mcmillan

Reply to the Attention of	*François E.J. Tougas*
Direct Line	*604.691.7425*
Direct Fax	*604.893.2359*
Email Address	*francois.tougas@mcmillan.ca*
Date	*August 21, 2019*

BY EMAIL TO: ferroviaire-rail@otc-cta.gc.ca

Canadian Transportation Agency
15 Eddy St
Gatineau, Québec
J8X 4B3

Re: Consultation on the Agency's Approach to Setting Regulated Interswitching Rates

We are solicitors for Teck Resources Limited and its affiliates Teck Coal Limited and Teck Metals Limited (collectively, "**Teck**") in connection with the Canadian Transportation Agency's Consultation on the CTA Approach to Setting Regulated Interswitching Rates (the "**Consultation**") announced on June 20, 2019.[1]

In support of our submissions, we have appended letters from the Western Grain Elevator Association, the Canadian Canola Growers Association, the Mining Association of Canada and the Western Canadian Shippers Coalition ("**Stakeholders**"), whose members have extensive dealings with Canadian National Railway ("**CN**") and Canadian Pacific Railway ("**CP**").

Throughout these submissions, we refer to the following documents and defined terms:

Documents

- **"Act"**: *Canada Transportation Act*
- **"ARCM Submission"**: McMillan LLP submission to Agency staff dated February 28, 2017 in response to the Agency's Consultation on the ARCM[2]
- **"Discussion Paper"**: the Discussion Paper entitled "Consultations on the Canadian Transportation Agency's Approach to Setting Regulated Interswitching Rates"[3]
- **"Gould Report"**: the expert report prepared by Dr. Larry Gould, Ph.D., entitled "Cost of Capital Methodology" in response to the Consultation, appended hereto at Schedule "A"
- **"Heller Report"**: the expert report prepared by Mr. James N. Heller and Mr. John Schmitter entitled "Analysis Of Certain Costing And Operational Issues Related To The Consultation On The Agency's Approach To Setting Regulated Interswitching Rates" in response to the Consultation, appended hereto at Schedule "B"
- **"Railway Interswitching Regulations"**: Railway Interswitching Regulations (SOR/88-41)

[1] The Agency's news release dated June 20, 2019 is available at: https://www.otc-cta.gc.ca/eng/content/cta-launches-consultations-its-approach-setting-regulated-interswitching-rates
[2] Available at: https://www.otc-cta.gc.ca/sites/default/files/teck-resources-ltd.-arcm-sumission.pdf
[3] Available at: https://www.otc-cta.gc.ca/eng/discussion-paper-cta-approach-setting-regulated-interswitching-rates

- **"R-66"**: Agency Decision LET-R-66-2010 entitled "Review of the Railway Interswitching Regulations" dated April 21, 2010
- **"RMI Submission"**: McMillan LLP submission to Agency staff dated September 28, 2018 in response to the Agency's RMI Consultation, appended hereto as Schedule "C"
- **"Yatchew Report"**: the expert report prepared by Dr. Adonis Yatchew, Ph.D., dated February 28, 2017 prepared in response to the ARCM Consultation, appended to the ARCM Submission

Defined Terms

- **"ARCM"**: Agency Regulatory Costing Model
- **"ARCM Consultation":** the Agency's "Consultation on the Agency's Regulatory Costing Model"[4]
- **"CAPM"** Capital Asset Pricing Model
- **"LRVC"**: long run variable cost
- **"RIAS"**: Regulatory Impact Analysis Statement
- **"RIS"**: regulated interswitching
- **"RMI Consultation"**: the Agency's rail transportation consultation announced by news release on May 31, 2018 as part of the Agency's regulatory modernization initiative[5]
- **"TIH/PIH"**: Toxic Inhalation Hazard (TIH) / Poisonous Inhalation Hazard (PIH)

INTRODUCTION

1. We are pleased to make these submissions to the Agency on behalf of Teck and the Stakeholders.

2. The Agency's work is important to a great many shippers, particularly in its efforts to meet the policy objectives set out in section 5 of the Act, about which we make further submissions under the heading "**Conclusion**". All of our submissions are underpinned by that policy, and we have a good sense, due to our footprint and experience in the field of rail transportation, that shippers rely on the effectiveness of that policy and look to the Agency to uphold its principles. This Consultation is very much a part of that exercise. We have come to appreciate the talent and expertise of Agency staff in attending to shipper expectations that their work will be robust, well-founded and transparent.

3. We recognize in particular that Determination No. R-2018-254 made reference at note 12 to the work that led up to that Determination, in some of which we were pleased to participate, to the extent we were aware:

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[4] Initiated by the Agency and conducted between January 9, 2017 and February 28, 2017, as described at: https://www.otc-cta.gc.ca/eng/consultation/consultation-agencys-regulatory-costing-model-arcm.
[5] The Agency's news release is available at: https://otc-cta.gc.ca/eng/content/canadian-transportation-agency-launches-consultation-rail-transportation. The Discussion Paper on Regulatory Modernization for Rail Transportation is available at: https://www.otc-cta.gc.ca/eng/discussion-paper-regulatory-modernization-rail-transportation.

> "This is the first revision of the interswitching rates since 2013. It necessarily relies on available data, and uses well-established costing methodologies, some elements of which are used in other Agency determinations. It also reflects relevant methodological determinations, for example, Decision No. 425-R-2011 (2011 cost of capital decision), Decision No. 97-R-2012 (pension decision), Decision No. 2015-R-91 (variability decision) and Determination No. R-2017-198 (determination of the methodology to determine the working capital amounts and capital structure for regulatory purposes)."

4. Teck and the Stakeholders are interested in the outcome of the Consultation for the following reasons:

   a. RIS rates, the application of the ARCM to establish LRVC, CN and CP claims for greater recovery of revenue in excess of LRVC and even in excess of total cost (not only for RIS rates, but rates and charges generally), use of cost-based rates, directly or indirectly affect the Stakeholders, often in proportion to their degree of captivity,

   b. in connection with the Agency's mandate pertaining to the economic regulation of railway companies, they are reliant on the robustness, correctness and fairness of the Agency's processes and the execution of its mandate; indeed, they rely on the Agency to adequately regulate, at the very least, those parts of CN's and CP's rail systems that operate as natural monopolies or otherwise exhibit attributes of entities that can and do exercise market power, and

   c. the significant exercise of market power by CN and CP is borne by the most captive shippers and has resulted in large wealth transfers from those shippers to CN and CP, as set out in the Gould Report, such that

      > "In 2018, the CN after-tax return on equity was estimated at 25.2%, 3.1 times the 8.1% level determined by the CTA to be the amount needed for CN to be financially viable. This is consistent with the fact that CN's share price is currently over five times its book value."[6]

      > "In 2018, the CP after-tax return on equity was 29.85%, 3.2 times the 9.47% level determined by the CTA to be the amount needed for CP to be financially viable. CP's share price is currently over six times its book value."[7]

5. Of course, there remains the unanswered question whether in fact either CN and CP are inadequately compensated for providing RIS services.

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[6] Gould Report, page 13.
[7] *Ibid.*

6. Many of the issues now raised in this Consultation are similar to those expressed by CN and CP in their various submissions in public and private proceedings. The Consultation Document discloses that CN or CP or both have raised issues with the Agency for which the two railway companies are prepared and other respondents to the Consultation have not been accorded an opportunity until the time of the Consultation. This leaves an impression that the CN and CP have an advantage. If that is the case, non-carrier stakeholders should be given adequate opportunity and information to address the claims advanced by CN, CP or others.

