the shipper is within a 30 km radius but is more than 40 linear km from the interchange	\$3.75	\$1.45

<sup>58</sup> Section 127(4) of CTA.

<sup>59</sup> Maville V.S. at 16.

<sup>60</sup> *Id.*

<sup>61</sup> Maville V.S. at 17.

<sup>62</sup> Maville V.S. at 17.

Recently, after a mandatory 5-year review of the rates, the CTA determined that the rates should be changed based upon current data, and that the present 7.5% markup over variable cost should be increased to 20.3%. This increase represents the difference between the variable costs calculated pursuant to the Agency's costing model and the total costs incurred by the railroads as set forth in the information supplied by the railways in Canada.<sup>63</sup> The Agency is expected to be issuing an order sometime this year that will result in the following interswitching rates (in Canadian dollars):

CTA Interswitching Rates – To Be Effective 2013<sup>64</sup>

Interswitching Distance Zone	Rates per single car (less than 60 cars)	Rate per car for a car block of 60 cars or more
Zone 1 – up to 6.4 km	\$229	\$46
Zone 2 – >6.4 to 10 km	\$248	\$55
Zone 3 – >10 km up to 20 km	\$284	\$65
Zone 4 - >20 km up to 30 km	\$251	\$74
Rate per km, to apply when the shipper is within a 30 km radius but is more than 40 linear km from the interchange	\$3.38	\$1.20

Although single car rates for Zones 1 through 3 will increase when the new rates go into effect, the single car rates for Zone 4 will decrease, and the per car rates for switching blocks of 60 cars or more will also decrease. Moreover, the rate per kilometer for linear distances above 40 linear kilometers from the interchange will decrease. These decreases at longer distances are the result of network efficiency gains since the rates were last set in 2004. The Agency has noted that, despite the fact that the contribution toward common costs will increase in the new

<sup>63</sup> 2012 CTA Regulatory Impact Statement at 5, 7.

<sup>64</sup> Maville V.S. at 17.

rates, overall five of the eight rate zones will see a reduction in rates when the new rates are put into effect later this year.<sup>65</sup>

2. The League Has Adjusted the Interswitching Fees in Canada to Account for Differences Between Canadian Interswitching and the CSP and to Simplify the Analysis

In its Decision, the STB noted that the League's Petition did not include a methodology for access pricing, which, the agency believed, would be a significant factor in determining the extent to which competitive switching could affect qualifying shippers and the financial strength of the railroad industry.<sup>66</sup> Accordingly, the STB asked the parties to develop an "assumed access pricing methodology" that could be used to estimate the extent to which the CSP would lower rates for qualifying shippers and reduce railroad revenue.<sup>67</sup>

The League has used the switching fees established under the Canadian interswitching system as its "assumed access pricing methodology." As explained below, the Canadian interswitching fees appropriately serve as a factor in estimating: (a) how much the CSP would lower rates for shippers that would qualify for competitive switching under the CSP; and, (b) the financial effect on the railroad industry that would result if the CSP were adopted. However, as described by Mr. Roman, the League has modified the Canadian switching fees to account for the "30-mile reasonable distance" presumption in the CSP and has used an average of the current Canadian fees in order to simplify this analysis.

Specifically, the League has applied the Canadian interswitching fees, as adjusted and simplified, as its assumed access pricing methodology as follows:

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<sup>65</sup> 2012 CTA Regulatory Impact Statement at 6.

<sup>66</sup> Decision at 7.

<sup>67</sup> Decision at 9.

- a) Interswitching Distances: Canadian interswitching applies to facilities that are within a distance of 30 radial kilometers of an interchange (about 18.6 miles). In contrast, the League's CSP would establish a presumption that a shipper might qualify for competitive interswitching if its facility is within a distance of 30 miles of an interchange at which cars are regularly switched. Thus, because of the difference in distance between the Canadian interswitching system and the League's proposal, the League developed an access fee that extends the Canadian interswitching rates up to a distance of 30 miles, to address that presumption in the CSP. To establish the fee for the 30-mile distance, Mr. Roman converted the fees per kilometer into fees per mile and applied the over-40-kilometer distance charge published in the CIF. The Verified Statement of Mr. Roman details these calculations.<sup>68</sup>
- b) Single Fee vs. Canadian Zones: As noted above, Canadian interswitching develops a different fee for four "zones" within the applicable 30-kilometer distance. For ease of analysis, and because rail carriers in the U.S. do not appear to adjust reciprocal switching charges on the basis of distance, the League developed and applied a single access fee that is based on an average of the Canadian fees for the applicable zones, up to the 30-mile distance under the CSP.<sup>69</sup> It should be noted that the League's assumed access pricing methodology is based on the current CIF; and the average CIF applied to a 30-mile distance will likely decrease in 2013 when the Agency publishes the most recent numbers,

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<sup>68</sup> Roman V.S. at 13.

<sup>69</sup> *Id.*

because of operating efficiencies experienced by Canadian carriers since the last figures were published by the Agency.

- c) Cuts of Cars: Canadian interswitching fees include per-car fees for switching less than 60 cars, and per-car fees for switching a block of 60 cars or more. The League's assumed access pricing methodology follows this structure and establishes a single per-car fee for switching less than 60 cars, and a single per-car fee for switching a block of 60 cars or more.<sup>70</sup>
- d) Canadian and U.S. Dollar: Canadian interswitching fees are published in Canadian dollars, whereas the League's assumed access pricing methodology utilizes two fees that are based in U.S. dollars. However, since the Canadian dollar and the U.S. dollar are currently at or very near parity, no adjustment was required to account for differences in currency values.<sup>71</sup>

The League believes that use of the adjusted and simplified CIF is an appropriate “assumed pricing methodology” for estimating the potential effect of the CSP. As explained above, the calculation of the CIF is rigorously determined by the Canadian Transportation Agency, on the basis of railway costs and other information supplied by the Canadian carriers, which are then verified and calculated by the Agency. As Mr. Maville noted, the CIF is designed to cover both variable costs and a share of the carriers' fixed costs.<sup>72</sup> Additionally, the legislative mandate in Canada, that interswitching charges be “commercially fair and reasonable” to all parties, is similar to the STB's statutory mandate that charges be “reasonable.” As a conceptual matter, the League believes that application of an access fee methodology that is cost-based

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<sup>70</sup> *Id.*

<sup>71</sup> Roman V.S. at 13.

<sup>72</sup> Maville V.S. at 15.

meets the reasonableness standard by ensuring that the railroads recover the costs of performing the switching service, but also by preventing the access fee from gutting the effectiveness of the competition created by the switching arrangement.

An access pricing methodology that is based on the Canadian switching fees also is familiar to the U.S. railroads. As discussed by Mr. Maville and Mr. Roman, the Canadian interswitching rules and rates have been successfully applied in a neighboring country that has some of the same railroads as the United States.<sup>73</sup> U.S. railroads also operate in some portions of Canada and thus are already subject to the Canadian interswitching regulations.<sup>74</sup> Further, the Canadian interswitching fees have not harmed the Canadian railways since it is abundantly clear that the Canadian railroads are operating profitably and efficiently under the interswitching regime in Canada.<sup>75</sup>

Moreover, as established in Section IV.A above, the CIF-based access fee that is used in the League's analysis is within the range of reciprocal switching fees published by all four major Class I rail carriers in the U.S. The CIF-based assumed access fee used in the League's analysis appears to be slightly higher than the average reciprocal switching fee published by the UP and BNSF, and only a little less than the average reciprocal switching fees published by the NS and CSXT.<sup>76</sup> Thus, the CIF, as adjusted by the League, is generally consistent with the average switch fees that have been commercially established by the U.S. Class I rail carriers and is a

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<sup>73</sup> Maville V.S. at 30-37.

<sup>74</sup> Maville V.S. at 14.

<sup>75</sup> Maville V.S. at 37-44.

<sup>76</sup> Though few recent STB decisions deal with switch fees, the decisions that do exist also support the use of the fees used by the League in its analysis of the CSP. Specifically, in STB Docket No. 34114, *Yolo Shortline Railroad Company – Lease and Operation Exemption – Port of Sacramento*, served February 3, 2003, the Board refused to disturb a fee of \$200 per car for a 3-mile switch. And, in the Conrail control transaction, STB Docket No. 33388, the Board approved a switch fee for the NYC terminal area of \$128.10 per car. See, *CSX Corporation and CSX Transportation, Inc., Norfolk Southern Corporation and Norfolk Southern Railway Company – Control and Operating Leases/Agreements – Conrail, Inc. and Consolidated Rail Corporation*, Decision No. 123, served May 20, 1999 at 13.

reasonable proxy for estimating the impact of the CSP on qualifying shippers' rates and on railroad revenue.

As previously noted, in order to simplify this analysis, the League developed a single average fee that would be applied to the entire 30-mile distance included in the CSP. As also discussed, distance does not appear to be a driving factor when U.S. carriers set reciprocal switching fees. Thus, to reduce the complexities involved with setting different fees for different distances within the 30-mile zone in the CSP, the League developed and applied a single access fee based on an average of the existing Canadian switch fees for zones 3 and 4, and adjusted the fee to account for the 30-mile distance in the CSP.<sup>77</sup>

Accordingly, the access fees assumed by the League in its analysis are \$300 for movements involving 1 to 59 carloads and \$89 for movements involving 60 or more carloads.

The chart below illustrates how the League's access fee was developed.<sup>78</sup>

	C1	C2	C3	C4	C5
	Canadian Rate/km	Incremental Distance (Greater 40 Km)	Incremental Distance Charge (C1 x C2)	Rate - Car	Access Fee (C3 + C4)
<b>1-59 carloads</b>					
10 Miles (Zone 3 Rate)				\$240	\$240.00
20 Miles (Zone 4 Rate)				\$315	\$315.00
30 Miles	\$3.75	8.27	\$31.01	\$315	\$346.01
				<b>Average</b>	<b>\$300.34</b>
<b>60 and more carloads</b>					
10 Miles (Zone 3 Rate)				\$75	\$75.00
20 Miles (Zone 4 Rate)				\$90	\$90.00
30 Miles	\$1.45	8.27	\$11.99	\$90	\$101.99
				<b>Average</b>	<b>\$89.00</b>
One Mile = 1.609 km					
Thirty Miles = 48.27 km					
Footnote -30 miles = 48.27 km, an incremental fee per km is added for distances beyond 40 km increasing the Canadian Inter-switching fee from the stipulated zone 4 rate to compensate for km in excess of 40 in a 30-mile movement					

<sup>77</sup> Roman V.S. at 13.

<sup>78</sup> Roman V.S. at 14.

The League has used these \$300 and \$89 figures in developing its estimate of the impact of the CSP on carriers and shippers in the discussion below.

C. IDENTIFICATION OF SHIPPERS AND AMOUNT OF REVENUES CURRENTLY EARNED BY CLASS I CARRIERS THAT WOULD POTENTIALLY BE IMPACTED BY THE CSP

The third issue identified by the Board for the CSP analysis was to address and quantify to the extent practicable the number of shippers, and the amount of revenues currently earned by incumbent Class I rail carriers from those shippers, that would be subject to competitive switching under the NITL's proposal.<sup>79</sup> In Section V of his Verified Statement, Mr. Roman details the procedures that he used to analyze almost 250,000 Waybill records in order to determine the number of shippers that would potentially be impacted by the CSP, based on the impacted stations and carloads in the Waybill, and the amount of revenues currently earned by Class I rail carriers from those shippers.

1. Development and Summary of Procedures

To perform these analyses, Mr. Roman had to develop protocols and procedures to analyze the data. These procedures involved matters such as: (a) determining the competitive status of rail stations in the United States; (b) determining the types of rail movements that may qualify under the CSP; (c) identifying the carloads in the Waybill to be analyzed; (d) determining the mileage between a Captive Station and a Competitive Station or a Working Interchange<sup>80</sup> and between a shipper's facility and the Waybill station at which the shipper is located (i.e. served); (e) determining the interchanges at which competitive rail service would be available under the CSP; (f) determining the captivity of industry facilities that are located (i.e. served) at a

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<sup>79</sup> Decision at 9.

<sup>80</sup> Mr. Roman uses the term "Working Interchange" to denote a location where equipment and/or freight are in fact being interchanged between two railroads, i.e., a location under the CSP where cars are "regulatory switched."

Competitive Station; (g) determining movements with a R/VC of 240% or more; and, (h) identifying the movements that would likely incur a rate reduction under the CSP.<sup>81</sup>

a. Analysis of Rail Stations

As a first step in this analysis, Mr. Roman analyzed every rail station in the United States in order to classify the station as either “captive” or “competitive.” A rail “station” is a facility where trains can stop to load or unload traffic.<sup>82</sup> “Captive Stations” are those stations in the Waybill served by a single Class I rail carrier.<sup>83</sup> “Competitive Stations” are those served by more than one Class I rail carrier either directly or indirectly through a short-line or regional railroad. In determining whether a station was Captive or Competitive, information regarding known paper barriers was incorporated into the analysis, and rail stations impacted by such paper barriers were designated as captive.<sup>84</sup>

b. Analysis of Impacted Movements

Mr. Roman also determined that there are two general types of movements that would be potentially impacted by the CSP. First, there are movements that are served at a “Captive Station” that are within 30 miles of a Competitive Station or a Working Interchange.<sup>85</sup> Under this scenario, a shipper’s facility would potentially qualify for competitive switching if it is located at a Captive Station in the Waybill, but that Captive Station is within 30 miles of a Working Interchange or a Competitive Station.<sup>86</sup>

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<sup>81</sup> Roman V.S. at 14 to 24.

<sup>82</sup> Roman V.S. at 7.

<sup>83</sup> Roman V.S. at 7.

<sup>84</sup> Roman V.S. at 7.

<sup>85</sup> Roman V.S. at 18.

<sup>86</sup> *Id.*

Second, there are movements that are “captive at an “industry” (i.e. a shipper’s facility) where the traffic originates or terminates, but the industry is served by a Competitive Station. In this scenario, even though the station serving the shipper’s facility may have access to more than one rail carrier, the shipper’s facility served at that station may only have access to a single Class I carrier.<sup>87</sup> In some cases, a shipper’s facility might be located precisely at the geographic location of a designated station (as, for example, where a generating facility that receives large amounts of coal is designated as a station). However, in many instances, the shippers listed as served at a Waybill station are located at some distance from the yard or rail facility that marks the exact geographic location of that station.

For example, the entire city of Birmingham, AL may be designated as a “station” in the Waybill. In many cases, shippers’ facilities are not physically located at the exact geographic milepost of the station, which, as noted, is usually a rail yard in the designated area, but rather are some distance away from the geographic location of the yard.<sup>88</sup> Thus, to continue the example, not all shippers “located” at the Birmingham, AL station in the Waybill have facilities that are physically located at the yard at which a shippers’ railcars are consolidated or de-consolidated or switched to another carrier. This means that, even though “Birmingham, AL” is designated as a point in the Waybill that is served by more than one carrier, and thus is a “Competitive Station,” there are some shippers served at Birmingham whose facilities are physically located outside the specific geographic location of the station and are physically captive to only a single rail carrier. Thus, for the purpose of this analysis, these shippers were determined to be “captive at the industry.”

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<sup>87</sup> Roman V.S. at 19.

<sup>88</sup> This distance from the yard or switching area that is the exact location of the “station” are commonly referred to as “local miles.”

Accordingly, Mr. Roman's analysis developed information for both of these types of rail movements by determining the total number of carloads that originate or terminate at Captive Stations that are within a 30-mile distance of a Working Interchange or Competitive Station; as well as the total number of carloads that are captive at the industry but are served by a Competitive Station. These two types of rail movements represent the universe of carloads that could potentially be affected by the CSP in Mr. Roman's analysis.<sup>89</sup>

c. Identification of Carloads

After determining the types of rail movements, Mr. Roman used the Waybill data to identify the carloads, stations and revenue that would be potentially impacted by the CSP. However, as Mr. Roman explains, a number of rail movements were excluded from his analysis because those movements would not by their nature qualify for competitive switching under the League's proposal or because of anomalies in the Waybill data. The largest category of movements excluded were intermodal movements. Intermodal movements originate or terminate on trucks and are therefore not captive to a single rail carrier.<sup>90</sup> Moreover, since intermodal movements are by their nature competitive, they are not likely to meet the 240% R/VC test in the CSP. Other categories of movements in the Waybill excluded from Mr. Roman's analysis included movements that originate or terminate at stations outside of the U.S.; movements of certain specialized categories of traffic, such as steam generators and like commodities; and movements with no revenue, no mileage, etc. in the Waybill.<sup>91</sup>

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<sup>89</sup> Roman V.S. at 19.

<sup>90</sup> Roman V.S. at 17.

<sup>91</sup> Roman V.S. at 17-18.

d. Mileage Determinations

In determining the mileage between a Captive Station and a Competitive Station or Working Interchange for purposes of applying the 30-mile “reasonable distance” presumption in the CSP, Mr. Roman used rail miles rather than radial miles. The use of rail miles was more advantageous to carriers, because the use of radial miles resulted in a number of difficult-to-resolve anomalies, where, for example, a particular interchange might be within 30 radial miles of an interchange, but the distance to the interchange measured by rail miles would be far longer because the route to the interchange was very circuitous.<sup>92</sup>

As discussed above, not all shippers are physically located at the yard that identifies the exact location of the “station” listed on the Waybill. Moreover, the Waybill does not include the actual “local miles” (the distance between a particular shipper’s facility and the station); rather, the Waybill only includes the mileage between stations. Thus, in order to perform the analysis requested by the Board, Mr. Roman was required to develop a surrogate for identifying the location of qualifying shippers and measuring the 30 miles to the nearest competitive interchange. After consulting with STB staff, Mr. Roman developed the following assumptions for his analysis: (1) when the Waybill indicates that carloads originate or terminate “at” a Captive Station, the facilities of the shippers tendering those carloads will be deemed to be located exactly at that station; and (2) the mileage between shippers’ facilities deemed to be located at a Captive Station and the nearest Competitive Station or Working Interchange located within 30 miles would be the actual rail mileage between that Captive Station and the Competitive Station or Working Interchange listed in the Waybill.<sup>93</sup>

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<sup>92</sup> Roman V.S. at 16.

<sup>93</sup> Roman V.S. at 20 and 21.

e. Qualifying Interchanges

Under the CSP, a shipper would have to show that there is or can be a “working interchange” within a reasonable distance of the shipper’s facility. This requirement would be satisfied under a conclusive presumption if the shipper’s facility were located within 30 miles of an interchange between two carriers at which railcars were “regularly switched.” Thus, in order to determine the number of carloads potentially impacted by the CSP, Mr. Roman had to determine the interchange points in the rail system at which cars are “regularly switched.” In making that determination, Mr. Roman used so-called “260 Junction” points identified in the Waybill as interchanges where switching actually occurred between carriers.<sup>94</sup> Mr. Roman refers to these interchanges as “Working Interchanges.” Mr. Roman used those Working Interchanges in the Waybill, along with origin and destination Competitive Stations on the Waybill, in determining the impact of the CSP on shippers and carriers.<sup>95</sup> As explained by Mr. Roman, over 400 locations in the Waybill were identified as places where cars were regularly switched.<sup>96</sup> However, Mr. Roman also noted that, even if a much larger universe of interchanges were utilized, the results would not have been appreciably different.<sup>97</sup> Not surprisingly, this suggests that, in the United States, switching regularly takes place near points at which most rail shippers are located.

f. Captivity Analysis

Since the Waybill does not identify individual shippers or the carloads that are “captive at the industry” (see Section C.1.b. above), Mr. Roman was required to develop protocols to

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<sup>94</sup> Roman V.S. at 16.

<sup>95</sup> Roman V.S. at 15.

<sup>96</sup> Roman V.S. at 16-17.

<sup>97</sup> Roman V.S. at 17.

identify the traffic that was “captive at the industry” even though it was served out of a Competitive Station. After developing such protocols, the basis for which is explained in Mr. Roman’s Verified Statement, Mr. Roman outlines the procedures that he used to analyze the Waybill data to identify such “captive at the industry” traffic.<sup>98</sup>

g. Calculating R/VC Ratios

Mr. Roman utilized the STB’s calculation of variable costs in the Waybill to obtain the R/VC ratios needed for the analysis, to identify all otherwise qualifying movements that had a R/VC ratio of 240% or more. These movements would meet the conclusive presumption in the CSP that the existence of such a high ratio shows that there is no effective competition for such traffic.<sup>99</sup>

h. Determining Impacted Movements

In determining the rate reductions that would likely accrue to shippers who qualify for the CSP under the above described analyses, it was first necessary for Mr. Roman to determine the movements that would likely experience a rate reduction by moving from a captive to a competitive status under the CSP. This is because not all movements that would change from captive to competitive status at the origin or destination would actually experience a rate reduction. For example, if a movement was solely served by one carrier at origin and solely served by the same carrier at destination, qualifying for competitive switching only at origin under the CSP would not likely result in a rate reduction, since the movement would still be captive to the same railroad at destination.<sup>100</sup> As the Board has recognized, if one carrier serves

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<sup>98</sup> Roman V.S. at 22-23.

<sup>99</sup> Roman V.S. at 23.

<sup>100</sup> Roman V.S. at 24-25.

the origin and the same carrier solely serves the destination, that carrier will control the rate.<sup>101</sup> Thus, simply looking at the number of carloads that qualify for the CSP at origin or destination, or simply looking at the number of stations affected, significantly overstates the potential effect of the CSP. Instead, one must look at the competitive status of individual movements at both the origin and the destination to determine whether rates would actually be reduced by the CSP.

Specifically, Mr. Roman examined all of the stations that would meet the tests for competitive switching under the CSP, and then examined all movements at those stations. He reviewed both movements under single line rates (including Rule 11 rates), as well as multiple railroad hauls under a single factor joint through rate. He then determined the change in status on the entire movement from origin to destination as a result of the CSP. For a single line movement, if the CSP would result in competition at both the origin and the destination, he calculated the rate reductions discussed below. For joint line movements, if the CSP would result in competition on one leg of the movement but not on the other leg, he calculated a rate reduction for the competitive segment. Conversely, if the CSP would result in competition at both the origin and at the destination under a joint line single factor through rate, he calculated a rate reduction for the entire movement.<sup>102</sup>

## 2. Results of Analysis: Potentially Impacted Carloads, Stations, and Total Revenue

Applying all of the procedures described in Mr. Roman's Verified Statement produces the following results regarding the number of stations, carloads and gross revenue potentially

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<sup>101</sup> See, e.g., Union Pacific Corporation, Pacific Rail System, Inc. and Union Pacific Railroad Company – Control – Missouri Pacific Corporation and Missouri Pacific Railroad Company, 366 ICC 459, 538 (1982) (“effective competition requires that competing origin lines have independent access to a power plant”); UP-Control-MP, 366 ICC at 539 (“A carrier with a destination monopoly usually will have substantial market power over the rate regardless of whether it has suitable coal on its own lines or on the lines of an affiliate. Therefore, the market power faced by an existing utility is not created, or increased by, consolidation of a monopoly destination carrier with an origin carrier.”).

<sup>102</sup> Roman V.S. at 24-26.

impacted by the CSP. Specifically, Mr. Roman calculated that slightly less than 1.24 million carloads carried by BNSF, UP, CSXT, and NS (the “Big Four”) would potentially qualify under the CSP, out of a total carload count for these carriers of about 31 million. Thus, only approximately 4 percent of all carloads on the Big Four would potentially qualify for relief under the League’s CSP.<sup>103</sup>

Finally, Mr. Roman estimates that the gross revenue of the Big Four carriers that could potentially be impacted by the CSP totals slightly more than \$2.9 billion, out of a total gross revenue of approximately \$52.9 billion. Thus, only about 5.5 percent of the Big Four carriers’ gross revenue could be potentially affected by the CSP.<sup>104</sup> From Mr. Roman’s analysis, it is clear that the total number of carloads and total gross revenue potentially impacted by the CSP would be a very small proportion of the carriers’ total carloads and gross revenue.

Moreover, because of the procedures and assumptions used by Mr. Roman, his analysis likely overstates the number of carloads that would qualify for competitive switching under the CSP. As explained above, because the Waybill does not contain specific information about “local” miles to industries that the Waybill deems to be located at stations, Mr. Roman assumed, after consultation with STB staff, that captive industries at Competitive Stations were located at the exact geographic location of the named station. Thus, some shippers with captive facilities deemed by the Waybill to be located at Competitive Stations may in fact be outside the 30-mile limit. For the same reason, shippers at Captive Stations were presumed to be located precisely at the station; the distance from a Captive to a Competitive Station or Working Interchange was measured from the geographic milepost of the Captive Station to the geographic milepost of the Competitive Station or Working Interchange. Thus, some shippers at Captive Stations that were

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<sup>103</sup> Roman V.S. at 29.

<sup>104</sup> Roman V.S. at 33.

presumed to be within 30 miles of a Competitive Station or Working Interchange might in fact be located outside the 30-mile limit.

3. Mileage Variation Requested by the Board

In its Decision, the Board requested that commenters might also “provide the analysis needed to assess the impact if the 30-mile ‘reasonable distance’ were changed.”<sup>105</sup> In order to be responsive to the Board’s request, the League asked Mr. Roman to calculate the number of stations, carloads and gross revenue potentially impacted if the 30-mile standard in the CSP was changed to 40 miles and to 20 miles. The results of Mr. Roman’s analysis for impacted carloads and stations are as follows:

Number of Impacted Carloads – Different Mileages

<i>Table 8</i>			
<b>Impacted Carloads – Full Competition</b>			
		Difference from 30 Mile Base Case	
	Total	# of Carloads	Percent
40 miles	1,522,049	282,752	22.8%
30 miles	1,239,297		
20 miles	969,135	-270,162	-21.8%

Number of Impacted Stations – Different Mileages

<i>Table 9</i>			
<b>Impacted Stations – Full Competition</b>			
		Difference from 30 Mile Base Case	
	Total	# of Stations	Percent
40 miles	1,880	210	12.6%
30 miles	1,670		
20 miles	1,435	-235	-14.1%

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<sup>105</sup> Decision at 9.

These figures show that if the mileage range in the CSP were extended to 40 miles instead of the 30 miles proposed by the League, the number of carloads potentially impacted would increase by 22.8 percent; and the number of stations potentially impacted would increase by 12.6 percent. Conversely, if the mileage range in the CSP were reduced to 20 miles, the number of carloads potentially impacted would decrease by 21.8 percent; and the number of stations potentially impacted would decrease by 14.1 percent.<sup>106</sup>

The League strongly believes that the Board should not reduce the mileage presumption in the League's Petition when it issues a Notice of Proposed Rulemaking. As the League's Petition noted, the United States Department of Agriculture ("USDA") and the Board's own Railroad-Shipper Transportation Advisory Council have suggested that the Board adopt a 30-mile competitive switching presumption.<sup>107</sup> Most importantly, the League's analysis shows that the railroad industry would not be harmed financially by prescription of a 30-mile presumption.

D. ESTIMATE OF RATE REDUCTIONS THAT MAY ACCRUE TO SHIPPERS WHO QUALIFY UNDER THE CSP, AND THE FINANCIAL EFFECT ON THE RAILROAD INDUSTRY

The analysis of the impact of the CSP on qualifying shippers' rates and on railroad revenue was developed under two different scenarios. First, Mr. Roman calculated the rates and revenue reductions that would accrue if the CSP were to result in a situation of "full" competition, that is, the level of competition that exists now in the industry for all competitive traffic, given the full panoply of inter-, intra-, product and geographic competition affecting competitive movements transported by the nation's rail carriers. Second, Mr. Roman calculated the rates and revenue reductions that would accrue if the CSP were to result in the level of rail-

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<sup>106</sup> Roman V.S. at 32.

<sup>107</sup> Petition at 57-58.

to-rail competition that exists in duopoly markets, that is, where only two rail carriers compete over wide areas and where intermodal competition plays only a minimal role.

1. Determination of Rates and Results of Analysis Under Conditions of Full Competition
  - a. Calculation of Reduced Rates for Shippers and Reduced Revenue for Carriers Under the Assumption of Full Competition

In order to determine the rate for a movement that changes from captive to competitive under the CSP, assuming that full competition would result, Mr. Roman calculated the average R/VC ratio that each of the Big Four carriers are currently obtaining on their competitive traffic. This calculation determined competitive rates by commodity using the five-digit Standard Transportation Commodity Code (“STCC”) and by mileage range, using all single-line movements on those railroads (hereafter “Competitive R/VC”).<sup>108</sup> “Competitive traffic” on each of the Big Four carriers was assumed to be any traffic that carried at an R/VC of less than 180% on that particular carrier.<sup>109</sup> This Competitive R/VC thus reflected the actual markup above variable cost that each of these railroads obtains for the specific type of traffic, under actual full competitive conditions existing for that traffic, including inter-, intra-, product and geographic competition. This Competitive R/VC was then multiplied by the variable cost of the movement as determined by the STB in the Waybill, to obtain a “Competitive Benchmark Rate.”<sup>110</sup> Finally, the access fee was added to the Competitive Benchmark Rate, and the sum of the two was subtracted from the actual rate in the Waybill in order to determine the net revenue reduction that

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<sup>108</sup> Single line movements were used to calculate the Competitive R/VC because, for joint line movements utilizing single factor through rates, the Waybill does not include the actual revenue distribution between the carriers involved in the movement.

<sup>109</sup> Roman V.S. at 27.

<sup>110</sup> Roman V.S. at 27.

would result from a movement changing from a captive to competitive status.<sup>111</sup> Again, these revenue calculations assume that full competition would result from application of the CSP and, as discussed below, are likely to overstate the impact of the CSP.

b. Results of Analysis Under Assumption of Full Competition

Mr. Roman summarized all of the data on potentially impacted movements in order to develop the total carloads, stations, impacted revenue and reduced revenue in total and by commodity, by state, and by railroad. As noted in Section IV.C.2 above, the number of impacted carloads for the Big Four carriers total about 1.24 million, or about 4 percent of total carloads of those carriers. The total gross revenue for the Big Four carriers potentially impacted by the CSP totals about \$2.93 billion, or only about 5.5 percent of those railroads gross revenue of \$52.9 billion.<sup>112</sup> After applying the rate and revenue reduction calculations described above, Mr. Roman calculates that the overall reduction in rates and concomitant reduction in revenue from application of the CSP under conditions of full competition would be about \$1.294 billion, or only about 2.4 percent of those carriers' gross revenue of about \$52.9 billion.<sup>113</sup>

The Big Four carriers' net revenue from rail operations before taxes in 2010 totaled about \$14.3 billion. Mr. Roman estimates that the overall reduction in rates and concomitant reduction in revenue from application of the CSP under conditions of full competition would reduce the Big Four carriers' net revenue from rail operations before taxes by about 9 percent of total net revenue from rail operations before taxes.<sup>114</sup>

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<sup>111</sup> Roman V.S. at 28.

<sup>112</sup> Roman V.S. at 32-33.

<sup>113</sup> Roman V.S. at 33. Totals by commodity, by state, and by rail carrier are included in the Appendices to Mr. Roman's Verified Statement.

<sup>114</sup> Roman V.S. at 34.

In light of the benefits of competition from the switching promised in the Staggers Act, these revenue reductions are reasonable, and will not cause undue financial harm to the railroad industry. Moreover, there is strong reason to believe that these revenue reductions are overstated. These reductions assume that every shipper that qualifies for competitive switching under the CSP will obtain relief, even for the smallest movements. This is extremely unlikely. Even though the CSP is designed to simplify burdens of proof and reduce the time and costs associated with STB proceedings, it does not eliminate such burdens entirely. A shipper with a small number of movements eligible for competitive switching at a particular station is not likely to spend the time and money to apply for competitive switching for those movements. Moreover, the shipper is likely to know that, even if it obtains the right to competitive switching under the CSP, the newly-competitive carrier is unlikely to bid aggressively for just a few carloads.

Moreover, the estimated revenue figures assume that the effects for every potentially qualified movement take place all at once. This is a patent overstatement, since at the very least contracts that currently bind traffic to a particular carrier will have to expire before the traffic can be bid competitively. Furthermore, the estimated revenue figures assume that carriers do not dynamically adjust for the different competitive landscape; and that there is always capacity available to the potential competitor. These revenue figures are also overstated for the same reason that the carload and station figures are likely overstated, *i.e.*, some shippers' facilities calculated to be within the 30-mile limit are actually outside that limit when the actual mileage figures from the facility are used.<sup>115</sup>

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<sup>115</sup> See at 42 *supra*.

Most importantly, these figures are likely overstated because they assume that rail carriers will in fact compete *to the same extent that they compete under conditions of full competition, i.e.*, to the same extent that they do for their movements that have a revenue to variable cost ratio under 180%. This is extremely unlikely, for a number of reasons. First, the average revenue to variable cost ratio for all movements under 180% – used by Mr. Roman to calculate the Competitive R/VC – reflects the results of *all* forms of competition: intramodal, intermodal, product and geographic. But movements that would qualify for the CSP are, by definition, unlikely to be restrained by effective intermodal competition. Rather, they are movements either that have an extremely high revenue to variable cost ratio, or movements for which the railroad's market share is extremely high, both of which circumstances indicate that intermodal competition provides a weak influence, at best.

Secondly, the CSP is unlikely to result in full competition because the form of the competition gained is at least partially *indirect* rail-to-rail competition. By its definition, it requires a switch to another carrier, a switch that costs both time and money. In contrast, the average R/VC ratio of all movements with an R/VC below 180 percent includes movements where there is direct rail-to-rail competition at the shipper's facility. Although the cost of the switch can be approximately offset by the access fee, at the end of the day the transportation provided by the accessing carrier is unlikely in all cases to be as timely as the service provided by the carrier actually serving the shipper's facility, because of the need for the switch. The incumbent will know this, and price its services accordingly.

Finally, the League's CSP is designed to permit a second rail carrier to access the shipper through a switch, for the purpose of transporting goods that are currently transported by rail. But, this second carrier will be one of only two rail carriers in the marketplace for rail

competition over wide swaths of the eastern and western United States, since in very large sections of the country, there is an effective duopoly in rail service. As discussed further below, prices charged by duopolists do *not* equal the prices charged in fully competitive markets: they are higher.

Thus, in recognition of the fact that the prices that will result from the CSP are unlikely to be as low as the “average” R/VC ratio for all movements with an R/VC less than 180 percent, Mr. Roman has calculated the revenue reduction that would take place in a market characterized by less-than-full competition. It is to that subject that we now turn.

2. Results of Analysis Under Conditions of Imperfect Competition – Duopoly Markets and the Lerner Index

As discussed above, there is a high likelihood that the CSP will not result in the “average” level of competition for competitive traffic currently on the rail system, because (a) intermodal competition is likely not present; (b) the indirect nature of the intramodal competition introduced by the CSP; and, (c) the duopoly nature of most rail markets in the United States. Therefore, the League has attempted to calculate the likely revenue effect on shippers and carriers that would take these factors into account.

For this purpose, the League offers for the Board’s consideration the Lerner Index, a widely-known economic theory that attempts to indicate the effect of the degree of market power of a business or firm. It was developed in 1934 by economist Abba Lerner and, in the ensuing 80 years, has become one of the most widely-cited and used indices in the field of economics. “To many economists, the Lerner Index...provides a desirable theoretical measure of a firm’s market power.”<sup>116</sup>

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<sup>116</sup> Keith H. Hylton and Fei Deng, *Antitrust Around the World: An Empirical Analysis of the Scope of Competition Laws and Their Effects*, 74 *Antitrust L.J.* 271 at § IV.A (2007).

The Lerner Index is represented by the following formula:

$$Index = \frac{price - marginal\ cost}{price}$$

In this formula, “price” is the price set by the firm for a good or service, and “marginal cost” is the firm’s marginal cost of producing that good or service. The Lerner Index ranges from 0 to 1 depending upon the market power of the firm in question. The theory underpinning the Lerner Index is quite simple, as described below:

If the firm faces few competitors, it will be relatively unconstrained by competition and will charge a price that is close to the monopoly price. On the other hand, if the firm faces many competitive constraints, it will be forced to charge a price that is close to marginal cost.<sup>117</sup>

The Lerner Index was revolutionary at the time of its creation because of its focus on marginal cost rather than average cost. Consequently, the Lerner Index provides information about inefficiency in the marketplace rather than the scale of profits earned by firms.<sup>118</sup> Moreover, the Lerner Index expressly reveals that market power, rather than being simply a yes-or-no question, is a matter of degree.<sup>119</sup>

Although the Lerner Index is an economic theory, it has played a significant role as the study of economics has grown and developed over the years. For example, the Lerner Index is directly related to the demand elasticity faced by the firm in question.<sup>120</sup> Demand elasticity, or the change in quantity demanded due to a change in price, is an important concept in economic analysis, because “if demand is inelastic, a price increase increases revenue.”<sup>121</sup>

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<sup>117</sup> Hylton and Deng, at § IV.A.

<sup>118</sup> Robert M. Feinberg, *The Lerner Index, Concentration, and the Measurement of Market Power*, 46 Southern Economic Journal 1180 (April 1980).

<sup>119</sup> Gregory J. Werden, *Demand Elasticities in Antitrust Analysis*, 66 Antitrust L.J. 363 at § I.B (1998).

<sup>120</sup> Werden, at § I.B.

<sup>121</sup> Werden, at § I.A.

The logic behind the Lerner Index can also be used in order to help define the relevant market for antitrust purposes.<sup>122</sup> The Lerner Index includes the same concepts used in critical loss analysis – which “seeks to determine whether the lost sales from a small price rise...would exceed a specified fraction of the market, the benchmark ‘critical loss’ beyond which the price increase would not be profitable.”<sup>123</sup>

The Lerner Index was also a component of the early attempt of William Landes and Richard Posner to “take a comprehensive view of antitrust market power.”<sup>124</sup> Landes and Posner showed that the Lerner Index is equivalent to the reciprocal of the firm’s elasticity of demand.<sup>125</sup> In other words, “products with inelastic demand have high Lerner indices – indicating that profit is maximized at prices well above marginal cost – and products with elastic demand have low Lerner indices – indicating a profit-maximizing price near marginal cost.”<sup>126</sup>

While no single number or theory can capture all of the interacting forces that will affect the degree of competition introduced by the CSP, the Lerner Index is one tool that the Board can use in evaluating the high likelihood that the degree of competition resulting from the introduction of the CSP will be less than the “average” level of competition for all competitive movements in the transportation by rail as a whole. Accordingly, Mr. Roman has calculated the effect of the CSP on qualifying carloads, stations and reduced revenue under the Lerner Index. The results of his analysis are as follows:<sup>127</sup>

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<sup>122</sup> Jonathan B. Baker, *Market Definition: An Analytical Overview*, 74 Antitrust L.J. 129 at § III.B (2007).

<sup>123</sup> *Id.* at § IV.C.

<sup>124</sup> Mark R. Patterson, *Coercion, Deception, and Other Demand-Increasing Practices in Antitrust Law*, 66 Antitrust L.J. 1 at § III.B (1997).

<sup>125</sup> *Id.*

<sup>126</sup> *Id.*

<sup>127</sup> Roman V.S. at 35-38.

<b>Impact of CSP Based on Reduced Competition versus Full Competition (Applying 30 Miles, 240% R/VC)</b>				
	<b>Full Competition</b>	<b>Reduced Competition</b>	<b>Difference</b>	<b>Percent Reduction</b>
Impacted Carloads	1,239,297	1,078,662	160,635	13.0%
Impacted Stations	1,670	1,606	64	3.8%
Potentially Impacted Gross Revenue	\$2,929,210,097	\$2,803,269,293	\$125,940,804	4.3%
Reduced Revenue	\$1,293,650,873	\$907,783,085	\$385,867,788	29.8%

3. Mileage and R/VC Variations Requested By the Board

As discussed above, in its Decision the Board requested information on the impact of the CSP if the 30-mile “reasonable distance” were changed.<sup>128</sup> In order to be responsive to the Board’s concerns, Mr. Roman developed figures for carloads, stations, and the amount of the revenue reduction that would accrue if the 30-mile distance in the CSP were changed. The reduced revenue figures if the 30-mile limit were changed to 20 and 40 miles are set forth below.<sup>129</sup>

<b>Shipper Savings/Carrier Revenue Reduction – Full Competition</b>			
		Difference from 30 Mile Base Case	
	Total	Reduced Revenue	Percent
40 miles	\$1,552,989,969	259,339,095	20.0%
30 miles	\$1,293,650,874		
20 miles	\$1,090,626,250	-203,024,624	-15.7%

The Board also requested commenters to provide information if the 240% R/VC ratio trigger were changed to the ratio that would result if the 4-year average RSAM benchmark published by the agency for each carrier was used.<sup>130</sup> Again, in order to be responsive the Board’s concerns, Mr. Roman has also estimated the number of carloads, the number of stations,

<sup>128</sup> Decision at 9.

<sup>129</sup> Roman V.S. at 32.

<sup>130</sup> Decision at 10.

and the revenue reductions that would occur if the 240% R/VC figure were replaced by a figure that equaled the average of the four-year average RSAM figures for the Big Four carriers. These figures are below:<sup>131</sup>

Carloads, Stations, and Reduced Revenue Based On a 240% R/VC Versus  
Average RSAM R/VCs

<i>TABLE 13</i>			
<b>30 Mile to Working Interchange Results RSAM vs. 240% R/VC – Full Competition</b>			
	<b>240% R/VC Shipper Savings/Carrier Revenue Reduction</b>	<b>RSAM R/VC Shipper Savings/Carrier Revenue Reduction</b>	<b>Difference</b>
Savings	\$1,293,650,873	\$1,136,138,151	\$157,512,722
Carloads	1,239,297	999,701	239,596
Stations	1,670	1,473	197

E. POSSIBLE TRAFFIC / REVENUE GAINS THAT MIGHT ACCRUE TO RAIL CARRIERS

In its Decision, the Board recognized that the introduction of competition into currently non-competitive situations is not simply a zero-sum game. Specifically, the Board noted that more reasonable competitive rates might be offset, at least in part, through traffic increases or other gains, and the Board asked for information dealing with this issue.<sup>132</sup>

Mr. Roman addresses this matter in his Verified Statement. As he notes, companies make logistics decisions based upon economics – if it costs more to ship by rail than other logistics options, railroads will lose business. And, the converse is also true: as rail rates decline, more traffic will flow to the railroads.<sup>133</sup> Mr. Roman analyzed a variety of situations in which rail carriers that increase prices on captive movements might lose business over time: through

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<sup>131</sup> Roman V.S. at 35.

<sup>132</sup> Decision at 9.

<sup>133</sup> Roman V.S. at 39.

competition from foreign sources, product substitution, re-sourcing, and increased volumes to trucks at longer and longer distances.<sup>134</sup>

To support this unremarkable proposition, Mr. Roman first analyzed rail rate increases taken by U.S. railroads and by Canadian railroads between the eight years covering the third quarter of 2004 and the third quarter of 2012. His analysis shows that the percent increase in the revenue per car by the CN and CP were half that of the four major U.S. carriers.<sup>135</sup> Not surprisingly, Canadian carriers, though at least as financially sound as their U.S. counterparts, are subject to far more intramodal competition through Canadian interswitching and other regulatory remedies than rail carriers in the United States.

Finally, Mr. Roman analyzed the Public Use Waybill between 2005 and 2011 in order to identify markets where Canadian rail carriers have gained substantial market share vis-à-vis their U.S. counterparts. For example, focusing on the important U.S. production market for plastics originating in Houston, Mr. Roman notes that between 2005 and 2011, rail rates from Houston to Chicago have increased 48%, while rail rates on plastics from Canada to the Chicago market have either decreased or have increased a small fraction of that amount. The number of carloads shipped from the two origins show the results of this behavior by U.S. carriers: while the number of carloads containing plastics transported from Houston to the Chicago market have remained static, the number of carloads of this commodity from Canadian origins have nearly tripled over the same time period.<sup>136</sup>

Similar results appear in Mr. Roman's analysis of the rail transportation market for liquefied gases into the Chicago market, where Canadian rail carriers have increased their market

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<sup>134</sup> Roman V.S. at 40-43.

<sup>135</sup> Roman V.S. at 43.

<sup>136</sup> Roman V.S. at 43-44.

share from 11% in 2005 to 66% of the carloads into this market in 2011. This is a time frame in which U.S. carriers have raised their rates by over 70%, while Canadian carriers' rate increases have been substantially less.<sup>137</sup> The same pattern holds for the market for sulfuric acid into the Chicago market: while U.S. carloads have decreased in the face of a doubling of rail rates between 2005 and 2011 in this market, Canadian rail carriers, whose rates have increased a small fraction of that, have seen a huge increase in their carload totals into the market.<sup>138</sup>

While there are obviously many reasons for shifts in market share, the cost of transportation is clearly a factor when companies make decisions about sourcing, buying, and selling. Although it is impossible to make exact predictions about the amount of traffic that U.S. rail carriers might expect to gain under a more competitive regulatory and business model, there is no doubt that more competition would result in greater pressure to operate more efficiently and a likely increase in traffic that would offset at least part of the loss of railroad monopoly power in selected markets under the introduction of the CSP.

#### F. IMPACT ON SHIPPERS WHO WOULD NOT QUALIFY UNDER THE CSP

In its July 2012 Decision, the Board asked commenters about the “economic and regulatory impacts of NITL’s proposal on the captive shippers served by the incumbent Class I rail carrier or carriers included in the study that would not be covered by the NITL’s proposal . . .”<sup>139</sup> The League strongly believes that the regulatory and economic impacts on captive shippers not covered by the CSP would be nil.

At the outset, it is important to put the potential impact of the CSP into perspective. As discussed above, the revenue reduction to the Big Four carriers as a result of the CSP is just 2.4

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<sup>137</sup> Roman V.S. at 45.

<sup>138</sup> Roman V.S. at 46.

<sup>139</sup> Decision at 9.

percent of those railroads' total gross revenue.<sup>140</sup> The carloads of the Big Four carriers potentially impacted by the CSP are just 4.0 percent of the total carloads on their systems.<sup>141</sup> There are many, many more captive shippers on the nation's railroads than the number of captive shippers that will potentially qualify for competitive switching under the CSP. But more to the point, even for captive traffic, rail carriers are not free simply to raise rates at will. Presumably, as rational economic actors, rail carriers have already priced even captive traffic at a level that produces the greatest revenue given the shipper's options. Further rate increases would not produce further revenue gains, otherwise the railroads would have taken them already.

The Board's apparent concern over "regulatory effects" is misplaced.<sup>142</sup> The fact of the matter is that a tiny percentage of shippers bring rate cases, given the multi-million dollar cost for lawyers and consultants and the multi-year timeframe for relief while the shipper pays tens of millions extra as a "tariff premium" for filing a case. The revenues attributed to a SARR depend upon the shipper's choice of a SARR route and selection of traffic. Given the small proportion of a carrier's traffic that will qualify for competitive switching under the CSP, and the miniscule chance that the small proportion of traffic affected by the CSP will occur to any meaningful degree on a SARR route selected by one of almost an invisible percentage of SAC complainants in the total universe of shippers, it is entirely speculative whether a shipper's chosen SARR will even include traffic that qualifies for relief under the CSP. Thus, it would be utterly irrational for the Board to deny the benefits of competition to many shippers because of the speculative effect on the very few shippers who decide to file a rate case at the Board.

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<sup>140</sup> Roman V.S. at 33.

<sup>141</sup> Roman V.S. at 29.

<sup>142</sup> Decision at 8, 9.

G. THE CSP WILL NOT ADVERSELY AFFECT RAIL NETWORK EFFICIENCY

In its Notice, the Board asked for information as to how rail network efficiency might be affected by the CSP.<sup>143</sup> As discussed immediately below and in the Verified Statement of Mr. Maville, the short answer to this question can be summarized in three short propositions:

- (1) The CSP will not adversely affect rail network efficiency at all, because the number of cars actually shifting routes is likely to be a very small proportion of the total number of cars eligible for competitive switching and a miniscule proportion of the total cars on the system. Also, because substantial relevant experience in Canada, confirmed by the testimony of Canadian carriers and the reviews of the Canadian regulatory agency, shows that there will be no negative network effects.
- (2) By providing for the possibility of a more efficient use of the system, the CSP may increase network efficiency.
- (3) Any local or specific operational problems at particular locations are specifically provided for under the terms of the CSP, which indicates that an application for competitive switching will be defeated if either carrier shows that the proposed switching is “not feasible or unsafe, or that the presence of such switching will unduly hamper the ability of that carrier to serve its own shippers.” Thus, the CSP itself provides for safeguards against local adverse operational impacts.

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<sup>143</sup> Decision at 9.

1. The Canadian Experience Shows That There Will Be No Adverse Operational or Network Effects if the CSP Is Implemented
  - a. The Canadian experience shows that a very small percentage of the cars qualifying for competitive switching will actually change routing

In answering the question as to how network efficiency will be affected by the CSP, the first question that must be answered is, how many cars are likely to actually switch routing under a competitive switching regime? Just because a particular carload may qualify for interswitching, and might even be “bid” between two competing carriers, does not mean that all qualifying cars will actually switch routing. Thus, to determine the effect on the network one must first determine the likelihood that the new competitive switching regime will actually result in new routings for the qualifying traffic, because there can be no adverse efficiency or operational effects if most cars simply remain on their existing route.

Fortunately, there is no need to guess at the answer to that question. Just to our north, Canada has an extensive program under which cars may automatically qualify for interswitching if they are within a certain distance of an interchange. As Mr. Maville discusses extensively, there have been three governmental examinations of the amount of traffic exposed to interswitching in Canada, and current governmental data on the actual amount of traffic actually interswitched. The most recent examination in 2001 (well after the extension of interswitching to 30 kilometers), and Mr. Maville’s own conclusions, indicate that approximately forty (40) percent of all Canadian traffic is exposed to regulated interswitching at both the origin and destination.<sup>144</sup> Indeed, this figure was confirmed by testimony submitted by CN itself in the

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<sup>144</sup> Maville V.S. at 24-28. It should be noted that this 40% figure is far higher figure than the amount of traffic that would be subject to competitive switching under the League’s CSP. As discussed earlier, Mr. Roman estimates that only 4 percent of the Big Four carriers’ carloads would qualify for competitive switching under the CSP.

2001 government review, in which the railroad stated that over forty percent of the Canadian traffic base (combined CN and CP tonnage) was subject to direct rail-to-rail competition.<sup>145</sup>

Although about 40% of all Canadian traffic is exposed to interswitching, the amount of cars actually interswitched is far less. As Mr. Maville explains, statistics published by the Agency reveal that, over the years, only four percent or less of the total number of cars on the Canadian rail system were actually interswitched. The most recent figures, published in 2007, reveal, that only 279,900 carloads were actually interswitched by CN and CP, out of a total of 7,442,000 freight carloads, or just 3.76 percent.<sup>146</sup>

In other words, although a large proportion of Canadian traffic qualifies for interswitching, and the carriers compete for the business, in the overwhelming majority of cases, the incumbent carrier keeps the business. Less than one-tenth of the total traffic that qualifies for interswitching in Canada is actually interswitched and moves over the new competitive route. This result is hardly exceptional or unexpected, since the incumbent carrier has a huge incentive to keep the business, even at a lower profit level, rather than to lose the business entirely.

There is no reason to believe that the same dynamic would not take place in the United States under the CSP. Mr. Roman has estimated that the total amount of traffic of the Big Four railroads that would qualify for interswitching is about 1.24 million cars out of the approximately 31 million cars transported annually by those carriers, or about 4 percent. If the same percentage of cars that qualify for interswitching are actually switched in the United States as are actually “interswitched” in Canada (i.e., less than one-tenth of the total number of cars that qualify), then the number of cars actually shifting routes under the League’s proposal is likely to total less than 120,000 cars, or less than one-half of one percent of the cars transported over the system in 2010.

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<sup>145</sup> Maville V.S. at 26.

<sup>146</sup> Maville V.S. at 21.

Moreover, this “traffic growth” will not take place immediately, or even over a single year. Thus, the nation’s rail carriers will have plenty of time to absorb this miniscule change in their system. To put this figure in perspective, the following table sets forth the number of carloads originated by Class I rail carriers each year for the past ten years, according to figures published by the AAR.<sup>147</sup> The table also sets forth the increase or decrease in the number of carloads compared to the previous year, as well as the percentage increase or decrease compared to the previous year:

U.S. Railroads – Carloads Originated			
Year	Total Carloads Originated	+ / - From Previous Year	% + / - From Previous Year
2011	30,000,000	790,000	2.7%
2010	29,210,000	3,204,652	12.3%
2009	26,005,348	(4,619,425)	(15.1%)
2008	30,624,773	(834,158)	(2.7%)
2007	31,458,931	(655,468)	(2.0%)
2006	32,114,399	972,182	3.1%
2005	31,142,217	1,047,421	3.5%
2004	30,094,796	1,224,747	4.2%
2003	28,870,049	968,682	3.5%
2002	27,901,367	695,952	2.5%
2001	27,205,415	-	-

The table shows that the annual increase or decrease in the number of cars originated by Class I carriers is many multiples of the number of cars that are likely to change carriers under the League’s CSP. If the U.S. rail industry can cope with traffic changes from year to year always reaching five to ten times, and up to thirty times, the number of cars expected to shift carriers as a result of the CSP, there is simply no reason to believe that the advent of competitive interswitching under the League’s CSP will have any adverse effect on the nation’s rail system.

<sup>147</sup> For numbers from 2001 to 2009, see *Railroad Facts*, 2010 edition, p. 24. For the 2010 and 2011 figures, see <https://aar.org/statistics&publications/documents/aarstats-2013-02-07.pdf>.

b. The Canadian experience shows that there will be no adverse efficiency impacts

Beyond the fact that the number of cars that are likely to be actually switched under the League's CSP (which is far less extensive than the interswitching regime in Canada) will be an infinitesimal percentage of the total cars handled in the United States, there are other lessons that the Canadian experience can teach. As Mr. Maville notes, regulated interswitching in Canada has been reviewed and monitored on a regular basis since 1988 when the 4-mile limit was substantially expanded to 30 kilometers. The reviews have consistently found that the interswitching regulations have increased rail-to-rail competition, but have had no negative impact on railway operations or network efficiencies.<sup>148</sup> It is significant that neither CN nor CP, which have participated in these reviews, have identified any adverse operational effects of the Canadian interswitching system, which is far more extensive than what the League has proposed in the CSP. In 2002, or fifteen years after the interswitching limits were substantially increased, CP noted in its submission to the agency that "[t]he current structure of the interswitching rates has worked to the general benefit of all parties concerned . . ."<sup>149</sup>

And, beyond these governmental reviews and the testimony of the railroads themselves, the figures don't lie: as Mr. Maville notes, by a variety of measures of a railroad's operating efficiency/workload performance and financial performance over time, Canadian carriers are among the most efficient and productive on the continent and in the world.<sup>150</sup> These include ton miles per employee, revenue per ton mile earnings, operating ratio, total carloads moved and total revenues earned.<sup>151</sup> Mr. Maville shows that, since 1988, when Canadian interswitching

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<sup>148</sup> Maville V.S. at 30-37.

<sup>149</sup> Maville V.S. at 32.

<sup>150</sup> Maville V.S. at 37-44.

<sup>151</sup> *Id.*

limits were increased substantially from 4 miles to 30 kilometers, Canadian carriers have become more efficient and more productive. In short, there is simply nothing in the figures to suggest that the substantial extension of interswitching has had any adverse effect on the productivity, efficiency or financial performance of Canadian railroads.<sup>152</sup>

## 2. Competitive Switching May Result in a Net Gain in Efficiency

The small percentage of traffic actually interswitched in Canada and the remarkable efficiency of the Canadian railroads suggests an intriguing possibility – that competitive switching might actually increase network efficiency. In all likelihood, traffic will be actually switched under the CSP primarily when the competing carrier is able to offer a more efficient or direct route (i.e., lower costs) than the incumbent, efficiencies sufficient to overcome the need for the switch at origin and/or destination. Moreover, under a regime of competitive switching, shippers might be able to access underutilized rail facilities and/or free up capacity on congested lines. The fundamental point is, under competitive switching, the marketplace will decide, based on the relative efficiencies and costs of the two competing carriers, who should have every competitive incentive (assuming no collusion) to reduce costs and improve service. Thus, the Board should not be blind to the possibility that Canadian carriers are so efficient and profitable precisely because so much of their traffic base is subject to direct rail-to-rail competition.