7. For example, claims about inadequate long term investment needs by CN and CP are just not credible. The requirement in s.127.1(2)(b) to consider the matter does not make it so. This legislation leaves an incorrect impression. While we are in position to address the point in the timeframe allotted, the issue for Teck and the Stakeholders is that they have to expend time and resources on something so obviously incorrect. That is not to say it is the Agency's fault, not by any means. In fact, we commend Agency staff for addressing the point head on and trust that the outcome will be as obvious to the Members as it is to us and to those who consistently make outsized contributions to CN's and CP's fixed (and constant) costs.

8. Of greater concern is the language now being used by the Agency in its public-facing materials, which on its face changes its policy and orientation, and adopts CN's and CP's interpretation and construction of the Act in relation to remedies under the Act. For example, none of the Discussion Paper, the Agency's news release in respect of the Consultation, or the Agency's most recent RIS rate determination (Agency Determination No. R-2018-254) refer to RIS as a "competitive" access mechanism for the protection of shippers or a way to increase competition (or similar). The language, for reasons unknown, and certainly without foundation, now reads as follows:

> "Interswitching is a practice that gives some shippers access to the services of railway companies that do not directly serve their facilities or sidings, by requiring that a railway company that does provide such direct service transfer cars with a shipper's traffic at an interchange to a different railway company with which the shipper has made transportation arrangements."

9. Until the foregoing statement, both the Agency and the courts consistently and explicitly recognized RIS as a *competitive access mechanism for the protection of shippers*. Examples follow:

> "To ensure fair and reasonable access to the entire railway system, interswitching has been regulated in Canada since 1904. The *Railway Interswitching Regulations* (Regulations) set the rates to be charged for interswitching services provided by the terminal carrier, thereby establishing a predictable and fair pricing regime that is applied equally to all terminal carriers providing interswitching services. Interswitching allows shippers to negotiate,

through normal commercial processes, suitable terms and conditions of carriage with competing carriers from the interchange point onward, for the line haul portion of the overall car movement.

…Interswitching represents an important part of the competitive access provisions that are available under the CTA. Regulated interswitching rates benefit shippers by extending their access to the lines of competing railway companies at rates that cover the cost of moving the traffic to or from the interchange point. Regulated rates thus 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, compensation for the costs in providing interswitching services.

…The economic impact of these Regulations on shippers is generally positive because it allows more competitive shipping options. Moreover, the regulated interswitching rates, which reflect the total costs but not the commercial profits, are below the unregulated market rates."[8] [underlining added]

10. The Agency's 2014 slide presentation to industry stakeholders in respect of the Agency's temporary increase of RIS limits to 160 kilometres from an interchange stated the proposition succinctly:

"Interswitching is a competitive access provision of the Canada Transportation Act for the benefit of shippers."[9]

11. The Agency reconfirmed the point in a 2014 RIAS:

"Regulated in Canada since 1904, interswitching is a competitive access provision of the *Canada Transportation Act* (CTA) for the benefit of shippers. It is a service where a carrier picks up a shipper's traffic at either its origin or destination, and conveys it to an interchange point with a second carrier, which then completes the movement to its ultimate destination. This ensures that captive shippers (i.e. shippers with only one choice of railway) have fair and reasonable access to the rail system at a regulated rate.

[8] RIAS in respect of the Regulations Amending the Railway Interswitching Regulations (2013), Canada Gazette Part II, February 28, 2013 (http://canadagazette.gc.ca/rp-pr/p2/2013/2013-03-13/html/sor-dors28-eng.html), page 585 - 587.
[9] See slide 4 of the Agency's presentation slides dated June 2014 and entitled "Determination of the Interswitching Rates For the Extended Distance Limits Under Bill C-30, Part 1: How Interswitching Rates Are Determined". Although the presentation focuses on the no longer applicable 160 km Zone 5, its statements apply equally to the other four zones. There is, for example, the questionable assumption that 2 ½ locomotives of 4400 HP are used for switching of block trains (as low as 60 cars), and the tell-tale reference for single car movements that "rather than calculating diesel unit miles, car miles, train hours, crew wages, and the other costs directly, our methodology only involves calculating the minutes of switching activity performed per car."

> The interswitching provisions of the CTA are considered to be competitive access provisions, allowing the shipper to choose their carrier despite having physical access to only one carrier.
>
> Increasing the access that farmers and elevators and shippers of other commodities have to the lines of competing railway companies will increase competition among carriers for business and will give shippers more transportation options.
>
> The Agency is now moving forward to meet the Government's objective by amending the *Railway Interswitching Regulations* to extend the interswitching distances in the Prairie Provinces to 160 kilometres for all commodities in order to increase competition among railways and to give shippers access to alternative rail services.
>
> The amendment to the *Railway Interswitching Regulations* will protect and advance the public interest in the economic well-being of Canadians, as expressed by Parliament in the legislation, and promote a fair and competitive market economy, specifically by increasing competition among railway companies and giving shippers access to alternative rail services, which will contribute to the ability of shippers of grain and other commodities to have improved access to domestic and export markets.
>
> …The Agency notes, however, that regulated interswitching is a competitive access remedy for the benefit of shippers with access to only one railway carrier. Furthermore, the local railway always has the option of making more competitive offerings to retain the traffic base it currently has."[10] [underlining added]

12. In 2017, the Agency described RIS as follows:

> "Interswitching of traffic between railway companies has existed in Canada since the early 1900's. The concept of interswitching was introduced to limit the proliferation of railway lines in urban areas serving manufacturing-based industries. However, limiting the number of railway lines in an area could create a monopolistic service and rate situation. The ability to exchange or interswitch traffic with another railway company or companies within certain limits was seen as a means to reduce exclusive control over traffic.
>
> The interswitching provisions of the CTA today are meant to provide shippers with greater access to competitive services at known prices to alternate rail carriers within interswitching limits. An interpretation of the relevant legislation should support this objective."[11] [underlining added]

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[10] RIAS in respect of the Regulations Amending the Railway Interswitching Regulations (2014), Canada Gazette Part II, August 1, 2014 (http://www.gazette.gc.ca/rp-pr/p2/2014/2014-08-13/html/sor-dors193-eng.html), page 2313-2314, 2322.
[11] Agency Letter Decision No. CONF-6-2017 at paragraph 72, quoting Agency Decision No. 35-R-2009 at paragraphs 62-64. At paragraph 77 of Letter Decision No. CONF-6-2017, the Agency restated the purpose of the interswitching remedy: "…the purpose of interswitching (i.e., enhanced competition between railway companies and improved service for shippers)…"

13. In dismissing CN's appeal the foregoing Agency decision, the Federal Court of Appeal favourably quoted a passage of the Agency's decision that characterizes RIS as a "statutory competitive access provision of the CTA…designed to relive against near monopolistic situations…".[12]

14. The Agency's most recent pronouncement regarding the purpose of RIS is in a 2019 RIAS dealing with administrative changes to various railway regulations that characterized RIS as providing "shippers with options between railways, at a regulated rate".[13]

15. It is in the context of relief from the exercise of rail carrier market power that we address Issues 2 through 4 (questions 2 through 8) and Issues 7 through 9 (questions 14 through 18) of the Discussion Paper.

16. In our submissions, we distinguish between (i) RIS rates, (ii) traffic interchanged between carriers without reference to RIS rates, and (iii) traffic that moves through interchanges (and associated infrastructure) that is not interchanged with another carrier, not to mention traffic interchanged in RIS zones that is interchanged with provincially-regulated carriers.

17. We also underscore the importance of transparency of the methodology, processes and inputs the Agency uses to make such determinations, including unit costs and relevant service units from the ARCM, given the significant and varied interests affected.

18. We submit the Agency is under a practical onus to demonstrate the benefits of any kind of price discrimination (legitimized by reference to cost), which we submit can be achieved, practically, only by sufficient transparency of process.

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[12] *Canadian National Railway Company v. BNSF Railway Company and Canadian Transportation Agency*, 2018 FCA 135, at paragraph 22.
[13] RIAS in respect of the Regulations Amending Certain Regulations Made Under the Canada Transportation Act (Rail Transport) (SOR/2019-254), Canada Gazette Part II, June 25, 2019 (http://www.gazette.gc.ca/rp-pr/p2/2019/2019-07-10/html/sor-dors254-eng.html).

ISSUE 2:
REGIONAL & COMMODITY-SPECIFIC REGULATED INTERSWITCHING RATES

Issue 2, Consultation Question 2(a): Should the CTA continue to determine a single rate in each zone, to maintain the simplicity and ease of administration of the interswitching remedy, or should the CTA determine multiple rates for each zone, to better match the rates to the costs of providing the service?

Issue 2, Consultation Question 2(b): If multiple rates are preferable, should the rates be by interchange, by province, by region (e.g., Western Canada, Prairies, Eastern Canada) or another alternative?

19. The Discussion Paper characterizes the railway companies' concern on this point as follows:

> "However, some stakeholders have argued that a national average rate is not consistently compensatory, depending on the geographic area where the movement was performed and other factors, and the rates do not provide an adequate contribution to fixed costs. One reason for this, according to the railway companies, is that the rates are set using a system-wide average of the railway companies' costs. They also suggest that the relatively low cost of interswitching in certain locales brings down the "average" cost, to the detriment of railway companies performing frequent switches in locales where the costs of doing so are much higher."[14]

20. We submit that in the absence of rigorous proof by CN, CP or the Agency that CN or CP (or both) are not receiving adequate compensation for RIS services, the Agency must dismiss such arguments, particularly any assertion that RIS rates do not provide an adequate contribution to common costs.

21. To the extent the Agency is able to determine that CN and CP incur substantially different variable costs in different regions for RIS shipments of a given distance (*i.e.*, within a given RIS zone), it may be defensible for the Agency to establish different RIS rates by zone and even by interchange. We even acknowledge that some shipments in some geographies may cost CN or CP less and other geographies more, due to a variety of factors, and that some infrastructure is more likely to result in cost efficiencies at some interchanges and inefficiencies at others. However, we are disinclined to advocate for regional RIS rate discrimination in the absence of demonstrable efficiency gains that outweigh the administrative burden of doing so.

[14] Discussion Paper, page 5.

22. We also urge the Agency to distinguish between variable costs incurred because of the nature of the traffic subject to RIS (which consists of characteristics imposed by both carriers and shippers) and variable costs CN and CP incur because of the nature of the interchange (which consists of characteristics imposed by the carrier, and possibly others, but not the shipper). This is a way of saying that some inefficiencies are due to CN or CP failure to adequately build infrastructure. There may be a justification for RIS rates that distinguish between RIS shipments using adequate versus inadequate infrastructure, and price the overall RIS rate at a level that recognizes those efficiencies.

23. Furthermore, if the Agency determines to adopt interchange-specific RIS rates or region-specific RIS rates, the opportunity for skewing of the Agency's determination of RIS rates may increase. As we understand it, the Agency's annual sampling of interchanges keeps all interchanges in the basket of aggregated interchanges, even though not all interchanges are sampled every year, such that there is no skewing of RIS rates one way or the other in any given year. As the Heller Report notes, the Agency's degree of disclosure to date regarding its data collection processes has not been sufficient to allow us to substantively comment on them.[15] Consequently, we acknowledge that we are not in a position to say that the present system of sampling and averaging is any better or worse. However, given the level of our understanding about the Agency's processes to capture the workloads involved in RIS operations, we accept that the risk of skewing is very low.

Issue 2, Consultation Question 2(c): Should there be different rates for different commodities? If yes, how should the commodities be broken down?

24. In answering this question, there may be a question of nomenclature or possibly language shortcuts to address the points we raise.

25. As we understand it, the expression "commodities" here represents the cars and trains in which railway companies transport the commodities, not the commodities themselves. We say this because a 100 tonne carload of grain should require the local carrier to incur substantially the same variable costs per mile as a 100 tonne carload of coal, potash, sulphur or other commodity. We think, therefore, that price discrimination on the basis of commodity, in this sense, is justifiable to the extent that the Agency establishes that a railway company must incur substantially different costs for transportation of certain commodities, perhaps by way of, for example, (i) unique handling requirements, (ii) the trains in which CN and CP transport the commodities, or (iii) marshaling activities required. Even then, we submit that

[15] Heller Report, pages 4 - 5.

the Agency should take into account only those costs that the railway company cannot otherwise recover.

26. The Discussion Paper identifies two possible examples where commodity-specific RIS rates may be justifiable, as follows:

> "A system-wide average rate of all commodities may lead to some "low cost" terminals subsidizing "high cost" terminals. For example, in the grain sector, many terminals or elevators are emptied or filled utilizing automation equipment or their own track mobiles. A railway company serving a grain terminal will place the cars at a siding, and the terminals will load or empty the cars using their own equipment while the railway company's equipment and crew will either remain on standby with the locomotives at the terminal location, or serve other customers elsewhere.
>
> Some commodities, such as dangerous goods, must be transported according to detailed regulations or specific customer requested placement of cars. This requires extra handling time by the railway companies compared to some other commodities, which in turn, increases costs."[16] [underlining added]

27. With respect to the first paragraph quoted above at paragraph 26, the use of automation equipment, track mobiles, etc., is common across many bulk commodity types, including coal, potash, grain, and others. The detention of the railway company's equipment and crew is not necessarily a commodity-specific problem; the costs would be driven by the operational requirements of a given terminal (which, in turn, may be impacted by geographic constraints, investment decisions of the shipper or carrier, substandard rail service levels, substandard railway company infrastructure, etc.) irrespective of the commodity at issue.

28. However, even if CN and CP were to incur sufficiently substantial incremental costs due to equipment and crew detention, they both already use their substantial tariff-making power to impose incidental or ancillary charges on supply–chain participants, including those who avail themselves of RIS services, that recover any incremental cost the rail carrier incurs. For example, the tariffs of both CN and CP impose a panoply of charges for incidental services, including charges on

    a. customers for use of railway-owned or leased railcars;[17]

    b. customers for use of railway-owned or leased track;[18]

[16] Discussion Paper, page 5.
[17] For example, see item 11 of CP tariff 2 and items 9000, 9050, 9060, 9370 and 9500 of CN tariff 9000.
[18] For example, see item 13 of CP tariff 2 and item 9200, 9250, 9300 and 9350 of CN tariff 9000.

c. customers for ancillary services, such as switching services, performed by railway crews and locomotives;[19] and

d. connecting carriers in respect of railcars CN receives at an interchange in error.[20]

29. CN and CP retain the ability to increase any of these incidental charges and impose others, should either of them determine that it is not being adequately compensated for the incidental services it is performing, subject only to a notice requirement. For this reason, we urge Agency staff to assess the extent to which RIS rates are set at a level that overcompensates RIS services due to double recovery (RIS rate + ancillary charge) for the same activity.