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<sup>152</sup> Maville V.S. at 35, 36-39. The Canadian experience is a powerful indication that there would be no adverse network effects as a result of the introduction of competitive switching under the League's proposal, but it is not the only one. Current reciprocal switching arrangements, the implementation of the Shared Asset areas, the activities of terminal and short-line carriers, all suggest that there will be no adverse operational effects. Significantly, the Christensen Report identified no operational or network concerns if competitive switching were introduced in the United States. See, Laurits R. Christensen Associates, Inc., *A Study of Competition in the U.S. Freight Railroad Industry and Analysis of Proposals That Might Enhance Competition*, revised 2009, at 22-12 to 22-14. Similarly, the Board's own Railroad-Shipper Transportation Advisory Council (R-STAC) identified no operational concerns when it recommended the adoption of competitive switching within 30 miles of an interchange.

3. The CSP By Its Terms Assures That Competitive Switching Will Not Result in Operational or Safety Problems

Under Section 1145(d) of the rule proposed by the League, “competitive switching shall not be established . . . if either rail carrier . . . shows that the proposed switching is not feasible or is unsafe, or that the presence of such switching will unduly hamper the ability of that carrier to serve its own customers.” Based on the experience of interswitching in Canada and the various types of switching arrangements in the United States, the League firmly believes that, in the very large majority of cases, competitive switching will be safe, feasible and efficient. However, the League is sensitive to the possibility that, in particular local circumstances, there could be locations at which competitive switching would not be feasible or safe. But in these instances, the CSP specifically permits a showing by the carrier that there will be adverse or unsafe operational effects, and in those instances, competitive switching will not be permitted.

Thus, if there are any adverse operational effects that could result from a shipper’s particular request for interswitching, the League’s own proposal allows for an evaluation of that issue on a case-by-case basis.

**V. CONCLUSION**

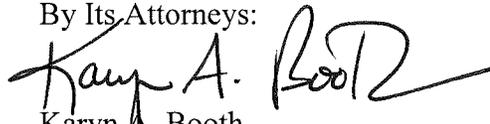
The League’s analysis clearly demonstrates that its Competitive Switching Proposal will reasonably increase rail competition for the benefit of qualifying captive shippers without harming the railroad industry. Indeed, the estimated financial impact of the League’s proposal on railroad revenue is a very small fraction of the nearly \$53 billion of gross revenue earned by the U.S. Class I railroads in 2010. Accordingly, the League strongly believes that the Board has more than enough information to justify its commencement of a notice of proposed rulemaking

on the CSP, and the League respectfully requests the Board to open a rulemaking promptly after this study phase of the proceeding.

Respectfully submitted,

The National Industrial Transportation League  
1700 North Moore Street  
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By Its Attorneys:

A handwritten signature in black ink that reads "Karyn A. Booth". The signature is written in a cursive style with a long, sweeping underline.

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Dated: March 1, 2013

# **EXHIBIT 1**

Ex Parte No. 711

*PETITION FOR RULEMAKING TO ADOPT REVISED  
COMPETITIVE SWITCHING RULES*

---

VERIFIED STATEMENT

of

HENRY JULIAN ROMAN

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**March 1, 2013**

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*PETITION FOR RULEMAKING TO ADOPT REVISED  
COMPETITIVE SWITCHING RULES*

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VERIFIED STATEMENT

of

HENRY JULIAN ROMAN

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**I. INTRODUCTION**

My name is Henry Julian Roman (Jay Roman). I am President of Escalation Consultants, Inc., which is located at 4 Professional Drive Suite 129, Gaithersburg, MD 20879. Escalation Consultants is a consulting firm engaged in economic analysis and consultation related to prices and price movement for shipping products by rail. Since founding Escalation Consultants in 1979, I have assisted a large number of companies in analyzing the best options for their rail traffic and in controlling the cost of rail transportation.

I regularly perform studies of rail rates for companies with movements in the U.S. and Canada. Some of the industries I work with are: coal, chemicals, petroleum, automobile, grain, steel, fertilizer, farm and food products, and forest products. I am knowledgeable about the current cost of rail transportation in the marketplace as I annually assist companies in rail negotiations and bid evaluations totaling more than a billion dollars in rail spend. I am the owner and developer of the Rail Rate Checker internet database program, which is a very large database that contains information on rail rates, rate changes, costs, volumes and rail profit by commodity group. A large number of companies subscribe to Rail Rate Checker to determine what rates are

reasonable for their rail movements and to help obtain better rates for their rail traffic. I am also the owner and developer of the Optimized Rail Bid Evaluation (“ORBE”) program, which is a macro processing program which optimizes the rail spend of shippers with a large number of rail movements. Versions of ORBE are used to analyze tens of thousands of movements and the ORBE was used in this proceeding to analyze 245,662 Waybill records to determine the economic impact of the proposed competitive switching rules.

Escalation Consultants regularly performs extensive analyses of the freight rail system, including issues affecting rail rates and competition in the rail industry. We have analyzed all rail stations in the U.S. and Canada to better understand the captive versus competitive status of rail movements in specific geographic areas. Escalation Consultants also analyzes rail movements for many commodities over time to determine the impact of rate changes and the change in traffic flows in markets.

I conduct one of the most widely attended and recommended rate negotiation seminars for rail shippers. Our negotiation seminars are attended by representatives from hundreds of companies in the U.S. and Canada; virtually all industries that ship by rail have participated in these seminars. I have testified as an expert on pricing issues involving coal and rail transportation issues before the U.S. Federal Energy Regulatory Commission, in federal courts, in state courts, before the National Energy Board of Canada, and in arbitration proceedings in the U.S. and Canada as well as before the U.S. Surface Transportation Board (“STB” or “Board”). My curriculum vitae is attached to this testimony in Appendix A.

## **II. GENERAL DESCRIPTION OF TASKS ASSIGNED**

On July 7, 2011, The National Industrial Transportation League (“NITL” or “League”) filed a Petition for Rulemaking (“Petition”) with the STB seeking the institution of a rulemaking on proposed rules for competitive switching that would replace the Board’s existing reciprocal switching rules. The new rules proposed by the League would increase competition in the rail industry for some captive shippers by requiring their incumbent carrier to switch their rail traffic to an alternative railroad if certain conditions are met.

Under the NITL’s Competitive Switching Proposal (“CSP”), the Board would be required to find that competitive switching meets the terms of the governing statute if: (a) the shipper is served by a single Class I rail carrier; (b) there is no effective inter- or intra-modal competition; (c) there is or can be a working interchange within a reasonable distance of the shipper’s facilities; and, (d) the rail carrier fails to show that the proposed switching is infeasible, unsafe, or would hamper the ability of either carrier to serve its shippers. Under the League’s CSP, certain conclusive presumptions would apply. Specifically, there would be a conclusive presumption that there is “no effective inter- or intra-modal competition” if the shipper shows that the revenue to variable cost (“R/VC”) ratio of its traffic is 240% or more, or that the carrier transports at least 75% of the shipper’s traffic. There would also be a conclusive presumption that there is a “working interchange within a reasonable distance of the shipper’s facilities” if the shipper shows that it is within an established switching district, or if it is within 30 miles of an interchange at which cars are “regularly switched.”

In a decision served on July 25, 2012 (“Decision”), the STB began a proceeding to evaluate the proposal submitted by the League. The STB indicated that it was seeking “empirical information” about the impact of the proposal. Specifically, the Board sought public

input on the proposal's impact on rail shippers' rates and service; and the proposal's impact on the rail industry, including its financial condition and network efficiencies. The Board asked for information on an "assumed access pricing methodology" that would be used to analyze the impact of the proposal on shippers and carriers. The Board made the Confidential Waybill Sample ("Waybill") available for the analyses that it requested.

I have been asked by the League to develop analyses that would respond to various issues set forth by the Board in its Decision. Specifically, the League has asked me to perform the following tasks:

1. Provide information regarding railroad pricing trends and determine the competitive or captive status of existing rail stations.
2. Determine an "assumed access pricing methodology" in order to analyze the financial effect of the League's CSP.
3. Calculate the number of carloads that would qualify for access under the CSP and the revenue currently earned by the incumbent Class I rail carrier from those carloads. This calculation would also estimate the carloads and revenue if the CSP were changed in several ways: (a) if the 240% trigger were changed to the RSAM; (b) if the 30-mile conclusive presumption were changed to another mileage.
4. Estimate the rates that shippers who would qualify for the CSP would pay for rail transportation if the CSP were adopted by the Board. I was asked to estimate the rates that shippers who would qualify for the CSP would pay for rail transportation under two alternative assumptions: (a) that CSP shippers would pay the same level of rates as shippers whose movements of the commodities are subject to the full range and level of competition in the transportation market place; and (b) that CSP shippers would pay a rate produced by a reduced level of competition, compared to fully competitive rates. I was also asked to estimate the carloads and revenue that would be impacted: (a) if the 240% trigger were changed to the RSAM; (b) if the 30-mile conclusive presumption were changed.
5. Estimate the "static" revenue reduction that would accrue to Class I rail carriers if the CSP were adopted by the Board, under the two alternative assumptions regarding competition discussed immediately above, and under the alternative R/VC and mileage scenarios.

6. Analyze sources of possible traffic/revenue gains that might accrue to Class I rail carriers.
7. Discuss the impacts of the NITL proposal on shippers that would not qualify under the terms of the CSP.

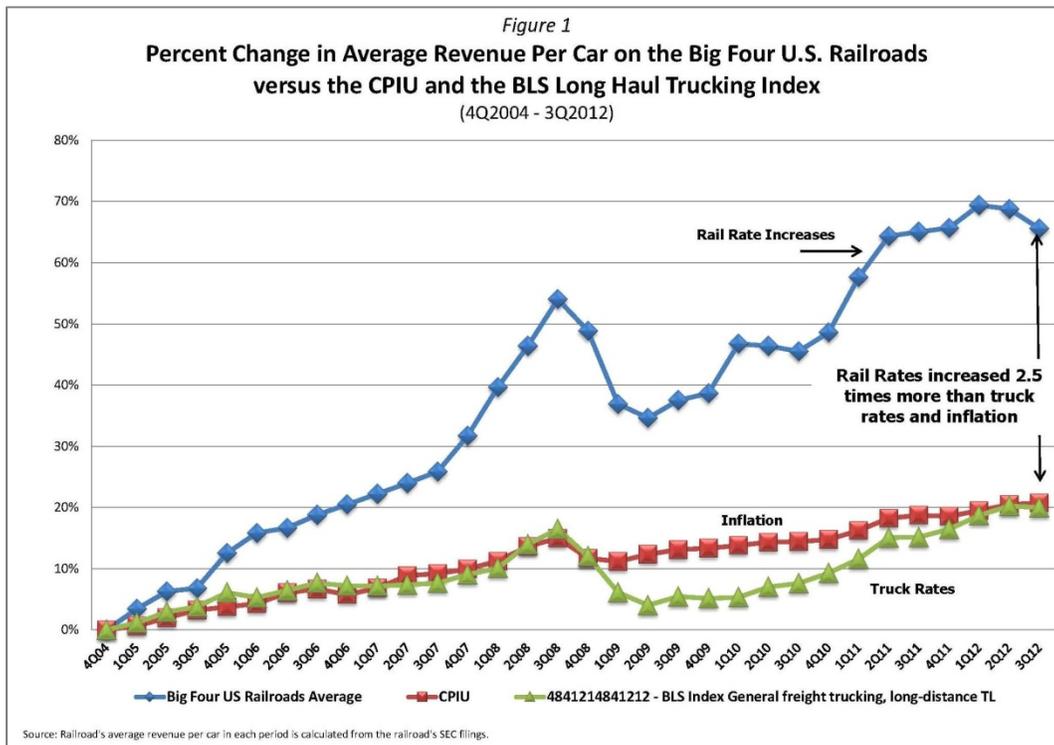
In the remainder of this Verified Statement, I will discuss my findings with respect to the tasks set forth above.

### **III. THE NEED TO CHANGE THE BOARD'S CURRENT SWITCHING RULES**

As part of my first task, I analyzed the pricing of the Big Four U.S. Class I railroads for the past eight years. Specifically, I analyzed how the average revenue per car for NS, CSX, UP and BNSF (the "Big Four") has increased over time in relation to inflation and the rates for long-haul trucking. As the basis for this analysis, I used the railroads' quarterly Securities and Exchange Commission ("SEC") filings to total the railroads' total freight revenue and carloads each quarter. By dividing freight revenue by the railroads' total carloads each quarter, I was able to track how the average revenue per car has changed on each of these railroads over time, as well as the average increase in revenue per car for the Big Four U.S. railroads in total. This calculation shows how revenue per car has increased on average for railroads. Revenue per car is a means of measuring the rates charged by railroads to their customers. The time period that I used for my analysis was from the fourth quarter of 2004 to the third quarter of 2012. From these sources, I determined that the average increase in revenue per car for these rail carriers between the fourth quarter of 2004 and the third quarter of 2012 was close to 70%. During much of this seven years and three quarters time period, the economy was in a recession. A 70% increase in revenue per car (i.e. rates) over seven or eight years is substantial during any time frame, but it is especially large for a recessionary time frame.

In order to benchmark the reasonableness of this 70% increase in rail rates, I compared the change in rail rates against inflation and the cost of long haul trucking. Inflation as measured by the Consumer Price Index (“CPIU”) increased approximately 20%. The price charged for long haul trucking according to Bureau of Labor Statistic index (“BLS”) Code 4841214841212 for “General Freight Trucking Long Distance” also increased about 20% over this time frame.

The graph in Figure 1 shows the historical change in rail rates versus inflation and long haul truck pricing between the fourth quarter of 2004 and the third quarter of 2012. Figure 1 shows that rail rates have increased close to 2.5 times more than inflation and the cost of long haul trucking. Support for the calculations in Figure 1 are contained in Appendix B.

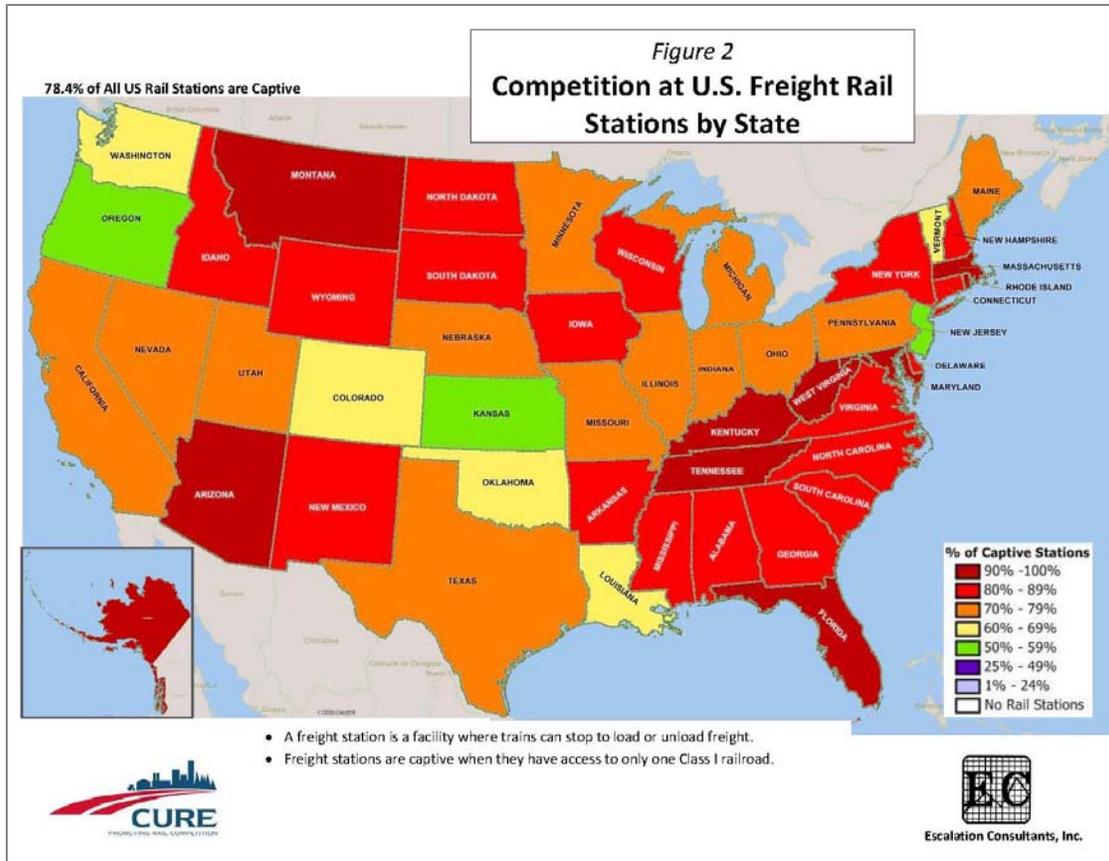


In addition to analyzing pricing trends of the four major U.S. Class I railroads compared to the general rate of inflation and price increases in the trucking industry, I have also analyzed

the captive and competitive status of all rail stations in the United States as determined from the RailInc Station Master List. I define a “station” as a facility where trains can stop to load or unload traffic. By the term “Competitive Station,” I mean a station that has access to two or more Class I railroads either directly or indirectly through a short-line or regional railroad. By the term “Captive Station,” I mean a station that has access to only one Class I railroad. A station was also determined to be captive if it has access to one Class I railroad as well as a short-line or regional railroad that: (1) only connects to the incumbent Class I railroad; or (2) has access to other Class I railroads, but is restricted by a known paper barrier that limits access to other Class I railroads. The railroads that were subject to paper barriers in my analysis were Montana Rail Link, Fort Worth Western and Red River Valley.

In order to determine which stations are “competitive,” all rail stations in the Station Master List were analyzed to determine the stations that: (1) have access to more than one Class I railroad, or (2) have access to one Class I railroad as well as a short-line or regional railroad that connects to a Class I railroad other than the incumbent railroad.

My analysis of the captive and competitive status of all rail stations in the U.S. shows that close to 80% of all rail stations – specifically, 78.4% – have access to only one Class I railroad and are, therefore, designated as Captive Stations. The Rail Station Captivity Map in Figure 2 color codes the degree of rail station captivity in each state. The map shows that in many states, more than 80% or 90% of the rail stations are captive to one railroad. It also shows that no state has less than 50% of the rail stations within its borders captive to a single Class I railroad.



The Rail Station Captivity Map shows a key reason why railroads can increase rates two and a half times more than inflation or trucking rates. Most rail stations are captive to one railroad and, combined with the increased concentration of the rail industry since 1995, this lack of intramodal competition results in higher rates for rail customers. The Rail Station Captivity Map also demonstrates the need for a solution to the unusually high rate increases of railroads: competition needs to exist at more rail stations. My analysis shows that there is a need for captive rail shippers to have greater competitive access to Class I railroads. The NITL’s CSP would help create additional rail competition and the results of my analysis show that this will be accomplished without bankrupting or adversely impacting the strong financial condition of the U.S. rail industry.

#### IV. DETERMINING AN ACCESS PRICING METHODOLOGY

In its Decision, the Board requested commenters to present an “assumed access pricing methodology” that could be used to determine the effect of the League’s CSP on shippers and the railroads. Under the CSP, a Class I railroad that solely serves an industry would be required to move traffic from a Junction<sup>1</sup> to the industry (or vice versa) for a fee, if the Junction is within a reasonable distance of the industry. I analyzed several different sources for determining a reasonable fee, including various rates in the Waybill; trackage rights fees and switch fees in STB (and ICC) cases; switching fees in existing railroad tariffs; and interswitching rates applied in Canada.

After reviewing these sources of data, it was determined that the Canadian interswitching fee (“CIF”), with simplifications, would be used as the assumed access fee for purposes of analyzing the effect of the CSP. This simplified CIF would be, in other words, the proxy rate for a reasonable access fee under the CSP in my analysis.

There are several reasons why a simplified CIF provides an appropriate proxy rate for a reasonable access fee under the CSP. The Canadian interswitching rules and rates are currently applied and working well in a neighboring country that has some of the same railroads as the U.S. It is beyond dispute that the Canadian railroads are operating profitably and efficiently at the same time that they are subject to the Canadian interswitching regime. In addition, U.S. railroads also operate in some portions of Canada and thus are already subject to the Canadian interswitching regulations. The Canadian interswitching fees are established and tested by the Canadian government, and are designed to cover both variable costs and a share of the carriers’

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<sup>1</sup> A Junction is a location at which an interchange of equipment and/or freight can take place between two rail carriers. Even though an interchange can take place at a Junction, interchanges may not actually be taking place at all Junctions.

fixed costs. Moreover, the CIF used in this analysis is within the range of reciprocal switching fees published by U.S. railroads in their current tariffs.

However, as explained in more detail below, it was determined that, for purposes of performing this study on the CSP, it was desirable to simplify the analysis and to apply a single average fee, based on the CIF, for all movements determined to qualify under the CSP.

A. Background of the Canadian Interswitching Regime

The Canadian Transportation Agency (Agency) has made clear that competitive and efficient transportation is the cornerstone of the Canada Transportation Act (CTA). Specifically, in its Decision No. 35-R, the Agency declared the following: “it is declared that a competitive, economic and efficient national transportation system that meets the highest practicable safety and security standards and contributes to a sustainable environment and makes the best use of all modes of transportation at the lowest total cost is essential to serve the needs of its users, advance the well-being of Canadians and enable competitiveness and economic growth in both urban and rural areas throughout Canada.” The Agency further noted that those objectives are most likely to be achieved when:

- Competition and market forces, both within and among the various modes of transportation, are the prime agents in providing viable and effective transportation services; and,
- Rates and conditions do not constitute an undue obstacle to the movement of traffic within Canada or to the export of goods from Canada.

Section 127 of the CTA allows the Agency to order interswitching when a railway line of one railway company connects with a railway line of another railway company and lies within a 30-kilometer radius of the point of origin or destination, or is 40 km away on the basis of rail miles (but still within the 30 km radius). A shipper who has access to the lines of only one

railway company at the point of origin or destination, and where a continuous route between those two points is operated by two or more railway companies, may request that the local carrier establish a competitive line rate. The underlying policy premise of these provisions, today, is to provide shippers with competitive alternatives.

The Agency is authorized to establish interswitching fees pursuant to Sections 127-128 of the CTA. The goal of interswitching is to “ensure fair and reasonable access to the entire railway system.” Under the interswitching regulations, shippers have “access to the lines of competing railway companies at rates that cover the cost of moving the traffic to or from the interchange point.” For distances to the interchange within the 30 km radius that are 40 km or less as measured by the distance along the line of rail, captive shippers can obtain service to the interchange at a fee set by the Agency. Track mile distances may exceed 40 km (but must remain within the 30 km radius) and shippers must pay an additional fee for each additional km over 40.<sup>2</sup>

Rates established by the CTA must be “commercially fair and reasonable to all parties.”<sup>3</sup>

To determine the interswitching rates, the Agency takes the following steps:<sup>4</sup>

1. The Agency obtains the actual costs for interswitching movements at all interchanges where interswitching is performed; actual costs are derived by determining, for each zone to which interswitched traffic is headed:
  - a. The work activities required at each interchange
  - b. The time required for each activity
  - c. The cost associated with the specific work activities required

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<sup>2</sup> Regulations Amending the Ry. Interswitching Regulations, 146 C. Gaz. pt. I, at 1854 (June 30, 2012) (Can.).

<sup>3</sup> Canada Transportation Act §122.

<sup>4</sup> Review of the Railway Interswitching Regulations at §§2.2 and 3, CTA Decision No. LET-R-66-2010, File No. 7360-6 (April 21, 2010) (“2010 Interswitching Review”). See also Review of the Railway Interswitching Regulations, CTA Decision No. LET-F-218-2007, File No. 7360-6 (Dec. 20, 2007).

2. The resulting average costs for each yard are then weighted by the traffic interswitched at each yard to produce a system average cost per car for each interswitching zone.
3. The respective system average costs for both Canadian National Railway (CN) and Canadian Pacific Railway (CP) are adjusted for inflation and productivity.
4. Costs are computed based on submittals by Canadian railroads reporting their revenues, operating expenses, and other statistics to the CTA, which then calculates railroad variable costs.
5. The CIF is calculated separately for three zones based on rail distances up to 20 km and a fourth zone for interchange points within a 30 kilometer radius. Zone 4 fees for interchanges within the 30 km radius and up to a 40 km rail distance are charged at a set fee; for rail distances beyond 40 km, the fee is the set fee plus an incremental fee per km based on distance beyond 40 km. Fees are calculated on a per car basis for movements of up to 59 carloads and for movements of 60 cars or more for each distance or zone.

B. Determining and Applying the CIF to Qualifying Movements Under the CSP

In applying the Canadian interswitching fee to the League's CSP, several mathematical adjustments were considered:

1. Adjust the fee for each cut (i.e. grouping) of railcars to U.S. dollars;
2. Adjust the fee for each cut of railcars to miles rather than kilometers;
3. Apply a single fee for each cut of railcars to a 10-, 20- and 30-mile distance rather than a kilometer distance; and,
4. Determine a single average fee for each cut of railcars for the 30-mile distance in the CSP.

As discussed above, it was decided that at this initial stage it was desirable to simplify the analysis so as to apply a single average fee for each "cut" of cars up to the 30-mile distance in the CSP. Moreover, switching fees published by the U.S. carriers in their tariffs do not appear to be driven by distance: U.S. carriers publish a single fee for switching in a particular city within the switching limits of one station or industrial switching district, no matter how large the

geographic area is, and apparently no matter where the named shippers are located within the switching district.

Thus, my analysis of the financial effect on shippers and carriers for the proposed competitive switching rules includes two switching rates per car for distances of 0-30 miles, and follows the structure of the Canadian system for “cuts” of cars, i.e., one per-car rate applies to a cut of less than 60 cars, and one per-car rate applies to a cut of 60 cars or more. However, my assumed access pricing does not have (as exists in the Canadian system) different rates for different distances within a “zone” for movements that are eligible for competitive switching.

No adjustments were made to convert the fees from Canadian to U.S. dollars, since in recent time periods the currency value differences are small. Thus, the Canadian and U.S. dollars were considered to be at parity for the analysis. Kilometers were converted to miles at 1.609 km = 1 mile; therefore 30 miles = 48.27 km.

The interswitching fees currently published by the Agency in zones for 10-km, 20-km and 30-km movements for one car up to 59 cars and for 60 cars and greater were used. In addition, the per-kilometer fee published by the Agency was used to extend the CIF to the 30-mile distance contained in the League’s CSP, since the “zones” for the CIF extend only to 30 kilometers. I then averaged the CIFs for each zone, resulting in a single fee to be applied to all movements within the 30-mile distance in the CSP in order to simplify the study. Applying the above procedures, the rates (rounded to the nearest dollar) were computed to be \$300 per car for 1 to 59 carloads and \$89 per car for movements with 60 cars or more. Table 1 below details the calculations of the CIF for each cut of cars over the applicable mileage ranges and the average rate per car for each cut:

<i>Table 1</i>					
	C1	C2	C3	C4	C5
<b>1-59 carloads</b>	Canadian Rate/km	Incremental Distance (Greater 40 Km)	Incremental Distance Charge (C1 x C2)	Rate - Car	Access Fee (C3 + C4)
10 Miles (Zone 3 Rate)				\$240	\$240.00
20 Miles (Zone 4 Rate)				\$315	\$315.00
30 Miles	\$3.75	8.27	\$31.01	\$315	\$346.01
				<b>Average</b>	<b>\$300.34</b>
<b>60 and more carloads</b>					
10 Miles (Zone 3 Rate)				\$75	\$75.00
20 Miles (Zone 4 Rate)				\$90	\$90.00
30 Miles	\$1.45	8.27	\$11.99	\$90	\$101.99
				<b>Average</b>	<b>\$89.00</b>
One Mile = 1.609 km					
Thirty Miles = 48.27 km					
<small>Footnote -30 miles = 48.27 km, an incremental fee per km is added for distances beyond 40 km increasing the Canadian Inter-switching fee from the stipulated zone 4 rate to compensate for km in excess of 40 in a 30-mile movement</small>					

**V. CALCULATION OF THE NUMBER OF CARLOADS THAT WOULD QUALIFY UNDER THE CSP AND THE REVENUES CURRENTLY EARNED ON THESE CARLOADS**

In its July 25, 2012 Decision, the Board asked for information on “how many additional shippers and what amount of revenues earned by the incumbent Class I rail carrier from those shippers would be subject to competitive switching under the NITL’s proposal.” Decision, p. 9. In this Section V of this Verified Statement, I present my findings as to that question presented by the Board. The Waybill was analyzed to determine the movements that would be impacted by the League’s CSP. The Waybill analysis was used to identify the total carloads, rail stations, and revenue that would be impacted by the competitive switching rules proposed by the League.