30. With respect to the second paragraph quoted above at paragraph 26, there are a handful of special instances involving the transportation of Dangerous Goods that may warrant specific consideration. On the surface, the rail transportation of crude oil may appear to impose incremental, commodity-specific costs on the carrier. Indeed, the Act requires railway companies to pay a levy into the Fund for Railway Accidents Involving Designated Goods for transportation of crude oil, but the obligation falls on the first railway company to carry the traffic "at a rate other than an interswitching rate", so RIS movements do not attract the levy.[21] However, even if RIS rates did attract the levy, both CN and CP have published tariffs that allow them to recover the full levy via charges imposed under their tariffs.[22]

31. The Transportation of Dangerous Goods Regulations impose a requirement not to place railcars containing certain dangerous goods next to other rolling stock in a train, thereby requiring the use of a buffer car.[23] Again, CP and CN's tariffs impose incidental charges on the shipper to compensate them for incremental costs CP and CN may incur.[24]

32. In addition, it is instructive that CN and CP protect themselves in respect of the transportation of Dangerous Goods, including TIH/PIH commodities, via their tariffs. For example, Item

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[19] For example, see items 21, 22, 23, 24, 25, and 36 of CP tariff 2 and items 13000 and 13100 of CN tariff 9000. In respect of unit trains, see item 4 (locomotive use), item 6 (deadhead deliveries and pick-ups), item 7 (additional train crews), item 10 (power removal), and item 16 (switching) of CP tariff 5 and item 1 (removal or replacement of locomotive and crew), item 3 (asset use or holding a unit train, both with and without locomotives), and item 10 (switching of buffer cars) of CN tariff 9004.
[20] See Item 3000 of CN tariff 9001 CDA-J and item 11 of CP tariff 7.
[21] Subsection 155.7(1) of the Act states: "Every railway company that is the first to carry, at a rate other than an interswitching rate, traffic in respect of which there is a levy under section 155.3 or 155.5 after the traffic has been loaded — and every railway company that is directed by an order made under section 155.6 to pay a levy — shall pay to the Receiver General an amount equal to the amount of the levy, applicable to the traffic carried by it…,"
[22] See item 14 of CP tariff 8 and Item 8240 of CN tariff 9000.
[23] See section 10.6 of the Transportation of Dangerous Goods Regulations (SOR/2019-101). TIH /PIH commodities are subject to a requirement for a buffer car in a wider range of circumstances than other Dangerous Goods.
[24] See item 15 (buffer cars) of CP tariff 5 and item 10 (buffer cars) of CN tariff 9004.

4000 of CN's tariff 9007 (Toxic Inhalations Hazards (TIH) Tariff) purports to make the shipper liable for any incremental costs CN might suffer due to government action:

> "If actions by federal, provincial, state, or local governments ban, preclude, or otherwise restrict the transportation through their jurisdictions of commodities moving pursuant to this Tariff under routings normally used for Customer's traffic, and thereby require the re-routing of trains and/or cars carrying such commodities in a way that causes CN to incur additional costs, the Customer will be responsible for such costs. Such additional costs may include, but are not limited to, costs associated with added mileage, including labor and fuel costs, additional car and locomotive days, added intermediate car handlings, additional switching operations, and increased terminal dwell time. CN will advise the Customer of the anticipation and/or occurrence of additional costs that would give rise to Customer's obligations under this Item. Such costs will be added to the freight rates published herein and included in the calculation of total charges due from the Customer."

33. CP's tariff 8 contains similar protective language.[25] Similarly, both railways have published tariffs that require shippers of TIH/PIH to obtain liability insurance not less than specified amounts,[26] and that set out fulsome allocation of liability provisions.[27] Again, to the extent CN and CP find themselves unable to recover certain incremental costs that may not be caught by a tariff provision, nothing other than a notice requirement prevents either carrier from modifying its tariffs to address the situation.

34. The cost to the railway company of insuring the transportation of Dangerous Goods cannot form the basis for differential treatment of those goods because the RIS rates already incorporate the cost of insuring the movement of the goods:

> "The Agency notes that rail, air, marine and road transportation of dangerous goods is federally regulated by Transport Canada under the *Transportation of Dangerous Goods Act, 1992* and the *Transportation of Dangerous Goods Regulations*, which establish the safety requirements for the transportation of dangerous goods. No aspect of this amendment to the *Railway Interswitching Regulations* diminishes or limits either of the above-noted pieces of legislation.
>
> The Agency also notes that the rate it sets incorporates the cost of insuring the movement of dangerous goods."[28] [underlining added]

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[25] Item 22 of CP's tariff 8 states: "If any action or ruling by any Canadian or United States federal, provincial, state or local government precludes or restricts the transportation of any trains or cars carrying Hazardous Commodities through their jurisdiction, CP will re-price the affected traffic, providing 30 days' notice to Customer."
[26] See item 5000 of CN tariff 9007 and item 53 of CP tariff 8.
[27] See item 6000 of CN tariff 9007 and item 54 of CP tariff 8.
[28] RIAS in respect of the Regulations Amending the Railway Interswitching Regulations (2014), Canada Gazette Part II, August 1, 2014 (http://www.gazette.gc.ca/rp-pr/p2/2014/2014-08-13/html/sor-dors193-eng.html), page 2318

35. To the extent a railway complies with "specific customer requested placement of cars", the customer will be subject to switching charges under the railway's tariffs. And, in the unlikely event the incidental services required from the railway company are not addressed under the railway's tariffs, nothing prevents the railway company from modifying the language in its tariffs to cover the situation.

36. However, we acknowledge that railway companies may be subject to special handling requirements for Dangerous Goods that may not be readily recoverable via tariff.[29] To the extent a railway company incurs sufficiently substantial incremental variable costs that it is otherwise unable to recover (under its tariffs or otherwise), it may be defensible to establish specific RIS rates for that case (or class of cases). If one or more such cases exists, and the Agency intends to establish different RIS rates for that case (or class of cases), the Agency should carefully consider whether the potential benefit outweighs the complexity and cost of doing so.

37. In any event, the Agency should adopt a policy of full disclosure in respect of such a change, including disclosure of the commodity (or class of commodities), the reasons for the Agency's determination, the Agency's methodology for determining the RIS rate, the inputs used, including unit costs and relevant service units from the ARCM, and any other information that may be relevant to a third-party attempting to confirm whether or not such a different rate is warranted.

38. We justify the disclosure on the basis that any price discrimination on the grounds of incrementally greater asset or crew use or special handling should take into account the many tariffs CN and CP impose on shippers. In the absence of such disclosure, we consider CN's and CP's claims that more revenue is required to address these alleged incremental costs as spurious and unsupported.

ISSUE 3:
INTERSWITCHING ZONES UP TO 30 KM

Consultation Question 3: Are the CTA's current distance based interswitching zones sufficient?

39. We have no reason to doubt that the Agency's current distance based RIS zones are adequate.

[29] For example, section 7.1 of the Railway Freight Car Inspection and Safety Rules (TC, December 9, 2014) impose additional inspection requirements for railcars carrying Dangerous Goods.

40. The Discussion Paper indicates that the abandonment of linear regression in R-66 in setting RIS rates means that "rates are not linear with the zone distances" and asserted that:

> "…rates do not necessarily increase proportionally with an increase in distance from the interchange due to the fact that the rail network is composed of different grades of track and that customers and their sidings are not identical."[30] [underlining added]

41. As indicated in response to Consultation Question 2(c) above, CN and CP already impose an array of incidental charges on supply-chain participants to keep themselves whole for services required due to specific customer or railway operating requirements at a customer's siding. We have no reason at present to recommend that the Agency should depart from its well established distance-based zone system.