Although the Board asked commenting parties to determine the number of “shippers” who would qualify for the League’s CSP, the Waybill does not contain information as to the

identity of specific “shippers.” Thus, in determining the financial effect of the CSP on shippers, I analyzed the number of carloads and stations that would qualify under the CSP. Also, as explained below, for the purpose of my analysis, shippers’ facilities that are served at Captive or Competitive Stations in the Waybill were deemed to be located at the Waybill stations.

A. Procedures for Evaluating Carloads and Stations In the Waybill

As described in Section III, Escalation Consultants determined the competitive status of all rail stations in the U.S. In order to determine how many shippers would be potentially impacted by the CSP, as well as the effect on the rates of those shippers, it was necessary to make a number of decisions concerning how to analyze the Waybill information. For example, it was necessary to develop methodologies for determining the mileage between stations; the number of working interchanges; the types of movements that would be potentially affected by the CSP; and other methodologies described below. In this subsection of my Verified Statement, I discuss these various analyses and the basis for my decisions.

1. Determining the Mileage Between a Captive Station and a Working Interchange

Under the CSP, shippers that are located within 30 miles of an interchange at which cars are “regularly switched” are conclusively presumed to be within a “reasonable distance” of the interchange. A shipper at a Captive Station might be within a reasonable distance (i.e., within 30 miles) of a location at which cars are in fact “regularly switched.” In this Verified Statement, I will use the term “Working Interchange” to denote a location where equipment and/or freight are in fact being interchanged between two railroads, i.e., a location under the CSP where cars are “regularly switched.” Thus, it was necessary to identify all Captive Stations in the Waybill that were within 30 miles of a Working Interchange. In turn, this required me to determine the

distance between Captive Stations and Working Interchanges in the Waybill. There are two possible ways of calculating this distance: rail miles and radial miles (straight line miles).

For purposes of my analysis, I used rail miles to calculate the distance from a Captive Station to a Working Interchange, since this was more equitable to railroads. There are some Working Interchanges that are relatively close to a Captive Station by radial miles, but the rail carrier must travel a much longer distance in rail miles to get to that Working Interchange. A train must travel the rail-mile distance to a Working Interchange and in some cases rail miles can be much longer than radial miles. Therefore, I used rail miles to calculate the distance between a Captive Station and a Working Interchange in my analysis.

## 2. Determining a Working Interchange

Under the CSP, a shipper may qualify for competitive switching if the shipper is within a reasonable distance of a “working interchange,” and is conclusively presumed to be so if the shipper is within 30 miles of a location at which cars are “regularly switched” between two carriers. Thus, in order to analyze the number of carloads that would be potentially affected by the CSP, I had to determine whether a particular Junction is a place where cars are “regularly switched” under the CSP.

The Station Master List published by RailInc identifies points known as “260 Junctions,” where carriers have agreed to switch cars. RailInc lists 4,225 such locations. However, just because it is possible to switch cars at a particular location does not indicate that switching is actually occurring at such a Junction.

To determine the Working Interchanges for movements that might be used under the CSP, I used the 260 Junctions included in the Waybill where traffic is actually interchanged.

Specifically, the Waybill contains 407 “260 Junction” points where cars are actually being switched between carriers. We used these 260 Junctions from the Waybill, along with origin and destination Competitive Stations on the Waybill, in determining the impact of the CSP on shippers and carriers along with Competitive Stations for origins and destinations on the Waybill.<sup>5</sup>

### 3. Movements Excluded From My Analysis of the CSP

There are 580,928 records in the Waybill, but a number of these records were excluded from my analysis of the impact of the League’s CSP, either because such movements by their nature would not qualify for competitive switching under the League’s proposal or because of anomalies in the Waybill data.

Exclusion 1: All intermodal movements were eliminated from consideration as potentially “impacted” movements since intermodal movements originate and/or terminate on trucks and as such are not captive to a single station. There were 332,859 intermodal records in the Waybill and they represented 57.3% of all Waybill records.

Exclusion 2: Movements of certain commodities were eliminated because the nature and size of these loads makes it extremely unlikely that they would be candidates for competitive switching under the League’s CSP. Table 2 shows the specific commodity codes that were eliminated:

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<sup>5</sup> We also ran the impact of the CSP using all 260 Junctions in the Station Master List (not just the 407 on the Waybill) and this did not have a significant effect on the number of impacted carloads. This means that, although interchanges might in theory take place at many places on the rail system, most interchanges occur at places near where most shippers are located.

<i>Table 2</i>	
STCC	Description
34333	Cast Iron Heating Boilers, Radiators
34433	Steel Power Boilers, Parts or Attachments
34435	Metal Tanks Exc. Pressure
36129	Power, Distribution or Specialty Transformers, NEC Exc. Radio
36212	Generators Exc. For Land Transportation

There were a total of 65 Waybill records eliminated from my analysis that fell into the categories listed immediately above.

Exclusion 3: Movements with miscellaneous problems on the Waybill were also excluded. These included movements that had no revenue or did not have variable costs assigned to all segments of a movement. There were a relatively small number of movements that fell into this category.

Exclusion 4: Origin or destination stations that were not in the U.S. were also excluded from my analysis. However, the U.S. portion of these movements could be impacted and, thus, was included in my analysis.

After these four exclusions, 245,662 Waybill records remained, and these records form the basis for my analysis of the impact of the League’s CSP.

4. General Types of Movements Potentially Impacted By the CSP

There are two general types of movements that are potentially impacted by the CSP. First, there are movements that are served at a “Captive Station” that are within a reasonable distance of 30 miles of a “Working Interchange.” Under this first scenario, a shipper’s facility would potentially qualify for competitive switching if it is deemed to be located at a Captive Station in the Waybill that is within thirty miles of a Working Interchange in the Waybill. Because the Waybill does not identify local miles, i.e., the distance that an actual shipper’s

facility is from the station, I had to develop a reasonable proxy for the location of the facility that could be used to measure the 30-mile distance, which is discussed in subsection 5 below.

Second, there are movements that are captive at an industry (i.e., shipper's facility) where the traffic originates or terminates, but the industry is served by a Competitive Station that has access to more than one Class I railroad. In this second scenario, even though the station serving the shipper's facility has access to more than one rail carrier, the shipper's facility may only have access to a single Class I carrier. Thus, for example, the station "Birmingham, AL" may be identified in the Waybill as being served by more than one rail carrier. However, even though that station would be considered as "competitive," that does not mean that every rail shipper served out of the Birmingham station has access to more than one rail carrier.

Because the Waybill does not identify local miles, and because the Waybill does not identify which shipper's facility served by a Competitive Station is in fact captive to one rail carrier, I had to develop protocols for identifying captive shippers at a Competitive Station. These protocols are discussed in subsection 6 below.

Accordingly, the total number of carloads that originate or terminate at Captive Stations, as well as movements that are captive at the industry but are served by a Competitive Station, represent the universe of carloads that could potentially be affected by the CSP.

##### 5. Determining Captive Stations Within 30 Miles of a Working Interchange

As previously explained, Captive Stations have access to only a single Class I carrier. The rail miles from these Captive Stations to the closest Working Interchange were calculated in order to determine the movements that would be potentially impacted by the CSP. As noted above, the Waybill does not contain specific local miles, and therefore it is impossible to

determine the distance between a Captive Station and the physical location of shippers' facilities served at that station, or in what direction from the Captive Station those individual shippers are located. Therefore, I assumed that movements shown in the Waybill that either originated or terminated "at" Captive Stations were geographically located exactly at that Captive Station. The Class I carriers that were included in my analysis are BNSF, UP, CSX, and NS.

Class II and Class III carriers were only considered if they were within a reasonable distance (30 miles) of a Captive Station served by BNSF, UP, CSX or NS. In addition, these Class II or III carriers had to physically connect to another Class I railroad. The exception to this was if the Class II or Class III carrier was subject to a known paper barrier. Class II and Class III carriers can have physical access to two or more rail carriers and theoretically could supply a competitive alternative to originate or terminate traffic. However, a number of these rail carriers were spun off by one of the four major railroads, and as a condition of the sale, an unknown number of these smaller carriers were contractually limited to exchange traffic only with the original line owner without incurring a large penalty.

In my analysis, I determined whether a Working Interchange exists and then measured rail miles from a Captive Station to the Working Interchange. However, if I knew that a paper barrier restricts shippers from taking advantage of the location of another carrier, then I concluded that there is no competitive alternative.

There is no comprehensive list of rail carriers that operate under paper barriers. In three instances the existence of such limitations were known: Montana Rail Link is captive to the BNSF; the Fort Worth Western Railroad is captive to the UP; and the Red River Valley Railroad

is captive to the BNSF. Stations on these railroads were considered “Captive” since the paper barrier would restrict economic access to only one Class I railroad.

Because I did not know where all other paper barriers exist, I assumed that all other Class II or Class III carriers were not subject to paper barriers and could compete if they were physically connected to more than one Class I railroad. Thus, my calculations of the impact of the CSP are overstated to the extent that other paper barriers exist that in fact restrict access to other Class I railroads.

6. Determining the Captivity of an Industry At a Competitive Station

a. Mileage determination for captive industries at a competitive station

As noted above, there are many movements in the Waybill that are captive to one railroad at an industry (i.e., the actual facilities of the shipper) but are located in the Waybill at a station that is served by more than one railroad and thus is a Competitive Station for purposes of my analysis.

As noted above, the Waybill only contains miles between stations. The local miles between the station and the industry are not included on the Waybill, and in fact, there is no public source for these local miles. Therefore, I could not calculate the actual distance between an industry and a station. I confirmed with STB staff that these miles are not known or published and adopted the reasonable assumption that shippers’ facilities at origins and destinations listed on the Waybill are geographically located at the station that serves the industry. Therefore, in analyzing the movements involving captive industries served by a Competitive Station, there are no miles to calculate, as the Competitive Station becomes the Working Interchange for these captive-at-industry movements.

This is a “conservative” assumption in the context of this analysis because if it is determined that mileage must be calculated from the specific industry location, then the number of carloads that will qualify for the CSP in my analysis will be overstated as will the resulting rate reductions obtained by qualifying shippers, because some shippers’ captive facilities might in fact be located more than 30 miles from a Competitive Station. In addition, the revenue effect of the CSP on the railroads will also be overstated.

b. Identification of captive movements at Competitive Stations

In the Waybill, movements start and stop at the origin and destination stations, which means that the Waybill does not identify who is shipping the traffic or the industries that are being served. In addition, the Waybill does not identify when industry facilities located at a Competitive Station in fact have access to only a single rail carrier and are therefore captive to that carrier. Therefore, I needed to establish rules for identifying movements that originated or terminated at a captive industry that is served at a Competitive Station. The rules that I developed to indicate the presence of a captive industry served at a Competitive Station are as follows:

- a. Rule 1: If a commodity at a Competitive Station has at least 300 cars with more than a 240% R/VC ratio on any railroad and more than 90% of these high R/VC carloads are on one railroad, then this station will be designated as Captive at the Industry (“CI”) for all movements of this commodity on that railroad that have an R/VC at or above 240% at that station.

Basis for Rule 1 - As the Waybill stops at the station, the only way to separate out different industries at the station is by the commodity being shipped. For Rule # 1, the commodities at each station were examined separately and the range of R/VCs for each commodity at the station were summarized. If a commodity at a competitive station had at least 300 cars with an R/VC at or above a 240% R/VC ratio on any railroad and more than 90% of these carloads were on one railroad, then I considered it very likely that these carloads were going to or from an industry that was

captive to this one railroad. The movements that meet all these parameters are designated as CI in my analysis, and qualify for the CSP.

- b. Rule 2: If a Competitive Station has more than 15% of its carloads with an R/VC ratio above 180% and more than 75% of the traffic at the station is on one railroad, then this station will be designated as CI for all movements at that station with an R/VC ratio at or above 240% on that one railroad.

Basis for Rule 2 – For this rule I looked at the composition of the traffic at a Competitive Station. If more than 15% of the carloads at a Competitive Station had an R/VC above 180% and more than 75% of the traffic was on one railroad, then this indicated that a large number of movements had high captive rates. The analysis designates all movements at Competitive Stations that meet these criteria and have an R/VC at or above 240% on the major railroad as being CI movements.

- c. Rule 3: If there are more than 3,000 cars at a Competitive Station with an R/VC at or above 240% (this could be less than 15% of the carloads at a station) and these cars are all served by the same railroad, then this station will be designated as CI for all movements with an R/VC at or above 240%.

Basis for Rule 3 – There are some major stations which have a large volume of traffic that would make it difficult to meet the 15% of traffic threshold in Rule 2. Rule 3, therefore, bases the measure of captive cars at a competitive station as 3,000 cars with an R/VC at or above 240%. These cars must all be served by the same railroad. This is a large number of cars on one railroad with high captive rates, so movements at Competitive Stations that meet these criteria are designated as CI.

- d. Rule 4: If a Competitive Station has more than 3,000 cars with an R/VC at or above 300%, then this station will be designated as CI for all movements with an R/VC 300% or greater.

Basis for Rule 4 – There were some movements at stations that have R/VC's that are so high that it is very unlikely that there is competition for this traffic. For Rule 4 we identified movements at competitive rail stations that had an R/VC ratio at or above 300% and if there were 3,000 of these movements they are designated as CI.

Based on the above rules, all movements designated as CI were included as being potentially impacted by the CSP. It should be noted that all of these rules required movements to have an R/VC ratio of 240% or greater to be included as potentially impacted movements.

7. Determining Movements With an R/VC Ratio of 240% Or More

The STB's calculation of variable cost, as contained in the costed Waybill, was used to determine the R/VC ratio for each movement. Every movement was considered individually to determine if it qualified under the CSP.

B. Determination of Existing Revenue For Movements and Carloads Subject to Competitive Switching Under the CSP

Once the number of stations and carloads that would qualify for competitive switching under the CSP were identified using the procedures outlined in subsection A above, revenue for the movements identified as being subject to competitive switching under the CSP was determined from the Waybill. On single line moves the actual unmasked revenue on the Waybill was used. On interlined moves the STB's breakdown of revenue was used.

**VI. PROCEDURES USED FOR CALCULATING POTENTIAL RATE/REVENUE REDUCTIONS AND RESULTS OF ANALYSIS**

Once I determined the universe of movements (stations, carloads and existing gross revenue) that could qualify under the CSP, I needed to determine the possible effect on rates if currently captive shippers moved from a captive to a competitive status under the CSP. To do this, I first needed to determine which movements at the stations that I identified would likely have their rates reduced by moving from a captive to a competitive status as a result of the CSP. Then, I needed to estimate the new competitive rates that shippers who qualify for the CSP would pay for rail transportation if the CSP were adopted by the Board. Estimating the new competitive rates would then allow me to estimate the revenue reduction that would accrue to Class I rail carriers if the CSP were adopted by the Board.

As explained further below, the reduced rates and revenue reduction were calculated under two scenarios: (1) the rates and revenue reduction that would accrue if the CSP were assumed to result in a situation of “full” competition; and (2) the rates and revenue reduction that would accrue if the CSP were assumed to result in a situation of “reduced” competition. This “static” revenue analysis also does not account for potential increases in volumes resulting from lower rates, a subject addressed in Section VII.

A. Determination of Movements That Would Be Subject to a Rate Reduction By Moving From Captive To Competitive Status Under the CSP

Not all movements that would change from captive to competitive status at origin or destination as a result of the CSP would actually experience a rate reduction. For example, if a movement was solely served by one carrier at origin and solely served by the same carrier at destination, qualifying for competitive switching only at origin would not likely result in a reduced rate, since the movement would still be captive to the same railroad at the destination. In such a case, when a railroad having a single line haul controls a destination, it normally controls the rate for the movement despite the “competitive” status at the origin.

Thus, in order to determine how rates would be affected by the CSP, I developed protocols and procedures – “rules” – for determining when rates would be reduced as a result of a change from captive to competitive status under the CSP. These rules are as follows:

Rules for Determining When a Rate Would Be Reduced Under the CSP

a. Single line movements (including Rule 11 rates).

<i>Table 3</i>		
<b>Single Line Hauls (including Rule 11 rates)</b>		
Existing Move		Needed for a Station to be Impacted
Origin	Destination	
Captive	Captive	Both origin and destination stations must be impacted to reduce the rate
Captive	Competitive	If origin station is impacted the rate is reduced
Competitive	Captive	If destination station is impacted the rate is reduced
<i>Note: Movements that are already competitive at both the origin and destination are not considered as they are not impacted by the NITL proposal.</i>		

Under this single-line rule, at least one end of a single line move must be captive before application of the CSP in order for the CSP to potentially impact the movement. Then, both ends of the single line move must be competitive after application of the CSP, in order for the CSP to actually impact the movement.

b. Joint line movements under single factor through rates

<i>Table 4</i>		
<b>Multiple Railroad Hauls Under Single Factor Joint Line Rates</b>		
Existing Move		Needed for a Station to be Impacted
Origin	Destination	
Captive	Captive	If only the origin station is impacted the rate for the origin segment is reduced
		If both stations are impacted the rates at both segments are reduced
		If only the destination station is impacted, the rate for the destination segment is reduced
Competitive	Captive	If the destination station is impacted the rate for the destination segment is reduced
Captive	Competitive	If the origin station is impacted the rate for the origin segment is reduced
<i>Note: Movements that are already competitive at both the origin and destination are not considered as they are not impacted by the NITL proposal.</i>		

Under these rules, if either end of a multi-railroad move transported under a single-factor through rate is impacted by the CSP, then that segment of the movement is impacted. This is different from single line moves, which must have both ends of the move competitive to be impacted. The reason that only one end of a joint line single-factor through rate move needs to

change from captive to competitive is because the junction where the traffic is interchanged between railroads is by its very nature competitive. Because the junction is competitive if the origin changes from captive to competitive, the segment of the move between the origin and the junction becomes competitive. The same rules apply between the junction and the destination. Thus, if either the origin or destination of a joint line single-factor through rate movement changes from captive to competitive, the segment of the movement impacted by this change becomes competitive.

B. Determination of Rates for Potentially Impacted Movements Under Conditions of Full Competition

In order to determine the rate that would result from a movement that changes from captive to competitive as a result of the CSP, under the assumption that full competition would result, I determined the average revenue to variable cost ratio that each Class I railroad is currently obtaining for its competitive traffic, calculated at the five (5) digit commodity code level by mileage range. This “Competitive R/VC” for that particular railroad for this commodity at that mileage range was then multiplied by the railroad’s variable cost for the movement to determine the new competitive rate that would result from the CSP. This approach assumes that the CSP would result in a condition of full competition and, thus, produces the largest possible revenue reduction to railroads.

To make the calculation of a Competitive R/VC, I used all single line haul movements on the Waybill for each railroad that had R/VC ratios below 180%. In other words, I assumed that all movements with a R/VC ratio of less than 180% were competitive movements. In calculating these “Competitive R/VCs,” I used a total of 159,106 records out of the 580,928 records on the Waybill.

The Competitive R/VCs on each railroad were stratified by STCC codes at the five-digit level. In addition, the Competitive R/VCs were summarized by mileage range. The mileage ranges determined at the five-digit STCC level were:

- 0 to 50 miles
- 50.1 to 150 miles
- 150.1 to 500 miles
- 500.1 to 1000 miles
- 1000.1 to 1800 miles
- Over 1800.1 miles

If sufficient moves were not available for the specific mileage range for a movement at the five-digit level, then the mileage range immediately above or below was used. If sufficient data was still not available, the same process was followed at the four-, three- and then two-digit level.

This process allowed the Competitive R/VC for all impacted movements to reflect the actual markup above variable cost that each railroad obtains for the specific type of traffic that could be impacted by the CSP, at that mileage range. When the appropriate Competitive R/VC is multiplied by the variable cost of the movement, a new “Competitive Benchmark Rate” was calculated that would reflect the actual markup above variable cost that the railroads could expect to obtain for the specific type of competitive traffic that could be impacted by the CSP, under conditions of full competition.

After calculating the new Competitive Benchmark Rate for impacted movements, the reduction in rates that shippers could expect when moving from captive to competitive status for each commodity at each mileage range could also be calculated, again assuming a condition of full competition.

Due to the high level of detail in my Competitive R/VC calculations, if railroads compete for this switched traffic like they do for other truly competitive traffic, my calculations of savings for shippers and reduced revenue for carriers from the CSP should be accurate. However, if the level of competition for this competitively-switched traffic is less than the level of competition for competitive movements of the same commodity at the same mileage range generally, my calculations of savings for shippers and the revenue reduction for carriers will be overstated. This is discussed further in subsection I below.

C. Results of Analysis Regarding the Number of Qualifying Carloads, Stations and Potentially Impacted Gross Revenues

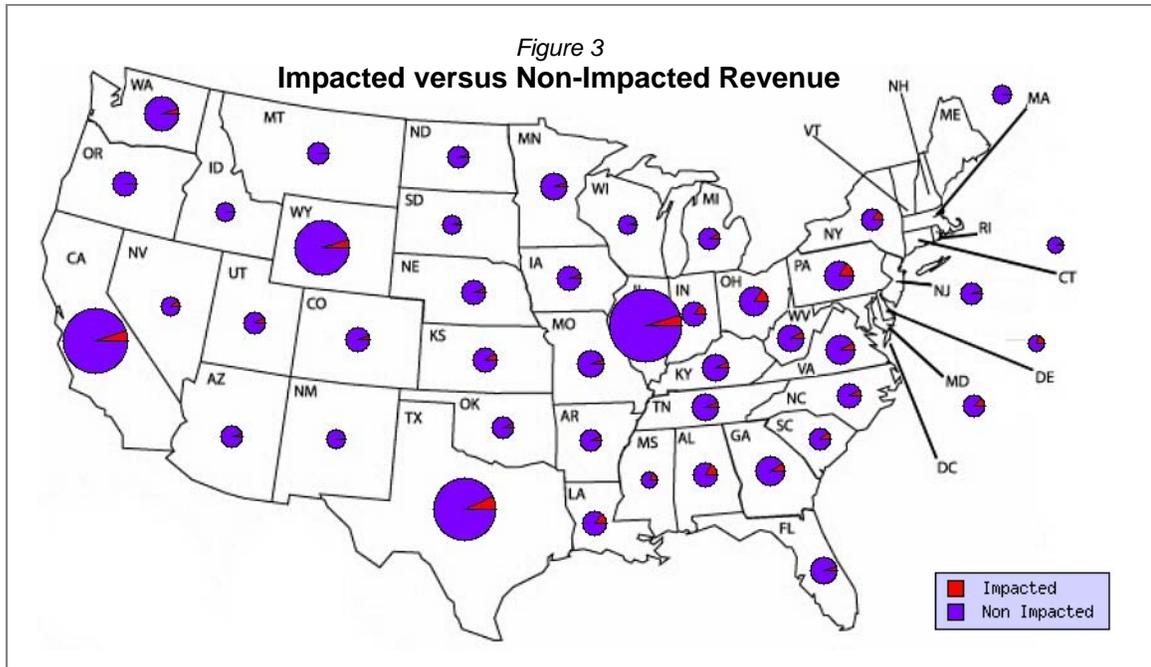
Applying all of the above procedures, I analyzed the Waybill to determine the number of impacted carloads, stations, and existing gross revenues potentially impacted by the CSP, applying the 240% R/VC Threshold and the 30-mile distance to a Working Interchange in the CSP. The results in total for the BNSF, UP, NS and CSX are as follows:

<i>Table 5</i>	
<b>Estimated Impact from the CSP on the Big Four Carriers Based on a 240% R/VC and a 30 Mile Distance to a Working Interchange</b>	
Impacted Carloads	= 1,239,297
Impacted Rail Stations	= 1,670
Potentially Impacted Gross Revenue	= \$2,929,210,097

To put these figures into perspective, there are a total of about 31 million total carloads for the Big Four carriers in the 2010 Waybill. Thus, the estimate of impacted carloads are only approximately 4% of the total carloads.

The map in Figure 3 below shows the breakdown of potentially impacted versus non-impacted revenue for each state. The size of the pie in each state represents the total amount of

gross revenue in the state on the four major U.S. railroads. The slice of the pie represents the percentages of gross revenue that is subject to a rate reduction through the CSP in each state.



D. Estimating the Value of the Rate Reductions For Movements that Change From a Captive to a Competitive Status Under the Assumption of Full Competition

Once a movement was determined to be eligible for a rate reduction under the CSP, the value of the rate reduction was first estimated assuming a condition of full competition. The rates of “captive” movements experiencing a change from captive to competitive status under the CSP were reduced to the R/VC level of the Competitive Benchmark Rate, for that specific commodity and mileage range. The Competitive Benchmark Rate was then added to the access fee at the origin and/or destination and the sum of these two amounts was subtracted from the Waybill rate. If the Waybill rate was less than the sum of the Competitive Benchmark Rate and the access fee, then the movement was not impacted by the CSP. If the Waybill rate was greater than the sum of the Competitive Benchmark Rate and the access fee, then the movement was

considered to be impacted by the CSP and the rate reduction was calculated. An example calculation for revenue reductions under the CSP follows:

<i>Table 6</i>	
<b>Rate Reduction Calculation for Impacted Movements (Savings)</b>	
Competitive Benchmark Rate	\$2,000
+ Access Fee	+ \$299
- Waybill Rate	-\$4,000
<b>Savings</b>	<b>-\$1,701</b>

All of the data on impacted movements under different CSP options were processed and summarized by the ORBE. The ORBE program can generate reports that summarize the data on rail shippers' impacted movements under different assumptions. Specifically, the ORBE summarized the total carloads, stations, impacted revenue and reduced revenue by railroad, by commodity, and by state.

The ORBE filter calculates the impact of different CSP options on railroads and on rail shippers. Impacted carloads, stations and reduced revenue are shown in relation to all carloads, stations and reduced revenue on each railroad. This provides a clear picture of the impact of the CSP on the Class I railroads. The results of the ORBE analysis of the CSP are organized by state in maps generated by the ORBE.

E. Results Of Analysis By Railroad Under Conditions of Full Competition

At a 30-mile distance to a Competitive Station from a Captive Station or captive industry and using the 240% R/VC presumption, the impact of the CSP on the Big Four carriers is as follows:<sup>6</sup>

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<sup>6</sup> Note: the number of carloads and stations are different when summarized by railroad versus by state or by commodity. The reason for this difference is described in Appendix E.

<i>Table 7</i>	
<b>Estimated Impact of CSP Based on 240% R/VC and 30 Mile Distance – Full Competition</b>	
Impacted Carloads on Railroads	= 1,239,297
Impacted Rail Stations	= 1,670
Potentially Impacted Gross Revenue	= \$2,929,210,097
Shipper Savings/Carrier Revenue Reduction	= \$1,293,650,873

Results for potentially impacted revenue, carloads and stations by carrier are set forth in Appendix C. A map showing the revenue reduction by railroad is in Appendix D.

F. Determination of the Number of Stations, Carloads and Revenue Reduction Potentially Subject To Competitive Switching If the 30-Mile Distance Were Changed

In its July 25, 2012 Decision, the Board suggested that commenters provide information on the impact of the League’s CSP if the 30-mile “reasonable distance” were changed. I have calculated the number of impacted carloads, stations, revenues, and revenue reduction for the Big Four carriers if the 30-mile distance were altered. The results are as follows:

**Impact of CSP by Mileage Range Based on a 240% R/VC Threshold**

<i>Table 8</i>			
<b>Impacted Carloads – Full Competition</b>			
		Difference from 30 Mile Base Case	
	Total	# of Carloads	Percent
40 miles	1,522,049	282,752	22.8%
30 miles	1,239,297		
20 miles	969,135	-270,162	-21.8%

Details by railroad are in Appendix C.

<i>Table 9</i>			
<b>Impacted Stations – Full Competition</b>			
		Difference from 30 Mile Base Case	
	Total	# of Stations	Percent
40 miles	1,880	210	12.6%
30 miles	1,670		
20 miles	1,435	-235	-14.1%

Details by railroad are in Appendix C.

<i>Table 10</i>			
<b>Shipper Savings/Carrier Revenue Reduction – Full Competition</b>			
		Difference from 30 Mile Base Case	
	Total	Reduced Revenue	Percent
40 miles	\$1,552,989,969	259,339,095	20.0%
30 miles	\$1,293,650,874		
20 miles	\$1,090,626,250	-203,024,624	-15.7%

Details by railroad are in Appendix C.

The results for impacted carloads, stations and the revenue reduction by state and by commodity have also been calculated. These results are set forth in Appendix E.

G. Reduction in Class I Railroad Revenue Compared to Class I Railroads’ Existing Revenue

In this subsection, I compare the potential reduction in revenue as a result of the CSP under conditions of full competition to the total revenue of the “Big Four” Class I rail carriers using the 30-mile “base case.” This comparison is included in Table 11. The total revenue in Table 11 represents the sum of the revenue for all commodities shipped (including intermodal revenue) for the four major U.S. railroads as contained in the Waybill. The only exclusion from total revenue were exclusions 2 and 3 in subsection 3 of Section V.

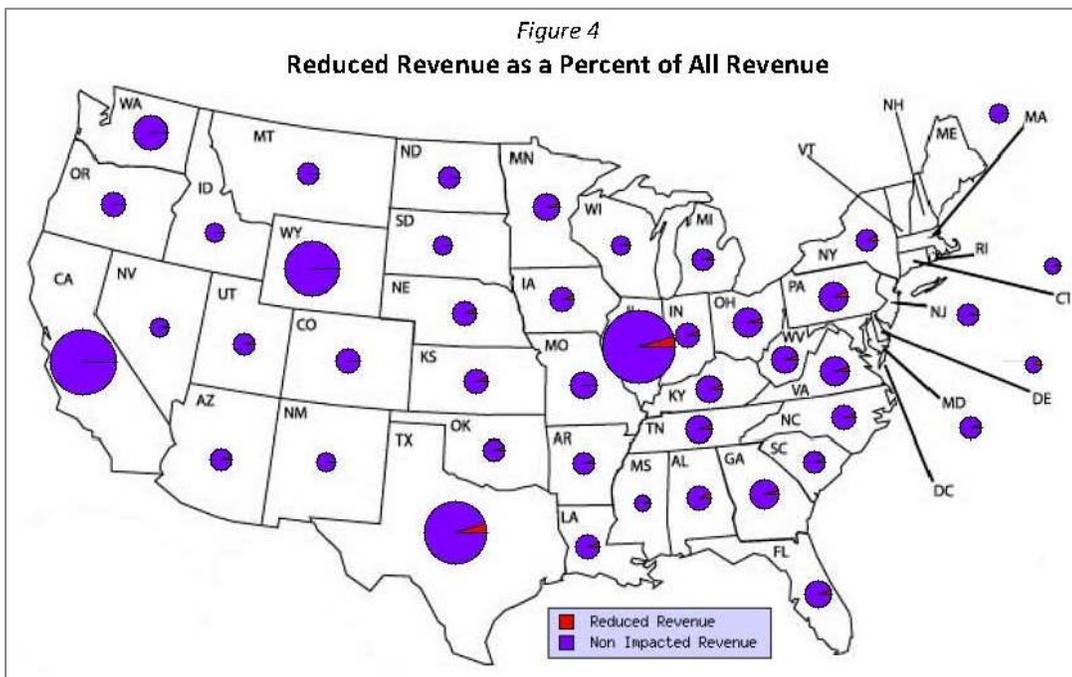
Impacted Revenue and Reduced Revenue as a Percent of All Revenue

<i>Table 11</i>					
<b>30 Mile File ~ Revenue Report – Full Competition</b>					
	All Revenue	Gross Revenue for Impacted Moves	% of Total	Shipper Savings/Carrier Revenue Reduction	% of All Revenue
Big 4 Railroad Total	\$52,920,579,871	\$2,929,210,097	5.5%	\$1,293,650,873	2.4%

Details by railroad are in Appendix F. Note that in apportioning all revenue on the Waybill to specific states on single line moves, half the revenue is designated to the state with

the movement origin and half to the state with the movement termination. The revenue is then totaled for all origins and terminations in each state. On joint line moves the STB's breakdown of revenue was used.

The map in Figure 4 shows the breakdown of reduced revenue (shipper savings) in relation to all revenue in each state. Note that the size of the pie in each state corresponds to the total amount of rail revenue in each state.



The map in Figure 4 shows that the slice of the pie in each state that represents reduced revenue to railroads is very small; in some states the revenue reduction is so small that it is not visible. Figure 4 indicates that the CSP will not have a dramatic impact on the rail revenue of the four major Class I railroads.

The impact of the revenue reduction from the CSP on railroads net income from railway operations before taxes based on a 240% R/VC and a 30-mile distance to a Working Interchange (and assuming full competition) is shown in Table 12.

<i>Table 12</i>	
<b>Revenue Reduction as a Percent of Railroads' Net Revenue from Railway Operations Before Taxes – Full Competition</b>	
Net Revenue	\$14,333,847,000
Reduced Revenue	\$1,293,650,874
Percent Reduction	9.0%
<i>Note – The Net Revenue from Railway Operations represents the combined total for NS, CSX, UP and BNSF for the year of 2010 as contained in the railroads' R1 reports. See Schedule 210 Line 15.</i>	

H. Determination of the Number of Stations and Carloads Potentially Subject to Competitive Switching if RSAM Values for Each Railroad Are Used

In its July 25, 2012 Decision, the STB requested that the savings be calculated based on the four year average RSAM R/VC values for each rail carrier. To calculate the movements impacted under the CSP each railroad's four year average RSAM value was used instead of the 240% R/VC value for its movements on the Waybill. Each RSAM value then determined the R/VC threshold that a movement had to reach or exceed to be impacted by the CSP. The reduction in carloads, stations and revenue that resulted from using the RSAM R/VC values are set forth in Table 13 below.

<i>Table 13</i>			
<b>30 Mile to Working Interchange Results RSAM R/VC's vs. 240% R/VC – Full Competition</b>			
	<b>240% R/VC Shipper Savings/Carrier Revenue Reduction</b>	<b>RSAM R/VC Shipper Savings/Carrier Revenue Reduction</b>	<b>Difference</b>
Savings	\$1,293,650,873	\$1,136,138,151	\$157,512,722
Carloads	1,239,297	999,701	239,596
Stations	1,670	1,473	197

I. Impact of CSP Based on Reduced Competition

All calculations thus far in my analysis assume that, for movements that change from captive to competitive status under the CSP, there is full competition between railroads and that the rates for impacted movements reflect this full competition. As discussed previously, the Competitive R/VCs that I calculated were based on the average R/VCs for all rates with a revenue to variable cost ratio of less than 180% for that particular commodity at various mileage ranges. Such R/VC ratios are therefore the product of situations where there is vigorous intermodal competition and where railroads compete head-to-head at the shipper's facility. The Competitive R/VCs used thus far in my analysis assume that movements impacted by the CSP would experience that same level of competition.

That assumption is likely unrealistic, for several reasons. The CSP would create competition only between two railroads for potentially impacted moves. It is likely that these two railroads will not compete as vigorously for potentially impacted movements under the CSP as they would for movements at stations subject to either direct intramodal competition at the plant or in situations subject to intermodal competition. Movements impacted by the CSP will by definition require a switch, likely increasing transit times, thus, making them less competitive than movements where two rail carriers serve the plant directly. If a lesser degree of competition results from the CSP than exists generally for competitive movements of the commodity, rates for potentially impacted movements would be greater than the "full competition" scenario assumed in my prior calculations.

As previously discussed, I have calculated Competitive Benchmark R/VCs (R/VCs below 180% as detailed in Section VI) at the five-digit commodity code level for specific mileage ranges. The average R/VC ratio for all captive movements (movements with more than a 180%

R/VC) was also calculated the same way. This allows me to make very detailed apples-to-apples comparisons of the markup above variable cost for potentially impacted movements on each railroad:

- For captive versus competitive traffic;
- For specific commodities (R/VC's are at the five-digit STCC level); and,
- According to the mileage for potentially impacted movements.

This detailed data on the markup that railroads obtain on captive versus competitive traffic allows the use of the Lerner Index in determining what the markup above variable cost would be under a scenario where full competition does not exist.<sup>7</sup> The Lerner Index essentially calculates the markup above variable cost for potentially impacted movements as two times the

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$$L = \frac{s_d}{E_d} = \frac{P - MC}{P}$$

The Lerner Index ( $L$ ) is equal to the firm's market share ( $s_d$ ) divided by the price elasticity of demand ( $E_d$ ). Market share is equal to 1 for a monopoly and ½ for a duopoly. Alternatively, the Lerner Index is equal to a firm's price ( $P$ ) minus its marginal cost ( $MC$ ) divided by its price. This demonstrates a firm's market power by showing its ability to set its price above marginal cost. With perfect competition, price is equal to marginal cost and  $L=0$ , demonstrating no price markup. As market power increases,  $L$  increases towards 1.

By assuming the Competitive Benchmark R/VC is close to a railroad's marginal cost,  $MC$  is set equal to the Competitive Benchmark R/VC. Because railroads price to the market, prices under 180 R/VC (used in calculating the Competitive Benchmark) would be those where railroads face a high level of competition, whether intramodal, intermodal, product, or geographic. Similarly, by assuming the Captive R/VC is a monopoly price,  $P$  is set equal to the Captive R/VC. Because railroads are allowed to exercise price discrimination in order to capture their fixed costs, prices for captive shippers should approach the monopoly rate. While these assumptions are not perfect, they do serve the purpose of identifying a scenario that would lie between nearly perfect competition and no competition, which is what may occur under competitive switching.

In places where railroads serve captive shippers, market share ( $s_d$ ) would be equal to 1. By substituting the Competitive Benchmark R/VC, Captive R/VC, and market share into the rearranged Lerner Index, the estimated elasticity of demand ( $\widehat{E}_d$ ) for each movement can be calculated as:

$$\widehat{E}_d = \frac{s_d * P}{P - MC} = \frac{1 * \text{Captive R/VC}}{\text{Captive R/VC} - \text{Competitive R/VC}}$$

Once the elasticity of demand is known, the duopoly R/VC resulting from competitive switching can be found. Resolving the Lerner Index formula for  $\widehat{P}$  and adjusting the market share for a duopoly scenario ( $s_d=1/2$ ) gives the following formula:

$$\widehat{P} = \frac{MC}{1 - \frac{s_d}{\widehat{E}_d}} = \frac{\text{Competitive R/VC}}{1 - \frac{1/2}{\widehat{E}_d}} = \text{Duopoly R/VC}$$

product of the captive and competitive R/VC's divided by the sum of the Captive and Competitive R/VC's. When the benchmark R/VC calculated using the Lerner Index is multiplied by the variable cost for potentially impacted movements, it approximates the rate that would result from competition by only two carriers. The "duopoly competition" benchmark rate reflects the market power railroads are able to exercise, through differential pricing, over shippers subject to competitive switching, where only two railroads are able to compete for the business, one of which is subject to a switch and where no other forms of competition are available.

The impact of the CSP under this reduced competition, based on the 240% R/VC threshold and a 30-mile distance to a Working Interchange, is contained in Table 14 along with the difference from the impact of full competition based on the same assumptions.

<i>Table 14</i>				
<b>Estimated Impact of CSP Based on 30 Mile Distance and 240% R/VC Reduced Competition versus Full Competition</b>				
	<b>Full Competition</b>	<b>Reduced Competition</b>	<b>Difference</b>	<b>Percent Reduction</b>
Impacted Carloads	1,239,297	1,078,662	160,635	13.0%
Impacted Stations	1,670	1,606	64	3.8%
Potentially Impacted Gross Revenue	\$2,929,210,097	\$2,803,269,293	\$125,940,804	4.3%
Shipper Savings/Carrier Revenue Reduction	\$1,293,650,873	\$907,783,085	\$385,867,788	29.8%

The results in Table 14 show that a situation of "reduced competition" has a much smaller impact on stations (3.8% reduction) and on total (gross) revenue (4.3% reduction) than it has on the amount of the revenue reduction (29.8% reduction). Reduced revenue is 29.8% less under a scenario of reduced competition compared to the full competition scenario but impacted revenue is only reduced by 4.3%. This means that the primary impact of reduced competition is not in the number of movements that will be impacted by the CSP, but rather that shippers will

obtain higher rates from railroads on movements that are impacted due to the reduced level of competition in the market place.

Table 14 also shows that the reduced competition scenario represents a 13% reduction in carloads. The decrease in potentially impacted gross revenue is much smaller, which indicates that these carloads were on the bubble, meaning that they just barely qualified under the CSP, *i.e.*, they would have R/VC's relatively close to the 240% threshold needed to qualify under the CSP.<sup>8</sup>

## **VII. TRAFFIC AND REVENUE GAINS THAT WOULD LIKELY ACCRUE TO CLASS I RAIL CARRIERS**

As noted above, in its July 25 Decision, the Board asked parties to analyze by how much would the proposed CSP result in lower rates for shippers who qualify, and how much revenue would Class I rail carriers lose as a result of the League's proposal. However, the Board, in asking those questions, also recognized the possibility that some of those revenue reductions "could be offset through traffic increases or other gains." Decision, p. 9. In this Section VII, I discuss that question.

### **A. "Static" Versus "Dynamic" Effects of the CSP**

Companies make logistics decisions based upon economics. If it costs more to ship by rail than other logistics options, U.S. railroads will lose a certain amount of business. The converse is also true. If U.S. railroads provide lower rates they will gain a certain amount of traffic. This is basic economics and is the foundation of many shippers' contract rate negotiations with railroads.

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<sup>8</sup> These carloads also tend to be for shorter distance movements and are more influenced by small changes in benchmark rates.

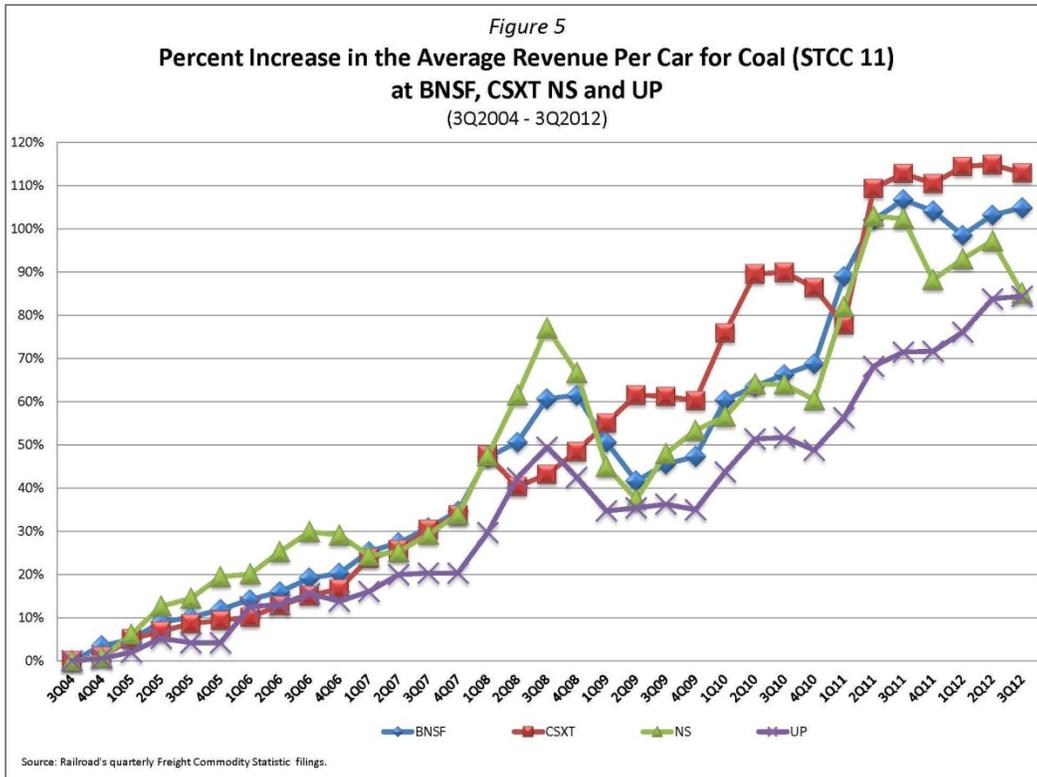
The rail shipper surveys that Escalation Consultants takes each year demonstrate that railroads have lost a substantial amount of business as a result of the large rate increases they have imposed in the market place. Lower rates will bring some of this volume back to rail. Thus, it is reasonable to expect that the railroads will gain traffic volumes from some shippers who obtain lower rates under the CSP, and that any such increases in traffic would offset some portion of the reduced revenue that would result from increased competition from competitive switching.

In general, price affects volume, even in markets where railroads are market dominant. The following are some of the reasons why this happens:

1. Competition from foreign sources. Imports tend to come into the U.S. at competitive locations but U.S. production of comparable and competing products is frequently produced at captive origins. Rail movements from U.S. plants that are captive to one railroad are subject to rates that generate monopoly profits for railroads, but this puts the output from these plants at a competitive disadvantage to imports. In these cases of foreign substitution of domestically produced commodities, railroads and rail shippers should have the same objective with respect to imports and that is to minimize their occurrence. However, the large volume of such imports into the U.S. shows that shippers and carriers are frequently not successful in maximizing U.S. production. The CSP will arm many rail shippers with a mechanism that will help them compete more effectively against imports with products from plants that today are captive to one railroad. This will help shippers increase volumes on railroads and ultimately help the economy by creating more production and jobs at U.S. facilities.

2. Product substitution. Some U.S. producers have options with the products they produce or purchase. If rail rates are too high, they just do not produce or purchase some products. Two examples of product substitution are in petroleum derivatives and coal. When refining crude oil to produce gasoline, several derivative products are made during the refining process. These products must be chemically produced, separated from the stack, pumped through the refinery, stored in tanks and marketed to receivers. If rail transportation costs are too high a refiner can choose to produce a greater amount of high octane gasoline, which is a more profitable product. The level of rail rates can determine if these types of derivative volumes are produced at U.S. refineries and shipped by rail. Lower rates through the CSP should result in additional derivative production at U.S. refineries that are captive to one railroad.

Another example is coal, which competes with gas, wind and nuclear power for the production of power at electric utilities. The delivered price of coal is largely made up of rail transportation expenses. If rail rates are too high, coal plants are ranked lower in the dispatch order and utilities purchase less coal. If rail rates are lower, coal plants are more likely to be part of the base load for utilities and the amount of coal shipped by rail will increase. The graph in Figure 5 shows that railroads have been slow to recognize that they are competing against other sources for generating power. Support for Figure 5 is in Appendix G.



The graph shows that between the third quarters of 2004 and 2012 (8 years) the average percent change in revenue per car for coal on BNSF and CSXT was greater than 100%, while NS and UP had rate increases of approximately 85%. The CSP would provide a mechanism for utilities to reduce the rail rates on traffic where railroads are now obtaining high monopoly profits. This will result in greater rail volumes of coal at captive power plants without shippers having to convince railroads that lower rates are a win/win scenario for both companies.

3. Resourcing. Some companies have multiple plants both inside and outside of the U.S. They choose the production location based on the delivered cost to the customer. This puts plants that are captive to one railroad at a significant disadvantage and can cause their captive plants to operate at a low capacity. The survey Escalation Consultants conducted in 2009, with 170 companies, highlighted this problem as the respondents categorized where traffic went when it was taken off of rail due to rail becoming too expensive:

<i>Table 15</i>	
<b>Results of Survey Questions on Where Traffic Went When it Was Taken Off of Rail</b>	
Switched to truck	75.5%
Switched to barge	22.3%
Switched to offshore production	10.1%
Changed where or how supplies are purchased	36.7%
Other	20.9%
<i>Note: Traffic that left rail fell in more than one category for many companies</i>	

The survey results showed that the high cost of shipping by rail has consequences. Ten percent of the respondent companies switched production to offshore facilities at least partly due to rail becoming too expensive. Lower rates under the CSP will help reverse the trend of traffic leaving rail and help make it more economical for companies to produce at their U.S. facilities that are captive to one railroad.

4. Taking volume away from trucking instead of trucking taking volume away from rail. The comparison of the increase in railroads' average revenue per car to truck rates and inflation over the last 7.5 years was described in Section III. Figure 1 on page 6 shows that rail rates have increased substantially more than the cost of long haul trucking. A company's logistics decisions are based upon economics and over the last 8 years trucking has become more economical than shipping by rail for many movements. The rail shipper surveys that Escalation Consultants has taken each year show that the high rate increases of railroads are causing traffic to leave rail and go to long haul trucking for those commodities that can move on either mode. Lower rail rates on impacted movements under the CSP can help reverse this trend and help traffic switch back from truck to rail.

B. The Effect That Rail Rate Increases Have on Volumes Can Be Measured In Some Markets

The rate increases taken by Canadian railroads have been much lower than those of U.S. railroads. The graph in Appendix H shows that between the third quarters of 2004 and 2012 the four big U.S. railroads had an average increase in revenue per car between 55% and 86%, while the Canadian railroads' average revenue per car increased between 29% and 43%. The smaller increase in CN and CP rates gives them an advantage in some markets for some commodities over U.S. railroads. The table below shows the percent increase in average revenue per car on each railroad over the last eight years. Appendix I contains support for the change in average revenue per car for U.S. and Canadian railroads.

<i>Table 16</i>			
<b>Percent Increase in Railroads' Average Revenue Per Car Between 3Q2004 &amp; 3Q2012</b>			
	<b>U.S. Railroads</b>		<b>Canadian Railroads</b>
BNSF	86.0%	CN	28.6%
CSXT	69.1%	CP	<u>43.2%</u>
NS	54.7%	<b>Average</b>	<b>35.9%</b>
UP	<u>76.1%</u>		
<b>Average</b>	<b>71.5%</b>		

Examples of business that U.S. railroads have lost and have the potential to regain can be seen in the competition for U.S. markets between Canadian and U.S. railroads. An analysis of the Public Use Waybill between 2005 and 2011 shows that, for some commodities, Canadian production has either taken over certain markets or is gaining market share. Part of the reason for this is that Canadian production has had lower rail rate increases than U.S. production. Some examples in the Chicago market follow:

1. Plastic (STCC 28211) Rail Movements into Chicago

Houston is the major production area for plastics with 40% of the U.S. plastic carloads going into the Chicago market in 2011. Between 2005 and 2011 rates from Houston to Chicago increased 48% while the number of carloads have not changed. The carloads originating in Canada for the same products have experienced substantial increases, a change assisted by low rate increases or rate decreases from certain Canadian markets into Chicago between 2005 and 2011.

For example, carloads from Ontario have increased 96%, while rail rates from Ontario have increased only 2%. Carloads from Alberta have increased 224%, while rail rates from Alberta have increased only 10%. Carloads from Canada that originate in provinces that are masked on the Public Use Waybill have increased 500%, while the average rate for these moves was 34% less in 2011 than it was in 2005. Between 2005 and 2011 the lower rates of Canadian railroads would appear to have helped Canadian origins go from 7.8% to 11.9% of the carloads into the Chicago plastic market. It is reasonable to infer that higher rail rates in the U.S. for plastics has adversely impacted rail volumes for this commodity. Table 17 summarizes these results. The bar chart in Appendix J shows these results graphically.

<b>Change in Rail Rates and Carloads for Plastics (STCC 28211) Movements into the Chicago Market from Houston versus Canada</b>						
Origin	Carloads			Rates		
	2005	2011	% Change	2005	2011	% Change
Ontario, CAN	1,160	2,280	96.6%	\$1,509	\$1,544	2.3%
Alberta, CAN	1,520	4,920	223.7%	\$3,782	\$4,148	9.7%
Canada Masked	40	240	500.0%	\$5,099	\$3,363	-34.0%
Houston, TX	22,360	22,360	0.0%	\$2,127	\$3,139	47.6%

2. Liquefied Gases (STCC 29121) Rail Movements into the Chicago Market

Canada has gone from representing 19% of the carloads into the Chicago liquefied gas market in 2005 to 66% of the carloads into this market in 2011. Over this six year time frame, U.S. rail carloads decreased by 14% and had average rail rate increases of 72.5%. The major increase in Canadian carloads came from Alberta, with a 3900% increase in carloads and 57% increase in rail rates; and from masked Canadian Provinces which had a 1986% increase in carloads and a 28.8% increase in rates. Markets can change for a number of reasons, but it appears the Canadian railroads are providing a rate structure that helps to improve market share for the railroad and their customers in the Chicago market. A lower, more competitive, rate structure on U.S. railroads should be helpful in protecting and improving market share for U.S. producers. Table 18 summarizes these results. Appendix K shows these results graphically.

*Table 18*

**Change in Rail Rates and Carloads for Liquefied Gases (STCC 29121) Movements into the Chicago Market for All U.S. Origins versus Alberta and Masked Canadian Provinces**

Origin	Carloads			Rates		
	2005	2011	% Change	2005	2011	% Change
U.S. Total	4,732	4,048	-14.5%	\$2,227	\$3,842	72.5%
Canada Masked	280	5,840	1,985.7%	\$2,532	\$3,261	28.8%
Alberta, CAN	40	1,600	3,900.0%	\$2,844	\$4,467	57.1%

3. Sulfuric Acid (STCC 28193) Rail Movements into the Chicago Market

Canada has gone from representing 49% of the Chicago sulfuric acid market in 2005 to 56% of this market in 2011. Over this six year time frame, U.S. rail carloads decreased by 19.8% and had average rail rate increases of 116.3%. The major increase in Canadian carloads came from masked Canadian provinces on the Public Use Waybill which had a 2050% increase in carloads and a 9.4% increase in rates. Table 19 summarizes these results. Appendix L shows these results graphically.

*Table 19*  
**Change in Rail Rates and Carloads for Sulfuric Acid (STCC 28193) Movements into the Chicago Market for All US Origins versus Masked Canadian Provinces**

Origin	Carloads				Rates		
	2005	2011	% Change		2005	2011	% Change
U.S. Total	4,320	3,464	-19.8%		\$1,408	\$3,045	116.3%
Canada Masked	80	1,720	2050.0%		\$2,353	\$2,574	9.4%

There can be many factors that determine the success or failure of companies in a market. The three commodities going into the Chicago market provide examples of where rate increases of U.S. railroads appear to be a contributing factor to a drop in market share for U.S. producers. Lower rail rates at captive U.S. plants will allow U.S. producers to compete more effectively against Canadian plants and ultimately increase traffic on U.S. railroads. The NITL CSP, therefore, has the potential to be a win/win scenario for both U.S. producers and US railroads. Thus, there is reason to believe that if more rail traffic was subject to competition and rail carriers competed for this traffic, they would experience a countervailing increase in volume to compensate for the decrease in rates resulting from the increased competition produced as a result of the CSP.

**VIII. IMPACT OF THE CSP ON SHIPPERS THAT WOULD NOT QUALIFY UNDER THE TERMS OF THE CSP**

The Board has asked for estimates of the impact of the CSP on shippers who would not qualify under its terms. There are many more captive shippers than the number of captive shippers who would qualify for competition under the CSP. The question is: will railroads increase the rates of non-impacted captive movements to make up for the loss of revenue on movements impacted by the CSP?

There is good reason to believe that the effects on non-qualifying shippers would be minimal, if any. As shown in Figure 4 on page 34, the reduction in rates that would result from

the CSP is very small in relation to the railroads' total revenue in just about all geographic areas. In fact, the slice of the pie that represents the savings to shippers in relation to the railroads total revenue in each state is so small that the savings slice is hardly visible. On a percent basis this is simply not a big reduction in rail revenue in relation to railroads' total revenue. This means that railroads would not need to recoup a lot of revenue through rates to account for the revenue that was lost to movements impacted by the CSP, even if they would choose to do so.

A comparison of the total revenue on the Waybill on the big four U.S. railroads to the reduction in revenue on impacted movements in the full competition scenario is shown in Table 20 below.