42. The Agency describes a potential cross-subsidization scenario that may result from costs not necessarily increasing proportionally with distance as follows:

> "…if we assumed railway companies A and B each handled traffic in 3 zones, but only railway company B handled traffic in zone 4, then a smoothing of the rates that increases the zone 4 rates and slightly reduces the rates for other zones will mean that railway company B is getting more than what the calculated zone 4 cost would produce."[31]

43. A 2013 RIAS in respect of amendments to the Railway Interswitching Regulations provides a little more detail regarding the factors other than distance that may be driving railway variable costs for RIS services:

> "While train costs generally increase with distance, interswitching comprises numerous operations, the majority of whose costs are not related to the distance between the interchange and the customer, which is the basis of the zonal classification. The location of the yard relative to the interchange, the yard layout and the efficiency of classifying and marshalling operations, the locations and distribution patterns of customers relative to the yard, the number of at-grade intersections and traffic delays encountered between the yard and the customers, and, most importantly, the volume of cars interswitched all have a profound influence on the interswitching cost per car at a location. In some cases, as happened in Zone 4, these other factors are large enough to outweigh the simplistic view that costs must increase with zonal distance increases."[32] [underlining added]

44. In the absence of publicly available data regarding the extent to which any of the foregoing factors influence railway variable costs of RIS operations, we have no reason to believe the

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[30] Discussion Paper, page 6.
[31] Discussion Paper, page 6.
[32] RIAS in respect of the Regulations Amending the Railway Interswitching Regulations (2013), Canada Gazette Part II, February 28, 2013 (http://canadagazette.gc.ca/rp-pr/p2/2013/2013-03-13/html/sor-dors28-eng.html), page 2319.

current distance-based RIS zones are insufficient. Again, we submit that the Agency should determine and demonstrate that CN and CP incur substantially different variable costs attributable to one or more of the factors described above (and which CN and CP do not otherwise recover either by imposing one or more of the many tariffs that recover those costs),

45. In any event, RIS rates must be based on an average markup relative to the average variable costs of a given set of movements in order to comply with subsection 127.1(3) of the Act.[33]

Issue 3, Consultation Question 4: Should the CTA introduce more factors, such as customer characteristics, train size, or grades of track characteristics to create a broader range of rates?

46. In principle, we think there is a rational basis for RIS rate discrimination on the basis of a variety of factors, primarily to do with the efficiency of car movements through RIS zones, for the same reason that line haul rates should closely track variable cost, as expected of every other industry in a modern economy, in order to minimize welfare loss. We address welfare loss further below in response to Issue 5 and articulate the desirability of rail rates that are closely coupled to marginal cost, with departures from the maximum welfare value of that objective limited to an amount no greater than the amount needed by a rail network to pay for economic costs that are not volume-related.

47. We also submit that, if a particular category of RIS shipments (movements) is more efficiently handled by railways than another, by reference to the LRVC of those shipments, those movements should have to make less of a contribution to the fixed and constant costs associated with the RIS assets, albeit at the same percentage mark-up above the LRVC of the shipment, than those that are less efficient. Whether the Agency can adequately and demonstrably segregate the RIS assets from non-RIS interchange assets, or even distinguish between assets that are necessary for a given set of traffic at an interchange over time, or that become unnecessary yet remain at an interchange, seems to us highly unlikely, and risks over-compensating CN and CP even more than is currently the case.

48. We have addressed each characteristic described in Question 4 below. However, it is not possible to provide adequate answers in the time frame allotted in this Consultation or in the absence of the engagement of one or more experts conducting adequate studies of varying interchanges where railways perform RIS services. Accordingly, we must rely on Agency staff's ability to correctly assess RIS operations.

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[33] Subsection 127.1(3) of the Act states: "In determining an interswitching rate, the Agency shall consider the average variable costs of all movements of traffic that are subject to the rate and the rate shall not be less than the variable costs of moving the traffic, as determined by the Agency."

Customer Characteristics

49. Teck and the Stakeholders support differential RIS rates that depend on the efficiency of the customer's traffic, provided the Agency has the ability, using the ARCM, to both calculate and demonstrate that carriers incur sufficiently different costs for serving particular traffic that the carriers cannot otherwise recover. That is generally consistent with the Agency's current approach to setting different RIS rates for shipments of car blocks, subject to the discussion in response to Issue #7, Consultation Questions 14 and 15 below.

50. As described above in response to Consultation Question 2(c) regarding the possibility of commodity-specific RIS rates, both CN and CP impose many incidental charges on supply chain participants that compensate the railway for costs it might incur from a variety of items one might think of as "customer characteristics". We warn against double recovery on this basis.

51. Further, different RIS rates by customer characteristics, other than those associated with efficiencies their traffic generates, increases the potential for disputes.[34] While the Agency is certainly able, if perhaps under-resourced, to deal with such disputes, the incremental administrative burden on the Agency may not warrant RIS rate discrimination on the basis of customer characteristics.

52. Moreover, the Heller Report, which is attached as Schedule "B", identifies that customer characteristics are not static, nor are railway operations for a particular customer's traffic.[35] Mr. Heller indicates that customer investment and operating practices, such as agreeing to block loaded railcars for outbound movements, would affect the carrier's costs, all of which may change from time to time. Similarly, the railway might modify its operations in a way that changes its costs of serving RIS traffic, which might include, for example, a local operating plan that is modified to bypass a yard where cars for a customer were previously handled, thereby increasing the number of miles in the movement in order to reduce switching. The Agency would need to assess and understand these and similar operating changes in order to properly assess the extent to which customer characteristics are driving the railway's operating costs.

[34] Agency Letter Decision No. CONF-6-2017 is a recent example of such a dispute. See: https://otc-cta.gc.ca/eng/ruling/conf-6-2017.
[35] See the Heller Report, page 2.

Train Size

53. We address the efficiency of manifest traffic, car blocks, solid trains and unit trains in response to Issue #7, Consultation Questions 14 and 15 below. The sum of our points is that, to the extent train size and these other attributes affect efficiency in a demonstrably calculable and transparent fashion, Teck and the Stakeholders support differential RIS rates on the basis of efficiencies correlated to, if not caused by, train size. In sum, Teck and the Stakeholders support rate differentiation on the basis of train size.

Track Characteristics

54. In the absence of time, expert review and study, we are not in a position to favour or disfavour differential RIS rates based on class of track or the many other possible track characteristics.[36] However, we are conscious of a number of factors that suggest considerable difficulty in establishing differential RIS rates on this basis.

55. First, whether a particular section of track meets the requirements of one track class or another is a function of railway decisions (investment decisions, maintenance practices, etc.), influenced by the traffic mix as it may change from time to time. RIS rates are not the basis on which these decisions and practices are founded, in part because non RIS traffic uses the same infrastructure to significant degrees. Distinguishing RIS traffic from non-RIS traffic for the purpose of establishing differential RIS rates on the basis of track characteristics strikes us as unlikely to be a successful endeavour.

56. Furthermore, if the Agency were to establish different RIS rates on the basis of class of track or some other track characteristics, the Agency presumably would have to monitor, either actively or by adjudicating disputes, whether or not any given section of railway track used for RIS operations is constructed or maintained to the requisite level to qualify for a particular RIS rate.