<i>Table 20</i>	
Reduced Revenue as a Percent of All Revenue	
All Revenue	\$52,920,579,871
Reduced Revenue	\$1,293,650,870
Percent of All Revenue	2.4%

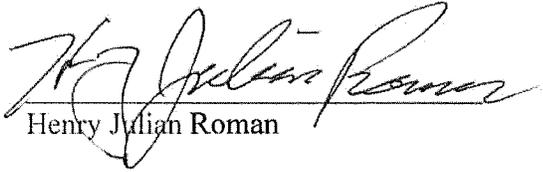
The rates of shippers that have a portion of their traffic competitive are restrained by competition. The process that many companies use to negotiate rates would make it difficult for railroads to recoup rate reductions from captive movements that are not impacted. Large, medium and even many small rail shippers negotiate bundles of movements with railroads. This means they combine their competitive and captive traffic together to get better rates on their captive traffic. The larger the volume of competitive traffic shippers have to offer, the greater the leverage they have to negotiate lower rates on their captive traffic. For example if a shipper has 30% of its traffic competitive a railroad has more to lose from pricing its captive traffic too high than if the shipper only has 15% of its traffic competitive. The CSP will ultimately increase the amount of competitive traffic shippers have to bargain with and this will

reduce the railroads' ability to increase rates for captive traffic. Furthermore, as noted above, it is reasonable to expect that increased rail competition will result in higher rail traffic volumes, which would also reduce the estimated revenue impact.

The regulatory effect of the CSP should be very small since so few shippers bring rate cases to the Board. If specific rules are laid out that specify how the CSP works and what is required to implement the rules, then the system should be able to work with minimal input from the STB.

VERIFICATION

I, Henry Julian Roman, verify under penalty of perjury that I have read this Verified Statement, that I know the contents thereof, and that the same are true and correct based on my knowledge, information and belief. Further, I certify that I am qualified and authorized to file this Statement.

  
Henry Julian Roman

Executed on February 28, 2013

Curriculum Vitae  
**Henry Julian Roman (Jay Roman)**

Jay Roman is the President of Escalation Consultants, Inc. A consulting firm engaged in economic analysis and consultation related to prices and price movement in rail transportation contracts. His business address is 4 Professional Drive, Suite 129, Gaithersburg, MD 20879. Since founding Escalation Consultants in 1979, Mr. Roman has assisted a large number of companies in controlling prices in rail transportation agreements.

Rail Rate Analysis - Mr. Roman regularly performs studies of rail rates for major companies with movements in the U.S. and Canada. Some of the industries he works with are: coal, chemical, petroleum, automobile, grain, steel, fertilizer, farm products and forest product industries. The studies provide rate information for key products, which enables companies to better structure their negotiations with railroads.

Mr. Roman is very knowledgeable of rates in the marketplace and in 2010 he has assisted companies in rail bid evaluations worth more than a billion dollars in rail spend. Mr. Roman is the owner and developer of Rail Rate Checker which is the largest database that exists on rail rates, rate changes, costs, volumes and profit by commodity group. A large number of companies subscribe to this database to assist in determining what reasonable rates are for their rail movements.

Seminars on Rail Contracting - Mr. Roman conducts the most attended and recommended rail negotiation seminar which is held twice a year. His seminars have been attended by hundreds of companies in the U.S. and Canada and virtually all industries that ship by rail have participated in his rail contracting seminars.

Expert Witness Testimony - Mr. Roman has testified as an expert on pricing issues involving coal and rail transportation before the Federal Energy Regulatory Commission, in federal and state courts, as well as in arbitration cases in the U.S. and Canada. He has also testified before the Surface Transportation Board.

Publications - Mr. Roman is the publisher of the *Rail Price Advisor* newsletter, a monthly newsletter dealing with issues related to railroad costs, revenue, rail rates, escalation and what shippers are doing to improve service and rail rates. He also contributes monthly articles to the publication *Rail Business*.

Some of Mr. Roman's Clients - Some of the clients for whom these and other services have been performed include: Oglethorpe Power Co., Carolina Power & Light, Texas-New Mexico Power Co., Ontario Hydro, TransAlta Utilities Corp., Nebraska Public Power District, Duke Energy, Associated Electric Coop., Inc., Shell Oil, TexPar Energy, Ameren Services, Equistar, Kennecott Energy Co., Exxon-Mobil, INEOS Olefins & Polymers USA, Holnam Cement Co., Champion International Corp., Air Products, Westlake Group of Companies, Rayonier, Nova Chemical, Akzo Nobel, Degussa, Cabot

Corp., Haliburton, Cargill Corp., International Special Products, Growmark, Inc., Koch Industries, SI Group, Chrysler LLC, Shell Chemical Co., Basell USA Inc., Stanislaus Food Products, Martin Marietta, United Sugars Corp. Peace River Coal, Inc., DSM Sourcing, ConocoPhillips and many others.

Education - B.S. Major in Accounting, University of Maryland, 1973.

# **APPENDICES B-L**

**REDACTED**

# **EXHIBIT 2**

**Ex Parte No. 711**

*Petition for Rulemaking to Adopt Revised Competitive Switching Rules*

**VERIFIED STATEMENT**

**Prepared by:**

Thomas L. Maville  
President  
TL Maville & Associates Inc.  
Ottawa, Ontario  
Canada

**March 1, 2013**

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Ex Parte No. 711

*Petition for Rulemaking to Adopt Revised Competitive Switching Rules*

Verified Statement

of

Thomas L. Maville

My name is Thomas L. Maville. I am President, TL Maville & Associates, Inc., Ottawa, Ontario, Canada. I am a rail freight policy, regulation, pricing and services practitioner with a career spanning over forty years in rail freight transportation in both the private and public sectors. I am also a trained and experienced facilitator and mediator in disputes respecting railway infrastructure, pricing and services, having completed formal training in mediation at both the *Massachusetts Institute of Technology* (“MIT” 1987) and the *University of Windsor Faculty of Law* (1995).

**I. Work History**

Immediately following graduation from Carleton University in 1971, I joined the Marketing and Sales Department of Canadian Pacific Railway Company (“CP”) at CP’s Montreal Canada Headquarters where I was engaged as a Sales Analyst-Revenue Planning and Sales Forecasting, and subsequently, as a Rail Rate Analyst and Senior Rail Rate Analyst. In 1975 I transferred to CP’s Eastern Region Headquarters in Toronto, Ontario as Supervisor of Rail Pricing Development and Costing for the Region. In 1977, I joined the Canadian Transport

Commission (“CTC”) as a Transportation Economist. The CTC was, at the time, the federal regulatory body responsible for the regulation of rail transportation in Canada.

- **Regulatory Work History and Experience**

Between 1977 and 1996, I was engaged as a senior officer with the CTC and the National Transportation Agency of Canada (“the Agency”), where I coordinated, managed and directed federal Agency investigations into disputes involving rail infrastructure, rates and services and advised Agency members on decisions and rulings in those matters. During this period I worked as a “Rail Transportation Economist”, “Senior Rail Transportation Economist”, “Chief of the Rail Complaints and Applications Directorate”, “Assistant Director of the Mediation and Arbitration Directorate”, “Senior Manager and Director of Rail Investigations” and “Acting Director of Industry Monitoring” with the Agency. I also represented the Agency at its Pacific Region Office in Vancouver, British Columbia while Canada’s National Transportation Act Review Commission (“NTARC”) was underway in 1991-1992.

- **Legislative Work History and Experience**

Since 1985, I have also played a major role in the development of Canada’s federal rail policies and legislation. As the Senior Rail Advisor to Canada's House of Commons Standing Committee on Transport (1985), and Senior Rail Advisor to the Office of Canada’s Minister of Transport (1986-1987), I was actively involved in both the design and development of the rail ‘competitive access’ and ‘dispute-resolution’ provisions established under the National Transportation Act, 1987 (“NTA’87”). This work included the design and drafting of the extended interswitching provisions in the NTA ’87 and the development of the interswitching regulations immediately following the passage of the NTA’87.

In 1995, I was again called upon to assist and advise Canada's federal policy makers in the design and drafting of the Canada Transportation Act of 1996, the legislation which replaced the NTA, 1987.

- **TL Maville & Associates Inc.**

After a career in private industry and government spanning 25 years, I co-established an Ottawa-based transportation consulting practice in July, 1996 under the name of Maville, Mozersky & Associates Inc. The firm was renamed TL Maville & Associates Inc. in July, 2003. TL Maville & Associates Inc. assists and advises shippers, shipper associations, carriers, ports, terminal operators and governments on matters respecting rail freight policies, legislation, regulations, infrastructure, rates and services. Through the firm I have negotiated long-term rate and service agreements with all of the major Class 1 railways operating in North America on behalf of Canadian and US shippers and have provided expert advice to federal government departments and agencies on matters relating to rail mergers and acquisitions. I have prepared briefs and appeared before the Canadian Transportation Agency, on behalf of shipper associations and individual shippers, on all interswitching reviews that have been carried out since 1996.

My major clients have included Canada's two national railways, the Canadian Transportation Agency, Transport Canada, Canada's Competition Bureau, rail shippers in the forest products, mining, chemical, fertilizer and grain sectors moving goods by rail within Canada as well as between Canada and the United States. My clients also include various industry associations and interest groups representing those sectors, provincial governments and Canada's major ports and terminal operators.

I am a member of the Chartered Institute of Logistics and Transport North America (“CILTNA”). Founded in 1919, the Chartered Institute of Logistics & Transport, headquartered in London, England, is the largest transport institute in the world, with over 30,000 members in 30 countries. The Royal Charter encourages the Institute “to promote, encourage and co-ordinate the study and advancement of the science and art of transportation and logistics in all its branches”. I was elected a “fellow” of the CILTNA in 2008 and have been a member of the CILTNA Executive Committee since that time. I currently serve as both National Treasurer of CILTNA and Co-Chair of the CILTNA Pacific Region Chapter.

The purpose of my Verified Statement is threefold. First, I intend to describe the history of regulated “interswitching” in Canada. Interswitching is a system whereby a shipper with access to one railroad in Canada has an automatic right to have its cars switched to another, competitive railway, at a set price, as long as that competitive railway has an interchange within a prescribed distance of the shipper facility. Second, I will describe how Canadian interswitching rates are established and issued by Canada’s regulatory agency. Third, I will describe the amount of traffic exposed to and handled under the Canadian regulated interswitching model. And finally, I will discuss the impact of regulated interswitching in Canada on the network efficiency and productivity of the two largest Canadian carriers, the Canadian National Railway Company (CN) and the Canadian Pacific Railway Company (CP).

## **II. Interswitching – General**

*“Interswitching is an operation performed by railway companies (carriers) where one carrier performs the pickup of cars from a customer (shipper) and hands off these cars to another carrier that performs the “line haul” (the majority of the linear distance of the overall railway movement). The interswitching arrangement is made in cases where a*

*shipper has immediate access to a single carrier, but is within a reasonably close proximity to one or more of the competing carriers.”<sup>1</sup>*

The interswitching of railway traffic has been regulated in Canada for over 100 years. First introduced in 1904, regulated interswitching was initially set at four (4) linear track miles and was designed to optimize track usage in urban areas. Today, interswitching is widely viewed in Canada as an important, albeit limited, competitive access provision under the Canada Transportation Act (“the Act”).<sup>2</sup>

At the turn of the last century, interswitching was designed to allow shippers who were located captive to the lines of a single railway to have physical access to the rates and services of a second, competing railway without the threat of rate or service abuse from the monopoly rail carrier to which they are otherwise captive. Interswitching benefits shippers by extending their access to the lines of competing railways at rates that are published by the Canadian Transportation Agency and are reasonably close to the cost of moving the traffic to or from the interchange point. Thus, the Canadian interswitching regime ensures that shippers derive the benefits of price competition, improved service levels and varying routing options, and that switching carriers recover their costs.

Under Canada’s regulated interswitching system, any shipper that is located physically captive to the line of a single, federally incorporated railway and located no more than 30 radial kilometres from an interchange with another federally regulated railway, is entitled to have the loaded and/or empty car moved by the railway to which the shipper is captive, and interchanged to the second railway for furtherance at rates that are established by regulation.

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<sup>1</sup> Justice Canada – Canada Gazette Vol. 146, No. 26 — June 30, 2012 REGULATORY IMPACT ANALYSIS STATEMENT

<sup>2</sup> Regulated interswitching is a corner stone of the basket of pro-competitive shipper protections contained in the Canada Transportation Act (“CTA”), which also includes competitive line rates (“CLRs”), final offer arbitration and confidential contracts.

Regulated interswitching can occur from the shipper's siding at the origin, to an interchange, and/or from an interchange to a receiver's siding at the destination, as long as the movements are no greater than 30 radial kilometres in distance.

### **III. The Evolution of Regulated Interswitching in Canada**

- **1904 – The First Board of Railway Commissioners Interswitching Order**

Regulated interswitching of rail cars between railways in Canada dates back to the turn of the previous century. The first interchange point was built in Toronto, Ontario and allowed the Grand Trunk Railway (GTR) and CP to access each other's lines. When the second interchange between the two companies was constructed at London, Ontario in 1904, the GTR refused to interchange traffic until the question of adequate compensation for the switching activity was determined. CP turned to the regulator, the Board of Railway Commissioners (Board) for an Order against GTR under the *Railway Act* to provide proper facilities for interchange including a determination of an adequate interswitching rate. In 1905, the Board ordered the GTR and CP to interchange traffic as it considered it in the public interest and convenience, and set the rate at \$0.01 per hundred pounds with a minimum charge of \$5 per car. The charges were applicable to traffic moving to/from GTR's sidings within a specific area of the city.

Following the London, Ontario Interswitching decision, the Board received a number of complaints regarding interswitching practices and charges. As a result of these complaints, the Board's Chief Traffic Officer undertook an investigation into the interswitching issue. The objective was to develop a standard interswitching charge for the convenience of shippers and railways in order to curtail the frequent complaints about excessive switching charges. The Board accepted the Traffic Officer's report and proceeded with the establishment of the first

General Order on Interswitching, Order # 4988 dated July 8, 1908, later called General Order No. 11. The Order adopted, as a nation-wide rule:

- a charge of \$0.01 per hundred pounds based on the principle of giving reasonable compensation for service furnished by the respective railways;
- an interswitching limit of 4 miles from the point of interchange between two railways;
- absorption of a minimum of 50% of the interswitching charge by the line haul railway.

From its inception in 1908, regulated interswitching has permitted shippers located captive to the lines of a single railway to access a second competing railway, originally within a distance of 4 miles (6.4 kilometres) and, since 1987, within a radial distance of 30 kilometres.

Since its inception, regulated interswitching has provided shippers who are physically captive to the line of a single railway, at either the rail origin or destination, to have their traffic switched to the lines of a competing railway without meeting any further tests or regulatory requirements. Stated otherwise, there are no revenue-to-cost thresholds that a shipper must meet in order to obtain interswitching services. The shipper must only establish that it is physically captive to the line of a single railway and situated within the legislated maximum distance of the interchange.

- **Between 1918 and 1984**

From 1918 until the early 1980s, regulated interswitching remained virtually unchanged other than a slight increase in the regulated rate to one a half cents per hundred pounds prior to 1951. For many years, the four-mile limit was sufficient to permit most shippers to access a second railway in most urban areas. However, cities grew and by the early 1960's, shippers who were located in the emerging outlying industrial sectors of cities were denied the benefits of regulated interswitching that were enjoyed by their competitors who were located in the urban cores.

- **1984-1987 Federal Interswitching Studies and Government Hearings**

The regulated interswitching distance remained unchanged at 4 miles from 1908 until 1987 when the National Transportation Act, 1987 (“NTA, 1987”) was enacted. During 1984 and 1985, just prior to the debates which ultimately led to the passage of the NTA, 1987, the Canadian Transport Commission (“CTC”), the regulatory agency responsible for administering the interswitching regulations at the time, conducted an interswitching inquiry. Two reports were subsequently issued:

- Summary of Submissions – Enquiry into regulations affecting freight traffic interswitching between railway companies under federal jurisdiction, April 1984
- Staff Report - Enquiry into Freight Traffic Interswitching Regulations, April 1985

In the 1985 Staff Report the CTC noted “[t]raditionally, line haul carriers have absorbed the entire interswitching charge on competitive movements....For this reason, interswitching has come to be viewed as an instrument to encourage intramodal competition, at least within the four mile limit prescribed by T-123...there has always been an element of intramodal competition in regulated interswitching, but it now appears obvious that at present this is now perceived as the primary focus of regulated interswitching.”<sup>3</sup>

Eight railways, including the Canadian National Railway Company (CN), Canadian Pacific Railway Company (CP) and the Chessie System Railroad, a major U.S. carrier operating within Canada at the time, submitted written comments to the CTC in 1984 and six of them, including CN, CP and the Chessie System Railroad, submitted additional comments in 1985 with respect to the adequacy of the then-existing four-mile interswitching limit.

CP made the following comments respecting the four-mile limit in its submission to CTC staff during the 1984 inquiry:

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<sup>3</sup> Canadian Transport Commission, Railway Transport committee, Staff Report “Enquiry into Freight Traffic Interswitching Regulations.” April, 1985, pg. 32.

“...in 1908 and likely for some time into this century, most if not all industry would be within such a limit and thus, benefit from the Order<sup>4</sup>, whether located in a smaller town with only a single interchange or in a larger centre with several (for example, the four-mile limit ordered in London in 1905 covered not only all of that city proper but also about a mile outside thereof<sup>5</sup>”.

This, CP stated, makes it appear that the original intention of the four-mile limit was

“...that interswitching rights are to be accorded to as many shippers as practicably possible...”<sup>6</sup>

CP’s 1985 submission further noted:

“...if one thing is certain it is that the present four mile limit is no longer adequate to meet the reasonable needs of shippers. On this point CP wishes only to adumbrate that when all the submissions are weighed the preponderance of opinion comes down in favour of a considerable extension of the current four mile limits of T-12.<sup>7</sup>”

In testimony before Canada’s House of Commons Standing Committee on Transport (“SCOT”) in October 1985 Mr. I.B. Scott, Chairman and Chief Executive Officer, CP Rail, stated:

“CP Rail favours increasing the number of official interchanges for traffic, expanding existing railway interswitching limits and introducing the concept of terminal running rights between Canada’s two national railways, thereby allowing one to run on the other’s right of way.<sup>8</sup>”

The Chessie System Railroad stated “an expansion of the four-mile limit should open up additional foreign line industries to various railroads increasing the traffic base, resulting in more competition” and recommended extending the limits from four to eight miles<sup>9</sup>.

CN made no comments in the April 1984 Staff Report but did question the need for the extension of the four-mile limit in the CTC April 1985 Staff Report.

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<sup>4</sup> CTC Order T-12 governed the movement of traffic under regulated interswitching in 1984 and 1985

<sup>5</sup> Canadian Transport Commission Staff Report “Enquiry into Freight Traffic Interswitching Regulations”, April 1984, pg. 21

<sup>6</sup> Ibid pg. 21

<sup>7</sup> Canadian Transport Commission Staff Report “Enquiry into Freight Traffic Interswitching Regulations”, April 1985, pg. 15

<sup>8</sup> House of Commons Issue No. 29, October 29, 1985, Minutes of Proceedings and Evidence of the Standing Committee on Transport, pg. 37, par. 6.

<sup>9</sup> Ibid, pg. 15

Nineteen shippers and shipper associations, governments and government agencies, provided further submissions and these submissions, with one exception, expressed support for an extension of the four-mile limit.

In the debates leading up to passage of the NTA, 1987, Canada's House of Commons Standing Committee on Transport ("SCOT") noted<sup>10</sup> that interswitching merited attention:

"The Committee recognizes that interswitching is a complex issue that requires careful and extensive study. While we are not in a position to say what the interswitching limits should be, we believe that the Canadian Transport commission's proposal deserves further attention."<sup>11</sup>

In testimony before SCOT on March 3, 1987 Mr. Robert Ritchie, Executive Vice President CP Rail stated as follows:

"We think the extension of it to 15 kilometres is pro-competitive....As far as we are concerned, going 15 kilometres and with the new definition of an interchange, we believe all areas that presently are complaining about a lack of interchange will be covered and all major cities or all major industrial areas around cities and towns in Canada will be covered. We also support the principle that if for any reason, a customer is outside the 15 kilometre interchange and would like to be brought in – what is the point of being arbitrary?- the Commission can order them in. We say, fine; do this as well. We are not trying to hold people out. We are trying to get a system that is workable and that allows us to plan our future to some degree. We believe 15 kilometres does it."<sup>12</sup>

Under questioning from a Committee member on what would happen to the proportion of traffic that was interswitched by CN to CP versus from CP to CN if the limit was extended to 30 kilometres, Mr. Ritchie responded "I believe the proportion stays but it just increases slightly; not a great deal."

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<sup>10</sup> SCOT review of the government's transportation White Paper "*Freedom to Move*."

<sup>11</sup> "Freedom to Move" Change, Choice, Challenge, Sixth Report, Standing Committee on Transport, December 18, 1985, pg. 25.

<sup>12</sup> House of Commons Issue No. 13, March 3, 1987, Minutes of Proceedings and Evidence of the Standing Committee on Transport, pg. 38

- **1987 Extension of Regulated Interswitching Limits to 30 Radial Kilometres**

The Committee ultimately recommended that the limits be extended from four (4) linear miles to 30 radial kilometres, equivalent to 18.6 miles (just less than twenty miles as the ‘crow flies’). The 30 kilometre limit was determined to be the most effective distance based on the evidence presented by the Canadian Manufacturers’ Association (“CMA”) before the House of Commons Standing Committee on Transport (“SCOT”) during the Committee’s deliberations into Bill C-18, “An Act Respecting National Transportation.” In its February 1987 written submission to SCOT, the CMA testified that: “A CMA member survey showed that extending interswitching limits to 32 km would result in about 80% of sidings across the country having competitive railway service.<sup>13</sup>”

The increased limits came into law on August 28, 1987 when the NTA, 1987 was assented to in Canada’s Parliament at section 152 (2) as follows:

“Where the point of origin or of destination of a movement of traffic is within a radius of thirty kilometres or a prescribed greater distance from an interchange, no company<sup>14</sup> shall transfer that traffic at that interchange otherwise than in accordance with the terms, conditions and rates prescribed or determined under subsection (4).”

The first set of regulations prescribing the extended interswitching terms and conditions took effect on January 1, 1988. The Regulatory Impact Analysis Statement which accompanied the regulations stated as follows:

“Anticipated Impacts

Expansion of interswitching limits significantly increases shipper access to intramodal rail competition. Shippers will benefit from price competition, improved service levels, increased car supply and new routing options. The requirement that the interswitching rate be compensatory will end the cost disadvantage incurred by railways which are net providers of interswitching.”

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<sup>13</sup> Canadian Manufacturers’ Association Submission to the House of Commons Transport Committee, February 1987, pg. 6

<sup>14</sup> Company is defined in the NTA, 1987 as meaning a railway company operating under the authority of Parliament.

A decision,<sup>15</sup> issued by the National Transportation Agency of Canada (“the Agency”) on August 18, 1988 in the matter of interswitching limits, makes reference to the Government of Canada’s policy initiatives in respect of interswitching:

“The government policy initiatives in respect of interswitching are clear. In expanding the previous interswitching limit of four track miles to the current 30 kilometre radius limitation, the legislators demonstrated a desire to provide for greater access to competitive service for captive shippers.....In this regard, the general policy objective of NTA, 1987, as referenced in subsection 3 (1), ....was designed to encourage competition for traffic through the...use of the competitive access provisions of expanded interswitching and competitive line rates....In other word, the current interswitching provisions were designed to foster competition where it does not presently exist, in order to encourage effective negotiations between shippers and carriers.”

The legislative changes introduced in the National Transportation Act, 1987, also opened up regulated interswitching, for the first time, to many resource-based, commodity industries which had, until that time, been located beyond the historical 4-mile interswitching limits and denied the benefits of this competitive access provision. This legislative change recognized that the very nature of the railways’ traffic base had also changed dramatically by 1987.

Manufacturing-based industries, traditionally located in urban areas where most interswitching took place, no longer dominated the railways’ traffic base. As of 1987, resource-based bulk commodities comprised an increasing and dominant share of Canadian railway traffic.

Section 152 (4) of the NTA, 1987 conveyed the power onto the Agency to make regulations “prescribing the terms and conditions subject to which the interswitching of traffic may occur” and “prescribing the rate per car to be charged for interswitching traffic.” The NTA, 1987 required the interswitching rates to be compensatory<sup>16</sup> (established at levels above Agency

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<sup>15</sup> National Transportation Agency of Canada Decision No. 269-R-1988, August 18, 1988, pg. 2.

<sup>16</sup> NTA, 1987, s. 152 (6)

approved long run variable costs), and for the rates to reflect any reductions in costs that might result from transferring several cars to or from an interchange at the same time<sup>17</sup>.

The initial rate scale that was established and came into effect immediately following the passage of the National Transportation Act, 1987 was broken down into four zones within the 30-kilometre radius as detailed in Table 1 below. A graphic representation of the interswitching zones is contained in Appendix 1 attached.

Rail revenues under the extended interswitching regime increased considerably when the new limits came into effect in 1988. Rates for interswitching within the zone 1 four-mile limit increased from about \$30 a car in 1987 to \$165 in 1988.

**Table 1**  
**Agency Prescribed 1988 Interswitching Rates**

Interswitching distance zone	Rate per car for interswitching traffic to or from a shippers' siding (\$) (\$)	Rate per car for interswitching a car block (\$) (\$)
Zone 1	165	85
Zone 2	185	85
Zone 3	210	85
Zone 4	250	85

Notes:

“Zone 1”: Sidings located wholly or partly within 6.4 km of an interchange;

“Zone 2”: Sidings located outside 6.4 km. of an interchange and wholly or partly within 10 km of an interchange;

“Zone 3”: Sidings located outside 10 km. of an interchange and wholly or partly within 20 km. of an interchange;

“Zone 4”: Sidings located outside 20 km. of an interchange and wholly or partly within a 30 Km. radius of an interchange.

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<sup>17</sup> NTA, 1987, s. 152 (5)

The extension of the regulated interswitching limits to 30 kilometres was recognition of the competitive needs of this portion of Canadian industry for the first time.

The NTA 87 was subsequently repealed and replaced in May 1996 by the Canada Transportation Act (“CTA”). The CTA subsequently underwent a major federal review in 2000, and was ultimately amended in February 2008. The extended interswitching provision was carried forward into both replacement Acts with only a single minor revision. The 2008 amendments to the CTA permitted the regulator – the Canadian Transportation Agency - to prescribe the interswitching rates which apply across the three interswitching zones, as maximum rates. This revision permitted the railways to charge rates lower than the maximums set out in the regulations. The 2008 legislation continues to the present time and the interswitching limit remains at 30 kilometres.

#### **IV. How and When Canadian Interswitching Rates are Currently Established and Issued**

The regulated interswitching rates apply to the movement of both the loaded car to the interchange as well as the return of the empty car from the interchange to the siding for subsequent reloading movement. The interswitching rates are currently prescribed and set by the Canadian Transportation Agency (“the Agency”). The CTA is the federal authority responsible for the economic regulation of railways operating under federal jurisdiction within Canada.

There are currently 32 railways operating under the legislative authority of Canada’s Parliament (They hold ‘certificates of fitness’ issued by the Agency). These include CN and CP, Canada’s two Class 1 railways; the BNSF, which operates into Winnipeg Manitoba and Vancouver British Columbia; Union Pacific Railroad, which operates into the southern interior of BC; and CSXT, which operates into parts of southern Ontario and Quebec.

Under section 128 of the CTA, the Agency may make regulations prescribing the terms and conditions for the interswitching of traffic, as well as determine the rate per car to be charged for performing this operation and to establish distance zones for that purpose.