57. In any event, it is far from obvious that the local carrier would incur materially higher total costs to provide RIS services by operating a higher class of track. A class upgrade does not necessarily mean higher velocity, but, if it did, could decrease the service units for two

[36] See the Rules Respecting Track Safety (TC E-54): https://www.tc.gc.ca/media/documents/railsafety/track-safety-2012en.pdf

significant drivers of variable costs (namely, crew and locomotive minutes[37]), and therefore the total variable costs the local carrier incurs in providing the RIS services.[38, 39]

58. Of course, the rail operations, and the manner in which they are executed, are in the railway's control. The frequency with which a railway decides to serve an interchange for RIS services or to serve a customer affects the size of the trains and number of locomotives and crews required to handle RIS traffic. Similarly, the amount of track at an interchange that is needed to hold cars will impact those operations.

59. There may be very few railway operations designed solely around the requirements to handle RIS traffic; instead, operations and even fixed assets will be designed around the railways' needs to deliver all traffic moving through an interchange or RIS zone. We doubt that, if there were no RIS requirements, many assets would be eliminated (perhaps some). It is not at all obvious to us that the Agency can adequately distinguish between these operational and asset characteristics to establish differential RIS rates.

60. We do not believe the Agency could distinguish track characteristics used in RIS versus non-RIS traffic.

Issue 3, Consultation Question 5: Should the CTA collapse the four zones and have one interswitching zone for all customers within the regulated interswitching limits?

61. No. See response to Consultation Question 3 above.

Issue 3, Consultation Question 6: Should the CTA reinstitute the use of weighted linear regression to produce rates that increase proportionately by zone?

62. In respect of linear regression, the Consultation Paper indicates that in R-66:

> "…the CTA decided to eliminate the use of linear regression techniques which ensure that the rates increased proportionally with an increase in distance from the interchange. Since the elimination of linear regression to smooth out the results, rates are not linear with the zone distances as set out in the Interswitching Regulations.

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[37] Section 5 of the Railway Interswitching Regulations obligates the connecting carrier, not the local carrier, to supply railcars for traffic subject to regulated interswitching. If the shipper supplies the railcars, the compensation the shipper receives for doing so must be agreed between the connecting carrier and the shipper.
[38] This assumes the faster operating time by the local carrier does not simply lead to increased waiting time for the local carrier's assets elsewhere on the network, perhaps at the interchange with the connecting carrier.
[39] One would expect the impact of higher operating speeds to be more readily realizable for the longer interswitching zones; for example, a 30 kilometre zone 4 interswitching movement is perhaps more likely to achieve operating speed improvements than a 6.4 kilometre zone 1 interswitching movement, all other factors being equal.

> The CTA explained that the rates do not necessarily increase proportionally with increases in distance from the interchange due to the fact that the rail network is composed of different grades of track and that customers and their sidings are not identical."[40]

63. Unless the Agency is willing to make a full (or representative) data set available to us, it is impossible for us to know whether or not linear regression forces a relationship that the data does or does not support. However, we have no reason to doubt the Agency's analysis on the point, particularly given our understanding of Agency staff's processes in sampling interchange operations.

ISSUE 4:
LONG-TERM INVESTMENT NEEDS OF THE
RAILWAY COMPANIES (COST OF CAPITAL METHODOLOGY)

64. As an initial observation, we note that Issue 4 poses three very broad questions relating to the Agency's cost of capital and cost of equity analyses and processes, without specifying any targeted questions regarding any one or more components of each. We have not otherwise received any information as to what the Agency may propose in connection with any of these or related issues, so we have attempted to anticipate the issues the Agency may be considering. As directed by the Discussion Paper, we do not comment on issues relating to the use of market values in determining the capital structure/net rail investments or the cost of debt.[41]

65. It is in that context that we have engaged Dr. Larry Gould of the University of Manitoba to prepare the Gould Report, in response to Consultation Questions 7, 8(a), and 8(b). We summarize below the key points Dr. Gould addresses.

Issue 4, Consultation Question 7: Does the CTA's inclusion of a cost of capital and depreciation allowance appropriately inform the consideration of long-term investment needed in the railway companies?

66. The Gould Report examines some of the theoretical underpinnings of the Agency's approach to cost of capital determinations. Dr. Gould concludes:

> "The CTA makes annual determinations of the railways' cost of capital using a methodology designed so that, if the railway obtains a financial return equal to the CTA

[40] Discussion Paper, page 6.
[41] On this point, the Discussion Paper states: "The CTA reaffirmed the choice of book values over market values of equity and assets in determining the capital structure/net rail investment in the 2017 determination. Consequently, the use of market values in determining the capital structure/net rail investment is not the focus of this consultation, nor is the cost of debt in light of the 2011 cost of capital decision and the 2017 Determination."

> determination, it will be able to maintain its financial viability while raising any capital needed for investment. I conclude that the methodology used by the CTA to determine the railways' cost of capital is reasonable and fair to all parties. This cost of capital is incorporated in the railway costing methodology. Accordingly, it is my conclusion that as long as the railways earn this cost of capital, they will be able to access the capital markets for the needed long term investment. This conclusion is supported by the experience of Canadian public utilities in raising capital under historical cost regulation."[42]

67. Accordingly, no change to the Agency's cost of capital and depreciation allowance is necessary to allow CN and CP to make "any long-term investment needed in the railways".

Issue 4, Consultation Question 8(a): Is the cost of equity model, an input to the cost of capital methodology, currently used by the CTA appropriate for determining an adequate rate of return on investment?

68. Dr. Gould explains that the Agency uses the CAPM to estimate the cost of equity capital for each railway by obtaining an estimate of the Canadian cost of equity capital using Canadian data that it averages with an estimate of the U.S. cost of equity capital using U.S. data (which is itself an average of two estimates that differ by the proxy used for the risk-free rate of return), using a weighting for each of CN and CP that is based on the volume of their shares traded on the Toronto and New York stock exchanges.[43] Dr. Gould indicates this method is unsatisfactory for a variety of reasons, including that it is not consistent with CAPM theory, there is no theoretical relationship between share volumes and market weights in the CAPM theory, and there are major differences in taxation between the two countries for which the approach does not properly account. Dr. Gould notes that the regulatory applications for which the Agency uses the foregoing approach are limited to Canada, and that the United States Surface Transportation Board does not use Canadian capital market data in its estimates of the cost of capital, and concludes that the Agency should not use United States data in its corresponding determinations.

69. Otherwise, Dr. Gould notes that with regard to the estimation of the Canada cost of equity using the CAPM, "the procedures for estimating the variables are reasonable and working well".[44] He recommends the use of Canadian data going back only to 1957, as opposed to 1951, so as to rely only on the higher quality S&P/TSX Total Return Index (rather than relying on the S&P/TSX Total Return Index, plus six years of data from TSE Corporates for the six years 1951 through 1957).

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[42] Gould Report, pages 16 – 17.
[43] *Ibid*., pages 21 - 23.
[44] *Ibid*., page 24.

<u>Issue 4, Consultation Question 8(b)</u>: If it is not, which cost of equity model or combination of cost of equity models should be considered by the CTA?

70. Dr. Gould explains that the cost of equity model currently used by the Agency, CAPM, is appropriate for determining an adequate rate of return on investment, and confirms that CN and CP have been earning returns in excess of their cost of capital:

> "CN and CP have had no difficulty raising capital and are currently earning returns well in excess of their costs of capital. The current methodology used by the CTA to determine the railways' cost of capital is working well and the CTA should continue to rely on the CAPM alone to estimate the cost rate of equity."[45]

71. Dr. Gould explains that while a DCF model could be used to obtain an accurate estimate of the cost of equity capital, the constant growth DCF model and the multi-stage DCF model each have severe deficiencies. Dr. Gould indicates that, in general, DCF models are unlikely to provide accurate results when used in a rigid formula, and the procedures for estimating inputs for the model, most notably growth rates, are unreliable for a number of reasons.

72. In particular, Dr. Gould identifies significant problems with the three methods of estimating growth rates for dividends under the constant growth DCF model:

    a. using past performance is an objective method of estimating g, but it does not account for the additional information investors use in evaluating an investment, which Dr. Gould states renders this approach subject to considerable error;

    b. using expert estimates of g requires the use of judgement, which would require the Agency to consider the reasoning behind the judgement in determining whether to accept or reject an estimate; and

    c. using an average of estimates of g made by security analysts generates biased estimates to the extent that the expected rate of return or retained earnings are expected to change over the period under examination.[46]

73. Similarly, Dr. Gould indicates that the multi-stage DCF model should be rejected because there is

    a. no specific multi-stage DCF model that can be used for all companies or even all railways, because the model must be tailored to the company or railway under analysis;

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[45] *Ibid*., page 30.
[46] *Ibid*., page 27.

b. significant difficulty in estimating the growth rates in earnings per share because it is uncertain what period is used by each analyst for estimating the growth rate and how the expected growth in operating earnings relates to the expected growth in dividends per share; and

c. often not a sufficient number of analysts providing estimates for earnings per share for a sufficient number of years to represent reliably the market expectation.[47]

ISSUE 5:
CONTRIBUTION TO FIXED COSTS

Issue 5, Consultation Question 9: Should the CTA continue to use the system average total to variable costs ratio as the contribution to fixed costs?

Deferred to January 2020 in accordance with the letter dated August 1, 2019 to stakeholders from Marcia Jones of the Agency.[48]

Issue 5, Consultation Question 10: Could alternative approaches, such as a full Ramsey pricing model, be used to determine the contribution to fixed costs?

Deferred to January 2020 in accordance with the letter dated August 1, 2019 to stakeholders from Marcia Jones of the Agency.

Issue 5, Consultation Question 11: If so, how does the alternative approach meet the "commercially fair and reasonable" requirement in section 112 of the Act?

Deferred to January 2020 in accordance with the letter dated August 1, 2019 to stakeholders from Marcia Jones of the Agency.

ISSUE 6: PRODUCTIVITY FACTORS

Issue 6, Consultation Question 12: Is the suggested alternative for calculating railway companies' productivity preferable to the Ideal Fisher methodology?

Deferred to January 2020 in accordance with the letter dated August 1, 2019 to stakeholders from Marcia Jones of the Agency.

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[47] *Ibid*., pages 28 – 29, and Table 8.
[48] Ms. Jones' letter is available at: https://otc-cta.gc.ca/sites/default/files/Consultations/2019-reviewregulatedinterswitchingregulations-lettergrantingextension-en.pdf.

Issue 6, Consultation Question 13: Is there another productivity model that the CTA should consider?

Deferred to January 2020 in accordance with the letter dated August 1, 2019 to stakeholders from Marcia Jones of the Agency.

ISSUE 7: VOLUME DISCOUNT RATE CATEGORIES

Issue 7, Consultation Question 14: Is the current block size minimum of 60 cars sufficient for recognizing the efficiencies gained from moving cars in a block?

74. The 60 car block size is probably insufficient to recognize the efficiencies CN and CP derive by the substantial increase in train length since the Agency established the 60 car block threshold. To the extent railway companies incur lower per car LRVC when transporting larger car blocks, we support differential RIS rates corresponding to those lower costs. We understand that unit trains, solid trains and other larger car blocks from origin to destination fit in that category.

75. Agency Determination No. R-2018-254 and the Railway Interswitching Regulations acknowledge the efficiency of car blocks by establishing a lower per car RIS rate for shipping a car block, with a threshold of 60 cars. We submit that trains that contain many more railcars than 60 justify a further differentiation in RIS rates.

76. We leave it to the Agency to determine what car block thresholds or other operating considerations might generate sufficient operating efficiencies to warrant different RIS rates, since there is no transparency of the information we would require to establish the "break point" of such thresholds. We note, however, that train length has increased substantially in recent years, while the 60 car block threshold has been around since before the time of those increases. It is a given that CN and CP favour longer trains, given their ever-present references to operating ratios, owing to cost and revenue factors. We cannot imagine that either CN or CP would increase train length if it were not more efficient for them.

77. As stated elsewhere, Teck and the Stakeholders support differential interswitching rates that depend on the recognizable and documentable efficiencies associated with various traffic, provided the Agency is able to determine that rail carriers incur different costs for serving particular traffic and the changes are sufficiently meaningful to establish different RIS rates. Therefore, we support lower RIS rates that recognize the efficiency impact of train length. We warn against double recovery of costs, however, through the imposition by rail carriers of charges via tariffs or otherwise. As recommended by the Heller Report, the Agency may wish to conduct an analysis of the efficiencies arising from the movement of car blocks of

varying lengths to determine if any change to the present approach is warranted.[49] We are strongly of the view that the Agency should disclose its methodology, processes and inputs, including unit costs and relevant service units, in making such determinations.

Issue 7, Consultation Question 15: Should the CTA determine rates for smaller or larger shipment sizes?

78. See response to Consultation Question 14 above. We are of the view that the CTA should determine rates for categories of train movements that benefit from cognizable efficiencies and prevent the subsidization of less efficient RIS traffic by more efficient RIS traffic.

ISSUE 8: COLLECTING INTERSWITCHING SERVICE UNITS

Issue 8, Consultation Question 16: Is there another way to collect interswitching service units to accurately calculate the average variable costs of all interswitching movements, as required by subsection 127.1 (3) of the Act?

79. The Consultation Document describes the Agency's process for determining the service units for RIS movements, which we note includes a high degree of Agency reliance on railway representations:

> "Each year, CTA staff visits select interchanges and speaks with railway company personnel to gather information on how they serve a sample of interswitching shippers (i.e., how far the train must travel to reach a shipper, how much time is required to spot and pull at the shipper siding, etc.). Railway company personnel will estimate these service units based on their experiences of annual car volume fluctuations (given that summer months may have more car volumes and would require additional switching time, while winter months may have less car volumes and would require less switching time, railway company personnel are asked to provide average service units)." [underlining added]

80. As noted in the Heller Report, the Agency's public disclosure of its data collection processes has been insufficient to allow us to make substantive comments.[50] However, our experience has been that railway companies are very unlikely to estimate the costs (or, as a proxy, service units) of providing a particular service in such a way that prejudices their interests. This is particularly the case when the railway company is being compelled to do something it does not want to do, such as interswitching railcars at RIS rates.

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[49] Heller Report, page 4.
[50] *Ibid*., pages 4 - 5.

81. We understand that Agency staff's current practice involves interviews of CN and CP staff to obtain information relating to RIS workloads. We encourage Agency staff to apply its own experience and judgment in evaluating railway claims regarding service units, and seek independent confirmation, perhaps from shippers or other supply-chain participants, at least where there could or may be doubt. The Agency is in position to test the veracity of claims by carriers and shippers. Where service unit inputs differ, as has previously been the case in FOA processes, we strongly recommend that the Agency allow parties to review the other's inputs to resolve differences.