Once the rates are established by regulations that have been drafted by the Agency, published in the Canada Gazette, approved by the government and subsequently issued by the Agency, they are required to be published by the railways in their freight tariffs. There are no enforcement provisions contained within the CTA for interswitching. The railway companies are fully responsible for reimbursing each other on a yearly basis for the interswitching services provided to each other at the applicable charges. As a result, they police each other in relation to the application of the prescribed rates. Shippers seldom, if ever, see the interswitching charge on their line-haul freight bill. CN, in fact, states that “[i]ndeed, the customer generally does not even see the interswitching rates as a separate item on his transportation rates.<sup>18,</sup>”

- **Interswitching Rates Currently Set at 7.5% Over Long Run Variable Cost - to be Increased to 20.5% in 2013**

Since the enactment of the CTA on July 1, 1996, which promulgated a new rate prescription directing that rates established by the Agency be "commercially fair and reasonable<sup>19</sup>" to all parties, the Agency has considered that a contribution of 7.5 percent over variable costs represented an appropriate compensation for railway constant costs (also referred to as fixed costs) in respect of interswitching movements. Accordingly, interswitching rates have been prescribed by regulation and set by the Agency at a level of 7.5% over the long run variable costs of CN and CP since 1996.

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18 CN comments to Canadian Transportation Agency, February 8, 2008 RE: REVIEW OF THE RAILWAY INTERSWITCHING REGULATIONS

<sup>19</sup> Canada Transportation Act, S. 112

This has resulted in rates that are currently no higher than \$315 per car, and this applies to a car moving to and from an interchange over the full 30 radial kilometres. The current rates have been prescribed at their present level since 2004 and are detailed in Table 2A below. The regulations set out the maximum rate per car that can be charged by the ‘home’ railway (to which the shipper is otherwise captive), to the railway receiving or forwarding the loaded and empty car from the home railway at the interchange for furtherance to or from the destination. The railways are permitted to charge less than the maximum rate. Both railways must be federally regulated in order for the rates to apply.

Since 1988 the regulations have also set out an additional “rate per kilometre” that can be charged when the traffic at issue is within the 30 radial kilometre limit of the interchange, but beyond a linear distance of 40 kilometres, while still within the 30 kilometres as ‘the crow flies’. The charge is applied over each mile of track beyond 40 kilometres until the traffic can be interswitched. It is intended for situations where there may be a mountain or other geographic feature that requires the railway to circumvent the feature to reach the interchange or siding, and to compensate the switching railway for the additional costs associated with the additional distance beyond 40 kilometres. Additionally, a separate rate is prescribed for each zone for cars switched in single blocks of 60 or more cars given the efficiency and lower cost in switching larger blocks of cars.

**Table 2A**  
**Agency Prescribed Interswitching Rates 2004 - Present**

Column I	Column II	Column III
	Rate <b>per single car</b> for interswitching traffic to or from a siding	Rate per car for interswitching a <b>car block of 60 or more cars</b> at one time
Interswitching distance zone	(\$)	(\$)
Zone 1 – <b>0.1 to 4 miles</b>	185	50
Zone 2 – <b>4.1 miles to 10 km</b>	200	60
Zone 3 – <b>10.1 km – 20 km</b>	240	75
Zone 4 – <b>20.1 km – 30 km</b>	315	90
<b>Rate per kilometre:</b> (This additional charge applies when the shipper is within the 30 km radius but more than 40 linear km of the interchange)	3.75	1.45

The issue of the magnitude of the contribution toward railway constant costs has generated diametrically opposed views among stakeholders in Agency consultations. The users of interswitching services have generally supported the continued use of a contribution level of 7.5 percent over railway variable costs on the grounds that there was no apparent reason to vary the earlier Agency determination. Conversely, the providers of interswitching services - the railways - have generally maintained that they should receive a compensation that provides for full recovery of their constant costs.

- **Mandatory Five-Year Review of Interswitching Regulations**

Subsection 128(5) of the CTA mandates that the Agency review the Interswitching Regulations when warranted, and at least once every five years. The specific objective of the regulatory review is to determine whether the Regulations accurately and effectively reflect

current railway company operating practices. The Regulations have not been amended since 2004. During that time, there have been significant changes observed in railway operating practices. Following the Agency’s most recent review of the interswitching rates (2008-2010 consultations with stakeholders), it determined that the 7.5% mark up over cost should be raised to 20.5%.

To fully implement the new rates, the Agency will ultimately issue an Order which will direct the railways involved to incorporate the amended rates in their tariffs. The railways will then be responsible for ensuring the use of the amended rates in their day-to-day interswitching operations. The Order is expected to be issued sometime this year. It will result in increased rates for traffic interswitched in zones 1-3 and a reduction in rates for traffic interchanged in zone 4.

The new rate scale will be as follows:

**Table 2B**  
**Agency Prescribed Interswitching Rates –To Be Effective 2013**

Column I	Column II	Column III
	Rate <b><u>per single car</u></b> for interswitching traffic to or from a siding	Rate per car for interswitching a <b>car block of 60 or more cars</b> at one time
Interswitching distance zone	(\$)	(\$)
Zone 1 – <b>0.1 to 4 miles</b>	229	46
Zone 2 – <b>4.1 miles to 10 km</b>	248	55
Zone 3 – <b>10.1 km – 20 km</b>	284	65
Zone 4 – <b>20.1 km – 30 km</b>	251	74
<b>Rate per kilometre:</b> (This additional charge applies when the shipper is within the 30 km radius but	3.38	1.20

Column I	Column II	Column III
	Rate <b>per single car</b> for interswitching traffic to or from a siding	Rate per car for interswitching a <b>car block of 60 or more</b> <b>cars</b> at one time
Interswitching distance zone	(\$)	(\$)
more than 40 linear km of the interchange)		

The reduced rates in zone 4 are the result of network efficiency gains that have been realized recently by CN and CP, particularly in western Canada. In the Regulatory Impact Analysis Statement, issued by the Government of Canada on June 30, 2012, it is stated “[t]he Regulations have not been amended since 2004. During that time, there have been significant changes observed in railway company operating practices.” These gains are described in section VI of this paper.

#### V. **Traffic Handled Under the Canadian Regulated Interswitching Model**

Between 90-95% of all interswitching in Canada occurs between the lines of CN and CP. CN and CP are the two dominant freight rail operators in Canada and are both Class I railways, meaning their revenues exceeded \$250 million in the past two years. Of total Canadian rail transport industry revenues, CN accounts for over 50% and CP for approximately 35%.

Together, CN and CP represent more than 95% of Canada's annual rail tonne-kilometres, more than 75% of the industry's tracks, and three-quarters of overall tonnage carried by the rail sector<sup>20</sup>. CN generates annual freight revenues in Canada on the order of \$5.5 billion, and employs 22,000 people in Canada and abroad. Meanwhile, CP operates 22,500 route-kilometres

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<sup>20</sup> Transport Canada – Transportation in Canada 2011

in six provinces and 13 States, generates almost \$4 billion in annual revenues in Canada and has roughly 15,000 employees system-wide<sup>21</sup>

A very small percentage of traffic originated on rail in Canada is actually interswitched to the competing railway. This is because, designed as a competitive access provision, regulated interswitching fosters rail-to-rail competition where it otherwise would not be present. Studies conducted in 1985, 1987 and in 2000/01 have found that, in most cases, traffic that is exposed to competition between the 'home' railway (the railway to which the shipper is physically captive), and the competing railway, to which it can be interswitched, remains on the line of the 'home' railway. The statistics developed since 1988, when the interswitching limit was extended from 4 miles to 30 radial kilometres, confirm that regulated interswitching has been and continues to work as it was intended; that being, to create effective intra-rail competition in areas where such competition might otherwise not exist.

The regulations therefore operate in the transportation marketplace as a tool for captive shippers. Where intra-rail competition is effective, traffic continues to move over the line of the local railway to destination, and the use of regulated interswitching rates and services are not required by the competing railway. Where, however, intra-rail competition may be ineffective or a more effective service arrangement is possible using an alternative carrier, the use of regulated interswitching rates and services is necessary and feasible.

- **Rail Cars Interswitched 1988 - 2007:**

Statistics published by the Canadian Transportation Agency reveal that less than 5% of all carloads moved by CN and CP move under the regulated interswitching rate scale. Total cars interswitched during the periods 1988-1990 (immediately following the extension of the limits from 4 miles to 30 kilometres), from 1998-2001 (following the enactment of the Canada

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<sup>21</sup> Transport Canada – Transportation in Canada 2011

Transportation Act, 1996), and in 2007 (most recent year for which data is available) are detailed in Table 3 below.

The Agency examined the interswitching movements performed in 2007 in terms of the quantity of cars interswitched in each movement. Almost half of the cars interswitched (48.2 percent), fall into two categories at either end of the spectrum, consists of 9 cars or less and consists of 120 cars or more. Consists varying from 30 to 59 cars represented only 10.3 percent of the total number of cars interswitched. Based on 2007 data, consists of 100 cars accounted for 36.8 percent of the total number of cars interswitched.<sup>22</sup>

**Table 3**  
**Total CN and CP Cars Interswitched Under Regulated Interswitching Regulations 1988 - 2007**

<b>Year</b>	<b>Total CN and CP Cars Switched</b>	<b>CN, CP Annual Freight Carloads<sup>23</sup></b>	<b>% Cars Interswitched</b>
1988	131,982	3,240,000 <sup>24</sup>	4.1%
1989	143,939		
1990	133,772		
1998	144,269		
1999	144,753		
2000	157,957	6,191,000	2.55%
2001	188,160	6,244,000	2.53%
2007	279,900	7,442,000	3.76%

CN is a much larger railway than CP and is, according to its submissions to the Agency, “a net provider of such interswitching activities and CP is a net beneficiary of such services.”<sup>25</sup>

<sup>22</sup> Canadian Transportation Agency Decisions No. LET-R-66-2010- Review of the Railway Interswitching Regulations

<sup>23</sup> CN and CP Annual Reports

<sup>24</sup> Railway Association of Canada, Railway Trends 1993, All Canadian Railways

<sup>25</sup> CN submission to the Canadian Transportation Agency February 8, 2008 RE: REVIEW OF THE RAILWAY INTERSWITCHING REGULATIONS

Statistics published for the period 1998-2001, detailed in Table 4 below, substantiate this statement.

**Table 4**

<b>Breakdown of Cars Interswitched By CN and CP 1988 - 2007</b>	<b>CP cars switched by CN</b>	<b>CN cars switched by CP</b>	<b>Total Cars Switched</b>
1998	81,715	62,554	144,269
1999	80,129	64,621	144,753
2000	91,437	66,520	<b>157,957</b>
2001	106,403	81,757	<b>188,160</b>

Table 5 below contains selective data on interswitching movements within the 4 zones from 1988-1990 and in 2007 (the most recent year for which such data has been collected). The data indicates that there has been a surge in interswitching activities within zone 4. This is attributable to efficiencies that have been realized by the railways within western Canada, particularly in the Vancouver area.

**Table 5**  
**Cars Interswitched in Zones 1-4, 1988 - 2007**

<b>Year</b>	<b>Cars Interswitched in Zone 1</b>	<b>Cars Interswitched in Zone 2</b>	<b>Cars Interswitched in Zone 3</b>	<b>Cars Interswitched in Zone 4</b>	<b>Total Cars Interswitched</b>
1988	87,884	15,685	17,503	10,910	131,982
1989	76,268	19,137	33,131	15,403	143,939
1990	66,095	14,175	37,259	16,243	133,772
2007	58,326	38,203	27,965	155,406*	279,900

**Note:** \* 95,132 of 155,406 cars were moved in blocks of 60 or more cars at a time

**Source:** Government of Canada Regulations amending the Railway Interswitching Regulations, June 30, 2012

**VI. Canadian Traffic Exposed to Intra-Rail Competition under Regulated Interswitching**

There are a number of interchanges in Canada which meet the legislative definition of an “interchange”<sup>26</sup> and where CN and CP actually perform interswitching pursuant to the regulations. The lists of interchanges are published in both CN’s and CP’s published tariffs. The interchanges total 70 and are spread across the country as detailed in Table 6 below.

**Table 6  
CN and CP Designated Interchanges in Canada**

<b>Province</b>	<b>Total Number of Interchanges</b>	<b>CN/CP Interchanges</b>	<b>CN/Other Railway Interchanges</b>	<b>CP/Other Railway Interchanges</b>
British Columbia	6	4	2 CN-BNSF	
Alberta	6	6		
Saskatchewan	7	6	1 CN-BNSF	
Manitoba	7	6	1 CN-BNSF	
Ontario	33	29	4 CN-CSXT	
Quebec	10	8	2 CN-CSXT	
New Brunswick	1		1 CN-MMA	
<b>Total:</b>	<b>70</b>	<b>59</b>	<b>11</b>	

From the above, it is clear that most of the interswitching activity that takes place within Canada 1) occurs between CN and CP and 2) occurs in urban areas, particularly in Ontario, which accounts for approximately half of the interchanges (49.2%), and is the country’s manufacturing hub, characterized by manufacturing, auto, steel and, to a lesser extent, the intermodal sector.

The amount of traffic that is annually exposed to regulated interswitching in Canada is much greater than the amount that is actually interchanged under the regulations. As previously detailed in Table 3, 279,900 cars were interswitched in 2007 between CN and CP. Collectively, the

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<sup>26</sup> “Interchange” means a place where the line of one railway company connects with the line of another railway company and where loaded or empty cars may be stored until delivered or received by the other railway company.” Canada Transportation Act, s. 111.

two railways moved 7,442,000 carloads of freight that year. Regulated interswitching accordingly accounted for 3.8 % of all traffic handled by CN and CP in 2007.

The government has, on three occasions, examined the amount of traffic that is exposed to the regulated interswitching system in Canada. The first two examinations occurred just prior to the passage of the National Transportation Act, 1987. The most recent was in 2001 during a federal review of the 1996 Canada Transportation Act. The findings following those examinations are described below.

- **1985-87 Examination of Traffic Exposed to Regulated interswitching**

A report prepared in 1985 for Transport Canada by Travacon Research Limited<sup>27</sup> estimated the gross freight revenues of CN and CP that would be exposed through the extension of the regulated interswitching distance from four miles to 30 kilometres. It concluded that approximately 18% of CN's and CP's combined freight revenues (\$750.8 million of \$4,287.4 million) (1985 basis) would be exposed through the extension of interswitching limits from four miles to 30 kilometres. The results are detailed in Table 7 below.

**Table 7**  
**Estimated CN and CP Freight Revenues Exposed to Intra Rail Competition through Regulated Interswitching 1987**

	<b>CN (\$ Million)</b>	<b>CP (\$Million)</b>	<b>Total (\$Million)</b>
<b>Revenues Exposed from Expanded Interswitching</b>	457.0	293.8	750.8
<b>Total Freight Revenues*</b>	2,530.5	1,756.9	4,287.4
<b>Percent of Total Revenues</b>	18.1%	16.7%	17.5%

**Note:** Excluding export grain, which moved under the Western Grain Transportation Act until the early 90's, and intermodal traffic which continues to be exempt from regulated interswitching.

<sup>27</sup> "An Analysis of the Revenue Impact Upon Canadian Railways of the Competitive Access Provisions of Bill C-18", Travacon Research Limited, February 1985.

**Source:** “An Analysis of the Revenue Impact Upon Canadian Railways of the Competitive Access Provisions of Bill C-18”, Travacon Research Limited, February 1985.

Estimating exposure on a carrier-by-carrier basis, Travacon concluded that approximately 44% of CN’s gross revenues<sup>28</sup> (\$1 billion in 1985) and 50% of CP’s gross freight revenues<sup>29</sup> (also \$1 billion in 1985), would be exposed to competition if the regulated distance was set at 30 kilometres.

A second report, prepared in February 11, 1987 by Peat Marwick and Partners, commissioned by the Transport Canada Office of Economic Regulatory Reform (“ERR”), estimated that 17% of all CN and CP traffic subject to competition from U.S. railways operating within Canada (\$139.6 million of \$823.5 million) would be exposed under the extension of interswitching limits from four miles to 30 kilometres.<sup>30</sup>

The total number of cars that were actually interswitched between CN and CP in 1988, the first year the limits were expanded, totalled 132,000 carloads,<sup>31</sup> representing four (4<sup>32</sup>) percent of total traffic handled by the two railways.

In 2001, almost 15 years following the extension of the regulated interswitching distance from four miles to 30 kilometres, a further review was carried out in an effort to again determine the amount of traffic actually exposed to the provision. This analysis formed part of the 2000-01 five-year federal review of the CTA 1996, which was mandated under the Act. The review was carried out by the federally appointed Canada Transportation Act Review Panel to determine what changes, if any, needed to be made when future amendments to the Act were legislated. In

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<sup>28</sup> “An Analysis of the Revenue Impact Upon Canadian Railways of the Competitive Access Provisions of Bill C-18”, Travacon Research Limited, February 1987, pg. 8 and Table 1, pg. 9.

<sup>29</sup> Ibid, Table 2 pg. 13

<sup>30</sup> U.S. and Canadian Railway Industry Economic and Regulatory Frameworks: Implications for Railway Productivity and Competitiveness, Peat Marwick and Partners, February 11, 1987, Exhibit V-2

<sup>31</sup> See Table 3

<sup>32</sup> Railway Association of Canada “Railway Trends” A total of 3,239,806 cars were originated on rail in Canada in 1988

its June 2001 final report the Panel made the following observations with respect to the amount of rail traffic exposed to regulated interswitching in Canada:

“An estimated two-fifths of Canadian rail traffic has access to direct rail competition. This is traffic that originates and terminates within 30 kilometres of points of interchange with a competitive railway. Moreover, this is likely to be the minimum amount of traffic with direct access. For grain traffic, the corresponding estimate is 24%.<sup>33</sup>”

And further;

“Concerning direct competition between railways, the following evidence was compiled...

Information was obtained from Transport Canada on the proportion of rail freight tonnage that was within 30 kilometres of interchanges with a competitive railway; in other words, had access to interswitching. Data include CN and CPR traffic for 1999. Some interchange points were excluded where there did not appear to be a competitive option for the shipper, such as those with small feeder carriers.

When border crossings were excluded, the data indicated that 20.7% of rail traffic had access to interswitching at both origin and destination. When traffic passing through border points was included as competitive, the estimate of traffic that had competitive options at both origin and destination was 38.7%. This latter figure is similar to CN's estimate in its submission to the Panel that 41% of total CN and CPR traffic originates and terminates within 30 kilometres of interchange points.<sup>34</sup>

CN stated in its submission to the Review Panel in October 2000<sup>35</sup> that 41 per cent (95,530,000 tons of combined CN/CP tonnage handled), was subject to direct rail-to-rail competition. The increase in the amount of exposed traffic between 1985 (17.5%) and 2000 (38.7%- 41%) was partly attributable to the inclusion of export grain to exposure to regulated interswitching following the passage of the CTA in 1996. It should also be noted that the 38.7% referenced by the Review Panel was traffic that was exposed to regulated interswitching at both

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<sup>33</sup> “vision and balance” Report of the *Canada Transportation Act* Review Panel June 2001,” Note on the Evidence About Competition in the Rail Freight Sector

<sup>34</sup> “vision and balance” Report of the *Canada Transportation Act* Review Panel June 2001,” Note on the Evidence About Competition in the Rail Freight Sector

<sup>35</sup> Pg. 9 of CN submission

the origin and destination. The Panel further found that the percentage increased to almost 50% for only traffic that was originated within the 30 kilometre radius.

From the above, the consensus appears to be that approximately 40 percent of total CN and CP traffic is exposed to regulated interswitching at both origin AND destination in Canada.

A cursory examination of total carloads moved by CN and CP on a commodity and geographic basis in 2010 would appear to support this estimate. As detailed in Table 8 below, we roughly estimate that at least 37% of total carloads originate within 30 kilometres of an interchange with a competing railway.

**Table 8**  
**2011 Estimate of CN and CP Carloads Exposed to direct Rail-to-Rail competition through Direct Dual Service and Regulated Interswitching**

<b>Commodity Group</b>	<b>Total Carloads</b>	<b>Estimated Carloads Exposed to Competition</b>
Intermodal	890,168	Nil
Grain and other Agriculture Products	466,305	111,913
Coal	348,556	Nil
Manufacturing and Miscellaneous Products <sup>36</sup>	281,457	225,166
Mining and Metals	951,347	313,945
Food Products	54,948	54,948
Forest and Paper Products	386,228	308,823
Fuels and Chemicals Products	432,657	389,391
<b>Total:</b>	<b>3,811,666 (100%)</b>	<b>1,404,186 (37%)</b>

**Source:** “Total Carloads” Railway Association of Canada “2012 Rail Trends” Carloads originated by commodity group, pg. 34

Our assumptions and calculations respecting the amount of traffic that is exposed to regulated interswitching in Canada are described below:

**Intermodal Traffic:** A total of 890,168 carloads of intermodal products were carried by CN and CP in 2011. Containers are handled at five major ports in Canada and intermodal traffic makes

<sup>36</sup> Includes 186,522 carloads of machinery and automotive

up approximately 23% of total carloads handled by CN and CP annually. Two of the five ports are captive to CN (Halifax NS and Prince Rupert BC) and located well beyond the regulated interswitching distance from a second competing railway. Intermodal traffic is, however, exempted from regulated interswitching. Section 2 of the regulations provides that a siding, from or to which interswitching applies, does not include “(g) a track that serves a reload or distribution compound, a container terminal or any other facility operated by a terminal carrier or its agent or for the terminal carrier’s own purposes.”

**Grain and Other Agriculture Products:** A total of 466,305 carloads of grain and other agricultural products were carried by CN and CP in 2011. Twenty four (24) percent of all grain shipped by rail in Canada was determined by the CTA Review Panel in 2001 to be within 30 kilometres of a second railway. This would amount to 111,913 carloads out of the total 466,305 total carloads carried by CN and CP in 2010.

**Coal:** A total of 348,556 carloads of coal were carried by CN and CP in 2011. All of the coal mines in Canada are captive to a single railway and well beyond the 30 kilometre radial distance of a second railway.

**Manufacturing and Miscellaneous Products:** A total of 281,457 carloads of manufacturing products<sup>37</sup> were carried by CN and CP in 2011. According to the 1987 testimony of the Canadian Manufacturers’ Association, approximately 80% of the traffic represented by its membership would have access to two railways if the interswitching limit was extended to 30 kilometres. This equates to 225,166 carloads. Most of the manufacturing facilities in Canada are located in the larger urban centres of Montreal, Toronto, Winnipeg, Regina, Calgary, Edmonton and Vancouver as well as across much of central and southern Ontario and the lower mainland of the province of British Columbia. All of these centres, and a large portion of these regions, are

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<sup>37</sup> Includes 185,962 carloads of machinery and automotive products

served either directly by both CN and CP, or within the regulated 30 kilometre radial distance of a second carrier.

**Mining and Metals:** A total of 951,347 carloads of mining and metal products were carried by CN and CP in 2011. Much of the mining in Canada occurs in remote regions of the country well beyond the reach of regulated interswitching. The exception is potash and, to a lesser extent, sulphur. Nine of the ten potash mines in Canada are either served directly by both CN and CP, or within the regulated 30 kilometre radial distance of a second carrier. It is estimated that approximately 33% of this traffic is exposed to either direct rail-to-rail competition, or extended interswitching. This would amount to approximately 313,945 carloads.

**Food Products:** A total of 54,948 carloads of food products were carried by CN and CP in 2011. We believe all of this traffic is exposed to either direct competition by CN and CP or through extended interswitching.

**Forest and Paper Products:** A total of 386,228 carloads of forest and paper products were carried by CN and CP in 2011. According to the submission of the Forest Products Association of Canada to the CTA dated June 11, 2010 “[a] number of our members are able to take advantage of regulated interswitching to gain access to a second carrier and thereby obtain the benefits of railway competition.”<sup>38</sup> We estimate that approximately 70% of this traffic (308,823 carloads) is exposed to regulated interswitching.

**Fuels and Chemicals Products:** A total of 432,657 carloads of fuels and chemicals products were carried by CN and CP in 2011. A substantial portion of this traffic originates in Alberta at facilities located at or very near the cities of Calgary and Edmonton, both of which are served either directly by CN and CP or through regulated interswitching. Much of the traffic that is originated in Ontario is sourced at Sarnia, which is served directly by CN and CSXT, or exposed

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<sup>38</sup> FPAC submission to CTA June 11, 2010, pg.2.

to both railways through regulated interswitching. For the purposes of this analysis we have assumed that 90% of this traffic is exposed to two railways through interswitching. This amounts to 389,391 carloads.

In summary, since the amount of carload rail traffic actually interswitched between CN and CP is relatively small (less than 4% annually), despite a significant portion of each railway's traffic being exposed to regulated interswitching, it can be concluded that the Interswitching regulation policy appears to be generating rail intra-modal competition where it would otherwise not arise.

As well, it would appear that shippers who are captive to either CN or CP see their traffic largely retained by the respective railway to which they are captive at origin or destination rather than being switched over to the competition at an interchange point under the Regulations.

## **VII. The Impact of Regulated Interswitching on CN and CP's Network Efficiencies and Productivity**

### **• Government Legislative Reviews and Canadian Transportation Interswitching Consultations**

Regulated interswitching has been reviewed and monitored on a regular basis since 1988 when the 4 mile limit was expanded to 30 radial kilometres. These reviews and monitors have consistently found that the regulations:

- have fostered increased rail-to-rail competition in urban areas as well as in some remote regions of Canada where resource-based products are competing for sales in domestic and export markets (i.e. chemicals in Alberta, potash in Saskatchewan, forest products in Quebec);
- have been consistently recognized as forming a critical component of the 'basket' of competitive access provisions contained in the Canada Transportation Act designed to enable captive shippers to access competitive rail services, and;

- have had no negative impact on railway operations or net-work efficiencies. To the contrary, the Agency's most recent review of the regulations,<sup>39</sup> has revealed that the cost of performing interswitching in zone 4 has declined due to efficiency gains and productivity improvements realized by the railways. The traffic originating or terminating in Zone 4 is highly concentrated in a limited number of interchanges located in the Vancouver and Edmonton areas. This is significant because 55% of all interswitched traffic occurs in zone 4.

The 30 kilometre regulated interswitching limit has now been in force in Canada for twenty five years. The legislation requires that the regulations be reviewed and, if deemed necessary, amended no later than every five years. The first review took place in 1992 and the regulations were most recently reviewed by the Agency during the period 2002-2004 and December 2007-2010. The Agency has consulted with both shippers and railways during each of the reviews on matters respecting both the interswitching distance limit and the interswitching rate scale.

CN and CP have participated in the Agency's consultations and are on record as performing very efficiently under the regulations over the period since the limit was expanded to 30 kilometres in 1988. CN did not explicitly comment on the appropriateness of the 30 kilometre limit during either the 2002-04 or 2007-10 reviews, but stated in its February 8, 2008 submission to the Agency "[t]o the extent that the Agency proceeds with regulated interswitching, CN considers that the Zones and Car Blocks being proposed in the Consultation Document are appropriate". Thus, in each of the Agency's required reviews of the interswitching regulations after the limits were substantially extended in 1987, the CN did not indicate that the extended limits were responsible for any adverse effects on the rail network or its operations.

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<sup>39</sup> Justice Canada – Canada Gazette Vol. 146, No. 26 — June 30, 2012 REGULATORY IMPACT ANALYSIS STATEMENT

CP has also not explicitly commented on the interswitching limit in recent submissions, but made the following comment in its September 30, 2002 interswitching submission to the Agency: “[t]he current structure of the interswitching rates has worked to the general benefit of all parties concerned, and that changes are neither necessary nor desirable.” Thus, CP (like CN) identified no adverse operational effects related to interswitching after the limits were substantially extended in 1987.

Since 2002, CN and CP have also been active participants in the federal reviews and meetings that have been initiated and convened by Canada’s House of Commons Standing Committee on Transport to consider legislative changes to the Canada Transportation Act and the National Transportation Act, 1987 which preceded it. Both railways, as well as Committee members, have made public statements at these meetings respecting the economic health and performance of Canada’s two major railways since 1988 when the interswitching limit was expanded. The following statements are reflective of the generally very positive results operating under the regulated interswitching system.

- **Year 2003**

In October 2003, fifteen (15) years following the extension of the regulated interswitching distance from 4 miles to 30 radial kilometres, Canada’s House of Commons Standing Committee on Transport (“SCOT”) convened hearings in Ottawa to consider proposed amendments to the Canada Transportation Act, contained in Bill C-26<sup>40</sup>. CN appeared before SCOT on October 28th, 2003. Mr. Sean Finn, Senior Vice-President and Chief Legal Officer, CN, stated in CN’s evidence the following at that time:

“Successive policies by the Canadian government of deregulating the rail transportation industry have lifted the rail industry from deficits and economic decline. To add a few more words on that, starting with the privatization, in 1995,

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<sup>40</sup> 37th Parliament, 2<sup>nd</sup> Session

followed very quickly with deregulation, in 1996, of CTA, we have ensured that both CN and CP are the best railways in North America, not to say the world--best from a competitive perspective as well as from a service perspective.”

and further;

“Canada has the lowest freight rates in the world, as you can see in the table attached to our submission, which by far continues to be one of the most successful stories when it comes to privatizing but also deregulating the industry for the benefit of shippers in Canada, for the benefit of shippers and receivers who now enjoy the lowest freight rates in the world. This is thanks, in part, to our government policy here in Canada and also an acknowledgement on the part of the Government of Canada that the transportation system is crucial to our country's economic development as being an important aspect of what shippers rely on in Canada to bring their goods to markets across North America.”

and further;

“We have a tendency to forget that the two best railways in North America are CN and CP. Essentially, then, the proof is in the pudding that the regulatory framework and the policies of the Government of Canada have worked to ensure that.... I mean, who would have thought five years ago that CN and CP would be the best railways in North America? We wouldn't have thought that could be the case, but it is the case today, and we're very proud of that environment, of both us and CP being in that situation.”

Mr. Serge Cantin, CN's General Counsel on regulatory matters, also appeared before SCOT the same day. In evidence, he commented on the impact of regulated interswitching on CN as follows:

“Now, I think what is very important to remember is that when you look at the competitive environment, there is the interswitching principle. When you draw the 30-kilometre radius right across the country, 80% of the traffic in Canada is subject to competition.”

At the conclusion of CN's 2003 appearance the Chair of the Committee stated as follows:

“To be absolutely fair between CN and CP, when Mr. Ritchie was here last week, I complimented him--and the same compliment applies to CN, obviously--that it may be one of the best-kept secrets in all of Canada that the two best railways in North America are CN and CP. We've got to find a way to get this out, because if you're the two best railways in North America, you're the two best railways in the world. I think Canadians have to be exceptionally proud of the fact that right here in Canada, we have the two best railways in North America and the world.....I look up and down at this group, and those of us who have sat on this transport committee for a number of years realize full well that this has not always been the

case, that there were some times when we sat here, with both CP and CN, and were disturbed that we were maybe on the brink of seeing the demise of national railways in this country with, at times, the huge subsidies that they would have to receive from government in order to continue to exist. So I think it's a credit to everybody who is employed by CN and CP that in a period of five or six years, you've attained these successes--and not, in my judgment, at the expense of the people who use the railways in Canada. So I compliment you. That was the same statement I made to CP, so I'm not showing favouritism." (Emphasis added)

Mr. Rob Ritchie, President and CEO, Canadian Pacific Railway, appeared before SCOT on October 21, 2003 to similarly provide his views and opinion respecting the impact of the Canada Transportation Act 1996, which carried forward the 30 km extended interswitching provision over the previous five years. He stated in his opening comments that;

"In Canada, with some legislation changes and with a low dollar, our two national railways have arguably evolved into two of the better railways in the world, if you consider "better" measured on overall price, service, and safety."

Mr. Stan Keys, a member of SCOT, had the following to say regarding CN's and CP's productivity during the period following the passage of the NTA '87 when the regulated interswitching distance was extended from 4 miles to 30 radial kilometres:

"As Canadians, I think we have to be really proud of the fact that we have a railroad industry that can make \$5 billion in capital investments in itself over the last five years. How do you achieve that? You wouldn't have got that kind of money out of the federal government over a five-year period; that comes with good management policy, good government policy, and good management decisions. The combination is there.

How do you not recognize that for a 10-year period between 1988 and 1999 we were able to see 43% production gains in the industry—43%—and then see 75% of that 43% going directly to lowering freight rates for the customers they serve? This speaks to a success story that I think is overlooked at times."

The Chair, before receiving questions from the Committee to the CP witnesses stated;

"...by all the criteria they use to measure the railways in North America--I don't know if all the committee members are of this mind or if they know what those criteria are--in the last three and a half to four years, both your railway, Mr. Ritchie, and CNR have become the two top railways

in North America, and as a result of that the top two railways in the world. So I think all Canadians have to be very proud of the work under both your leadership and the leadership of CNR that has taken our railways to that position. I compliment you on that.”

Thus, it is clear that, in a key review of the statute after the extension of the interswitching limits in 1987, neither of the largest Canadian railroads identified any adverse network operational effects as a result of the extended interswitching limits.

- **Year 2006**

SCOT convened further hearings three years later in October 2006 following the passage of the CTA, 1996 to study proposed amendments to the Canada Transportation Act, 1996 set out in Bill C-11<sup>41</sup>. Both the Railway Association of Canada and CN appeared before the Committee on October 26, 2006. Although both railways had, at that time, almost eight years of operating experience under the extended interswitching limits, neither had anything specific nor negative to say about the expanded limits, focussing their comments instead on the continuing excellent performance of their respective railways. Mr. Claude Mongeau, Executive Vice-President and Chief Financial Officer, CN made the following statement to the Committee:

“I think the federal government and your predecessors as members of the Transport Committee should be proud of where we stand today in the rail industry. CN has transformed itself from a laggard railroad ten years ago to a leading railroad in the North American industry. CP Limited has created CP Rail, which is today a focused, lean railroad serving all of Canada. I invite you to look at the hard facts..... If I take CN's example, for instance, our transit time and the reliability with which we achieve our transit time has improved by more than 50% over the last ten years.”

- **Year 2007**

SCOT convened further hearings one year later in November 2007 to study further proposed amendments to the CTA set out in Bill C-8.<sup>42</sup> (Those amendments were subsequently

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<sup>41</sup> 39th Parliament, 1st Session

<sup>42</sup> 39th Parliament, 2nd Session

adopted and incorporated into the amended CTA which received Royal Assent in February 2008.) The Railway Association of Canada appeared before the SCOT on November 27, 2007. With respect to “deregulation”, which encompassed the regulated interswitching provisions, Mr. Clifford MacKay, President of the RAC, stated as follows:

“Deregulation has proved to be a resounding success. It started with legislated reform in 1987, which allowed railways and customers to make separate commercial deals, and it developed further from that point with the amendments to the Transportation Act in 1996. If you measure what's happened as a result of all of this, as measured by revenue per tonne-kilometre, average freight rates in Canada declined 31% in real terms from 1988 to 2006. This has allowed shippers not only to move more goods but to move them at lower cost.

I should say that since deregulation, particularly since the mid-1990s, railways have spent more than \$15 billion to improve their systems. This was double the amount of investment that took place during the same period of time under the regulatory regimes of the 1970s and early 1980s. Over the coming year alone, railways will be investing more than \$2.5 billion in their infrastructure, which represents something in the order of 20% of our total revenues.”

Mr. MacKay further stated;

“.....particularly in the last 10 years there has been a massive change in the way in which rail services are managed and delivered, not only in Canada but in the whole of North America. We have moved from the days when railways did not run to precision schedules, where our capacity utilization was abysmal—if you look at our operating rates back 10 years ago, that clearly proves it—and we're now operating the system much more efficiently, much more fluidly, at much better productivity rates than ever in the past.”  
(Emphasis added)

Clearly, the Railway Association of Canada, representing the interests of Canadian railroads, did not identify any adverse effect of the extended interswitching limits in these reviews.

- **Year 2009**

An indication that CN was operating efficiently twenty years following the 1988 extension of the interswitching limit from 4 miles to 30 radial kilometres is found in the following excerpt from CN’s 2008 Annual Report, where Hunter Harrison, CN’s President and Chief Executive Officer at the time, stated that CN increased its dividend to its shareholders in 2009 for the 13th consecutive year:

“We also increased our dividend for the 13th consecutive year in January 2009. How did we achieve these results? By doing what we do best: provide a high-quality service at a fair price to our customers, while working hard to manage our costs, use our assets efficiently, develop our people and in the process not get anybody hurt. I’ve seen it proven my entire career that if you do these five things well, you’ll succeed in this business. We’ve built something special here at CN. Our diverse franchise, unique business model and strong balance sheet put us in an excellent position in an important industry – rail is the backbone of the North American economy, and nobody operates a railroad better than CN.”

- **Measuring CN’s and CP’s Network Productivity and Efficiencies**

There are several key barometers in the railway industry that are helpful in measuring and assessing a railway’s operating efficiency/workload performance and financial performance over time. They include the following:

- Revenue ton miles per employee (Table 9 below)
- Revenue per ton mile earnings (Table 10 below)
- CN and CP operating ratio (Table 11 below)
- Total carloads moved (Table 12 below)
- Total revenues earned (Table 13 below)

I examine each of these variables in the following section of this paper. The metrics support the fact that both CN and CP have achieved significant gains in reducing costs and running more efficient and timely operations across their respective systems. Both railways have improved their network operating efficiency significantly over the past 25 years since regulated interswitching was expanded from 4 miles to 30 radial kilometres. Since 1995, Canadian railways have been operating with 10% less track and with 30% fewer employees. Over this same period, however, freight traffic (tons) has increased 13% and freight revenue per ton has increased 9%.<sup>43</sup> The fact is that there is nothing in these figures to suggest that the extension of interswitching in 1987 has had any adverse effect on the productivity or efficiency of Canadian railroads, which are among the most productive and efficient in the world.

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<sup>43</sup> Railway Association of Canada “2005 Railway Trends”

- **Productivity Measured on a Revenue Ton Miles per Employee Basis**

The most common barometer for measuring rail workload performance is revenue ton-miles (revenue tonne-kilometres) or RTM (RTK), which is the movement of one revenue-producing ton of freight the distance of one mile (kilometre). It is calculated by multiplying the weight of paid tonnage by the total distance (in miles or kilometres) it has been transported<sup>44</sup>. Furthermore, the output of the rail business only goes as far as the efficiency of its employees. In Canada employee productivity is measured in terms of revenue-per-ton-mile-kilometre (RTK) per employee, which gives a sense of how well the sector is allocating its resources.<sup>45</sup>

As detailed in Table 9 below, the number of employees working in the Canadian rail industry has declined from approximately 75,000 in 1988, the first full year following the extension of the interswitching limit to 30 kilometres, to about 33,600 in 2011, a reduction of 55% in the workforce. During this same period, however, revenue ton-miles per employee has almost quadrupled from 2,332 RTM/employee to 8,496 RTM/employee.

**Table 9**  
**Revenue Ton Miles per Employee in the Canadian Rail Industry**

	<b>Total average number of employees</b>	<b>Revenue ton-miles per employee (000)</b>
<b>1988</b>	75,267	2,332
<b>1989</b>	71,405	2,235
<b>1990</b>	65,637	2,436
<b>1991</b>	62,455	2,698
<b>1992</b>	60,111	2,706
<b>1993</b>	57,410	2,907
<b>1994</b>	54,427	3,538
<b>1995</b>	50,995	3,758
<b>1996</b>	47,556	4,061
<b>1997</b>	46,174	4,843
<b>1998</b>	44,641	4,903
<b>1999</b>	43,109	5,197

<sup>44</sup> Railway Association of Canada “2012 *Railway Trends*”, pg. 10

<sup>45</sup> Railway Association of Canada “2012 *Railway Trends*”, pg. 20

<b>2000</b>	41,118	5,878
<b>2001</b>	39,511	6,167
<b>2002</b>	37,296	6,319
<b>2003</b>	36,599	6,764
<b>2004</b>	35,736	7,352
<b>2005</b>	35,389	7,679
<b>2006</b>	34,558	7,963
<b>2007</b>	34,938	8,045
<b>2008</b>	35,208	7,625
<b>2009</b>	32,237	7,404
<b>2010</b>	32,565	8,287
<b>2011</b>	33,624	8,496

**Source:** 2002-2011 statistics: Railway Association of Canada “2012 Railway Trends”  
2001 statistics: Railway Association of Canada “2003 Railway Trends”  
1991-2000 statistics: Railway Association of Canada “2001 Railway Trends”  
1988-1990 statistics: Railway Association of Canada “1993 Railway Trends”

These figures suggest that there has been no adverse effect on the productivity of Canadian carriers as a result of the substantial extension of the limits of interswitching.

- **Productivity Measured on a Revenue per Ton-Mile Basis**

In 1987 it was estimated that CN and CP represented about 90% of the traffic of federally regulated railways in Canada.<sup>46</sup> As detailed in Table 10 below, revenue per ton -mile earnings of Canadian railways have increased from 3.65 cents (all railways) in 1988 to 4.04 cents in 2011, an increase of 11%.

RTM data for CP and CN is available from 1996 and 1998 respectively. CP’s RTM has increased 14% from 3.42 cents in 1996 to 3.91 cents in 2011. CN’s has increased 24% from to 3.57 cents in 1998 to 4.44 cents in 2012. Notwithstanding the fact that CN performs more interswitching than CP<sup>47</sup> and is a net provider of interswitching services to CP, regulated interswitching does not appear to have harmed CN on that basis in any way.

<sup>46</sup> U.S. and Canadian Railway Industry Economic and Regulatory Frameworks: Implications for Railway Productivity and Competitiveness, Peat Marwick and Partners, February 11, 1987, pg. 12

<sup>47</sup> CN submission to the Canadian Transportation Agency, May 21, 2010, pg. 4.

**Table 10**  
**CN and CPR Freight Revenue per Ton Mile**  
**(Millions of dollars)**

	<b>CN</b>	<b>CP</b>
1988 ( <u>All</u> Canadian railways) 3.65 <sup>48</sup>		
1996	NA	3.42
1997	NA	3.41
1998	3.57	3.45
1999	3.50	3.31
2000	3.50	3.13
2001	3.56	3.16
2002	3.71	3.22
2003	3.50	3.04
2004	3.57	3.02
2005	3.78	3.40
2006	3.91	3.60
2007	3.90	3.52
2008	4.29	3.87
2009	4.15	3.95
2010	4.14	3.84
2011 <u>All</u> Canadian railways 4.04 <sup>49</sup>	4.32	3.91
2012	4.44	4.11
<b>Change:</b>	<b>22% increase</b>	<b>13% increase</b>

**Source:** CN and CP Annual Reports and 4<sup>th</sup> quarter financial statements.

- **CN's and CP's Operating Ratios**

An indication of just how productive Canadian railways have become in recent years is further illustrated by their operating ratios - the benchmark measurement of operating performance in the North American railway industry. It measures the amount of each dollar of revenues that is consumed by the railway's operating expenses to earn it. The lower the ratio, the lower the percentage of revenues required by the railway to cover expenses.

As detailed in Table 11 below, CN's operating ratio has declined steadily since 1995 from 89.0 in 1995 to 62.9 in 2012, meaning 26.1 cents less of every dollar in revenue brought in

<sup>48</sup> Railway Association of Canada "Railway Trends", 1993, pg. 6

<sup>49</sup> Railway Association of Canada "2012 Railway Trends", pg. 31

by the railway is required to cover expenses today as compared to in 1995. CN, in fact, has one of the lowest operating ratios among Class 1 railroads in North America. Since 1995, CP's operating ratio has fluctuated from about 83 down to about 75 in 2006-07, then increased during the 2008-12 period back to the 83.3 mark. Clearly, CN, a net provider of interswitching since the limits were increased in 1987, has performed extremely efficiently, compared to other Class 1 railroads in North America.

**Table 11**  
**CN and CP Operating Ratios 1995-2012**

<b><u>Year:</u></b>	<b><u>CN Operating Ratio</u></b>
1995	89.0
1996	85.0
1997	78.4
1998	75.1
1999	72.0
2000	69.6
2001	68.5
2002	69.4
2003	69.8
2004	66.9
2005	63.8
2006	61.8
2007	63.6
2008	65.9
2009	67.3
2010	63.6
2011	63.5.
2012	62.9

**Source:** CN Annual Reports and 4<sup>th</sup> Quarter financial statements

<b><u>Year:</u></b>	<b><u>CP Operating Ratio (%)</u></b>
1996	83.0
1997	81.4
1998	79.2
1999	78.2
2000	76.9
2001	77.3
2002	76.6
2003	80.1

2004	79.8
2005	77.2
2006	75.4*
2007	75.3*
2008	78.6*
2009	81.1*
2010	77.6*
2011	81.3*
2012	83.3*

**Note:** \* Canadian Pacific 3 Year/5 Year Rail Data Summary (4<sup>th</sup> Quarter 2008 and 4<sup>th</sup> Quarter 2011)

**Source:** CP Annual Reports and 4<sup>th</sup> Quarter financial statements

- **CN and CP Carloads**

CN's and CP's combined carloads have increased over 300% between 1985, prior to the extension of interswitching limits, and 2012.

CN's carloads have more than doubled between 1995 and 2012 (120%), while CP's have increased approximately 17% between 1997 and 2012. Train weights have also increased significantly over this period, meaning trains are longer and cars are heavier. Productivity has therefore increased.

**Table 12**  
**CN and CP Carloads**  
(Thousands)

	CN	CP
1985 Combined CN and CP carloads totalled 1,845,645 <sup>50</sup>		
1995	2,295	NA
1996	2,315	NA
1997	2,547	2,283
1998	3,483 <sup>51</sup> 2,456 <sup>52</sup>	2,245

<sup>50</sup> U.S. and Canadian Railway Industry Economic and Regulatory Frameworks: Implications for Railway Productivity and Competitiveness, Peat Marwick and Partners, February 11, 1987, Executive summary Appendices E and F

<sup>51</sup> CN acquisition of Illinois Central Railroad occurred on January 1, 1998

<sup>52</sup> Excluding Illinois Central Railroad carloads

1999	3,645	2,330
2000	3,796	2,395
2001	3,821	2,423
2002	4,153	2,447
2003	4,177	2,539
2004	4,654	2,699
2005	4,841	2,676
2006	4,824	2,618*
2007	4,744	2,698*
2008	4,615	2,645*
2009	3,991	2,363*
2010	4,696	2,661*
2011	4,873	2,597*
2012	5,059	2,669
<b>Change</b>	<b>120%</b>	<b>17%</b>

**Source:** CN and CP Annual Reports and 4<sup>th</sup> quarter financial statements.

**Note:** \* Canadian Pacific 3 Year/5 Year Rail Data Summary (4<sup>th</sup> Quarter 2008 and 4<sup>th</sup> Quarter 2011)

- **CN and CP Total Revenues**

CN's and CP's total revenues have increased dramatically since 1996. As detailed in Table 13 below, CN's revenues have more than doubled (128%) while CP's have increased almost 60%. Notwithstanding the fact that CN performs more interswitching than CP<sup>53</sup> and is a net provider of interswitching services to CP, regulated interswitching does not appear to have harmed CN on that basis in any way.

**Table 13**  
**CN and CP Revenues (Freight and Other)**  
(Millions of dollars)

	<b>CN</b>	<b>CP</b>
1988 All Canadian Railways \$6,411 <sup>54</sup>		
1996	\$3,911	\$3,543
1997	\$4,283	\$3,583
1998	\$4,952	\$3,472

<sup>53</sup> CN submission to the Canadian Transportation Agency, May 21, 2010, pg. 4.

<sup>54</sup> Railway Association of Canada "Railway Trends" 1993. In 1987 it was estimated that CN and CP represented about 90% of the traffic of federally regulated railways in Canada

1999	\$5,032	\$3,496.
2000	\$5,236	\$3,460*.
2001	\$5,457	\$3,497.
2002	\$5,901	\$3,472*.
2003	\$5,694	\$3,479*.
2004	\$6,252	\$3,729*.
2005	\$6,793	\$4,266*.
2006	\$7,254	\$4,427*
2007	\$7,186	\$4,555*
2008	\$7,641	\$4,815*
2009	\$6,632	\$4,280*
2010	\$7,417	\$4,853*
2011	\$8,111	\$5,052*
2012	\$8,938	\$5,550
<b>CN and CP Change:</b>	<b>128% Increase</b>	<b>57% Increase</b>

**Source:** CN and CP Annual Reports and 4<sup>th</sup> quarter financial statements.

**Note:** \* Canadian Pacific 3 Year/5 Year Rail Data Summary (4<sup>th</sup> Quarter 2008 and 4<sup>th</sup> Quarter 2011)

### **VIII. Conclusion**

Regulated interswitching has existed for over one hundred years in Canada. By 1987 it was recognized that the 4 mile limit had not kept pace with the expansion of Canadian cities and the relocation of business to industrial parks in outlying suburban areas, to the detriment of shippers that were captive to the lines of a single railway at origin or destination. As well, over time, the regulated rates fell far short of the compensatory needs of the railways. With the passage of the NTA, 1987, regulated interswitching limits were expanded to a radial distance of 30 kilometres. In 1987, the regulated rates were also raised to compensatory levels, to ensure that the revenues earned by the railways compensated them for the work performed in providing the interswitching services. With the passage of the CTA in 1996, and further amendments to the Act in 2008, regulated interswitching has been carried forward. Today, the regulated rates are

no longer required to be compensatory, but are required to be set by the Canadian Transportation Agency at levels that are "commercially fair and reasonable"<sup>55</sup> to all parties.

Today, regulated interswitching represents an important component of the competitive access provisions that are available to Canadian shippers under the Canada Transportation Act. The interswitching regulations benefit captive shippers by extending their access to the lines of competing railway companies at rates that cover the cost of moving the traffic to and from the interchange point. Shippers derive, where available, the benefits of price competition, improved service levels and varying routing options. Railway companies receive, in turn, "commercially fair and reasonable" compensation for the costs of providing interswitching services.

Recent government reviews have concluded that Regulated Interswitching is a valuable competitive access mechanism that continues to ensure that rail shippers derive, where available, the benefits of price competition, improved service levels and varying routing options. The railway companies receive, in turn, fair and reasonable compensation for the costs in providing interswitching services, given the Agency's legislative role in this regard.

Recent studies further reveal that, although a very small percentage of rail traffic is actually interswitched between CN and CP under the regulation (less than 4% annually), a much larger portion of total traffic is exposed to regulated interswitching. Studies conducted in 2001 estimated that approximately 40% of total rail traffic had access to direct rail competition at both origin and destination under the 30 kilometre interswitching limit. Shippers who are captive to either CN or CP see their traffic largely retained by the respective railway to which they are captive rather than being switched over to the competition at an interchange point under the Regulations. In short, the Interswitching Regulation policy generates rail competition where it would otherwise not arise.

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<sup>55</sup> Canada Transportation Act, s. 112

Both CN and CP have generated significant productivity and efficiency gains across their respective systems in recent years, and especially since the extension of interswitching limits. As well, both have generated operating efficiencies in handling traffic in two of the four interswitching limit zones where a relatively higher proportion of the total regulated interswitching traffic is handled. There is simply no evidence that interswitching has harmed the operations of the Canadian carriers or the efficiency of the rail network in Canada in any way.

VERIFICATION

I, Thomas Maville, verify under penalty of perjury that I have read this Verified Statement, that I know the contents thereof, and that the same are true and correct based on my knowledge, information and belief. Further, I certify that I am qualified and authorized to file this Statement.

TL Maville & Associates Inc.

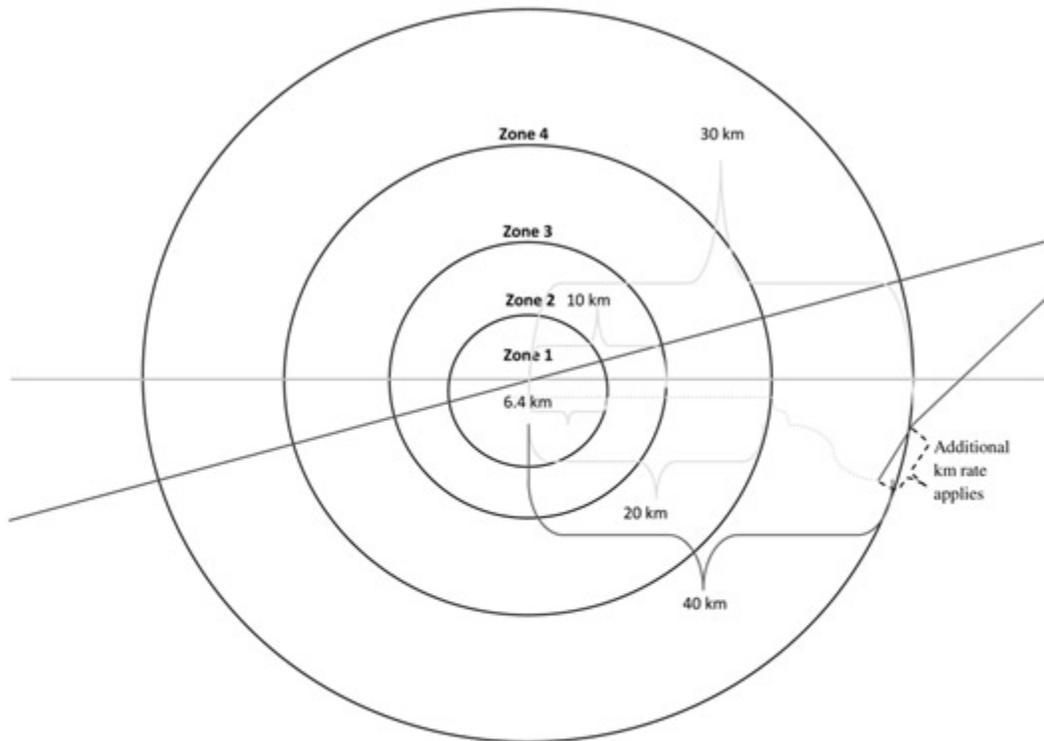
per:

A handwritten signature in black ink, appearing to read "Tom Maville", written over a horizontal line.

Tom Maville - FCILT

Executed on February 28, 2013

## Appendix A — Interswitching Zones Graphic Representation



### Legend

-  Within 30 km radius
-  Additional km
-  Railway 1
-  Railway 2

# EXHIBIT 3

### EXHIBIT 3

#### SUMMARY OF THE LEAGUE'S COMPETITIVE SWITCHING PROPOSAL

##### A. Elimination Of Current Rules And Current Precedent On Reciprocal Switching

The Board should eliminate the agency's current competitive access rules in Ex Parte 445 (Sub-No. 1), *Intramodal Rail Competition* (49 C.F.R. Part 1144) insofar as such rules apply to reciprocal switching. The Board should also vacate the agency's existing precedent insofar as such precedent applies to reciprocal switching under the agency's existing rules.

##### B. Establishment Of New Rules On Competitive Switching

The Board should adopt new rules for reciprocal switching, under which the Board "shall require" a Class I rail carrier to enter into a competitive switching agreement if the following four conditions are met for a shipper (or group of shippers) and/or a receiver (or group of receivers):

1. The petitioner shows that the shipper's/receiver's facility(ies) for which competitive switching is/are sought are served by rail only by a single, Class I rail carrier (the "Landlord Class I Carrier").

2. The petitioner shows that there is no effective inter- or intramodal competition for the movements for which competitive switching is sought. There would be no consideration of product or geographic competition. There would be a conclusive presumption that there is no such effective competition where either: (a) a movement for which competitive switching is sought has an R/VC ratio of 240% or more; or (b) the Landlord Class I carrier has handled 75% or more of the freight volume transported for a movement for which competitive switching is sought in the twelve months prior to the petition seeking switching.

3. The petitioner shows that there “is or can be” a “working interchange” between the Landlord Class I Carrier and another carrier within a “reasonable distance” of such facility(ies). There would be a conclusive presumption that there is a “working interchange” within a “reasonable distance” if either one of two circumstances exist:

(a) the shipper’s/receiver’s facility(ies) for which competitive switching is/are sought are within the boundaries of a “terminal” of the Landlord Class I Carrier existing on July 7, 2011, the date of this Petition for Rulemaking; or are within the boundaries of any new “terminal” established by the Landlord Class I Carrier; or

(b) such facility(ies) are within a radius of 30 miles of an interchange between the Landlord Class I Carrier and another carrier, at which cars are “regularly switched.”

4. Competitive switching shall not be imposed if either rail carrier between which competitive switching is to be established shows that the proposed switching is not feasible or is unsafe; or that the presence of such switching will unduly hamper the ability of that carrier to serve its own shippers.