82. If diligent attempts to obtain independent confirmation still leave any doubt in the minds of Agency personnel, we submit that the Agency must resolve the issue in favour of the party the RIS remedy is intended to assist, namely, the shipper.

ISSUE 9: TRANSPARENCY OF THE REGULATED INTERSWITCHING RATES AND METHODOLOGY

Issue 9, Consultation Question 17: How can the CTA make the regulated interswitching rates and/or rate setting methodology more transparent and accessible to Canadians?

83. We make three specific recommendations in the context of this Consultation, each well within the Agency's purview.

    a. The Agency should disclose the variabilities it determines, if not at each level then at the block level (e.g., 400 level of the UCA).

    b. The Agency should disclose in detailed, narrative form how it has determined RIS rates and why, including the judgements it has had to make, the information and data on which it has relied, and any direction Staff have been given about those judgements, information and data. It is important that Agency decisions respecting RIS rates and reviews err on the side of more rather than less disclosure.

    c. The Agency should disclose the relationship, numerically, and in narrative form, between LRVC and RIS rates by specific reference to the ratio between LRVC and common costs to allow parties to reconcile that ratio in each decision to its former allocation of LRVC and common costs making up total cost. While we are confident well-represented shippers can make that reconciliation, we are very concerned about the language used by railway companies before third parties to undermine what the Agency has done.

84. The rail shipping community has been pleading with the Agency for increased disclosure of the Agency's costing and other regulatory processes, including in the Agency's ARCM Consultation and RMI Consultation. In particular, the RMI Submission, which we have appended hereto as Schedule "C" for ease of reference, contains a fulsome analysis of the need and rationale for increased Agency disclosure of costing inputs, processes, methodology, models, submissions, documents, drivers, variabilities and various other information. In particular, we reiterate the critical need for increased disclosure of

    a. the Agency's methodology for the determination of interswitching rates, whether by Agency decision or guidance documents, including, for each interswitching rate determined and for each interchange location analyzed, the identity and average amount of each service unit;[51]

    b. in relation to the "long-term investment needed in the railways" under subsection 127.1(2)(b) of the Act, the specific investment items included in determination of the interswitching rate, the amount of investment costs and how any contribution margin used to determine each of the interswitching rates is modified to account for the addition of long term investments not otherwise captured in the Agency-determined cost of capital;[52]

    c. a public version of the ARCM in its present form;[53]

    d. in relation to the former Rail in Canada publication

        i. disclosure of past or archived information formerly contained in the publication, including cost and operational data, or

        ii. three year old information, thereby addressing any reasonable confidentiality concerns, while disclosing useful information that railway costing experts might use to calibrate their costing models and estimates;[54]

    e. as part of its annual interswitching decisions, disclose the unit costs by account or account grouping that it calculates for each of CN and CP, as part of updating the ARCM;[55] and

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[51] RMI Submission, paragraph 50.
[52] *Ibid*., paragraph 23.
[53] *Ibid*., paragraphs 26 - 30.
[54] *Ibid*., paragraph 34.
[55] *Ibid*., paragraphs 35 - 36.

f. a summary of the submissions of interested stakeholders in its decisions and other pronouncements regarding costing, including amendments to the Interswitching Regulations.[56]

85. We commend the Agency for its practice of disclosing the overall contribution to rail fixed costs that is required for all traffic for CN and CP to cover their total costs, and recommend that the Agency continue such disclosure.[57]

86. We reiterate the view that the Agency's approach to railway cost data disclosure and disclosure of its costing processes more generally is out of step with regulated industries.[58] As indicated in the Yatchew Report:

> "35. In regulated industries, stakeholders, even those indirectly affected by the outcome, typically have the opportunity to make representations and to examine the evidence. When the proceeding relates to rates, this usually includes examination of cost models. Both the efficiency and efficacy of the regulatory process is enhanced when interested parties have the opportunity to examine and test the costs that underlie the rates that they are charged.
>
> 36. Cost analysis, from both statistical and operational standpoints, requires that common sense be applied. However, the information (i.e., data and models) to which it is applied needs to be available to parties with competing interests. Well crafted and objective statistical analysis often delivers its own narrative which should comport with common sense interpretations."[59]

87. We submit that the Agency should adopt a more transparent process with respect to its RIS rate determinations that would allow scrutiny and verification by interested parties, much like we expressed in respect of the Agency's capital structure determinations:

> "In a public utility setting, where cost of capital determinations are (i) transparent to those paying the bills, (ii) capable of scrutiny and (iii) verifiable, the public at least will be comforted by understanding the processes. If railway companies are to continue enjoying the market power associated with natural monopolies, in the manner that public utilities enjoy it, cost of capital determinations should face the same rigours as those utilities. If railway companies are not to be treated as public utilities for transparency purposes, they

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[56] *Ibid*., paragraphs 91 – 93.
[57] *Ibid*., paragraphs 87 - 90.
[58] The Agency's discussion paper in the ARCM Consultation identifies the problem as: "The Agency is mindful that its current costing methodologies, which are nearly completely reliant on confidential railway data, may be viewed as lacking in transparency and therefore out of step with modern regulatory processes."
[59] See paragraphs 35 – 36 of the Yatchew Report. Also, see paragraphs 9 – 10 of the Yatchew Report.

should be constrained from engaging in supra-competitive pricing and sub-competitive service levels."[60]

88. We reiterate our request that the Agency improve transparency with respect to its RIS rate determinations, and allow scrutiny and verification by interested parties.

Consultation Question 18: Are there measures that railway companies can take to ensure shippers are aware of the applicable rate? For example, would it be appropriate to require railway companies to show the regulated interswitching rate, as a separate charge on the waybill? Should this charge be paid by the shipper directly to the railway company providing the interswitching service?

89. In our view, the publication of RIS rates in the Agency's decisions under section 127.1 of the Act (most recently in Agency Determination No. R-2018-254) is sufficient notice to allow shippers to ascertain the RIS rates that are available for a given movement. Since the payment between railways is not transparent to the shipper, we recommend that the shipper should have an unequivocal right to make the payment directly to the carrier providing the RIS service, at that shipper's option.[61] Too often, however, as a condition of contracting, CN and CP will compel shippers to contract out of its rights under the Act. The adoption of a rule preventing contracting out may be necessary, unfortunately.

Conclusion

90. National transportation policy has for the last five decades emphasized the importance of an efficient transportation system and the use of competitive market forces to ensure this efficiency. This position began with the MacPherson Royal Commission.[62] That Commission emphasized that an economically efficient transportation system using all modes of transportation would provide Canada with the best transportation service.

91. Section 5 of the Act provides guidance for the direction of transportation policy. As the Agency is well aware, the policy articulated at section 5 has undergone changes in wording as the statute has been amended from time to time since 1967, but the section did not fundamentally change in its underlying statement of policy objectives until Bill C-11.[63] The enduring themes contained in section 5 have been and are that the objectives of the well-being of users and Canadians are best met when the transportation system is economically efficient as well as safe and reliable. We are confident, based on our experience in the field, that the

[60] Page 2 of the submission of McMillan LLP dated November 18, 2016 in response to the Agency's Consultation on methodology for determining CN's and CP's Capital Structure under the Maximum Revenue Entitlement Program.
[61] Also, see pages 5 – 6 of the Heller Report.
[62] See Canada, Report of the Royal Commission on Transportation 1961.
[63] Bill C-11, Act to amend the Canada Transportation Act, June 22, 2007.

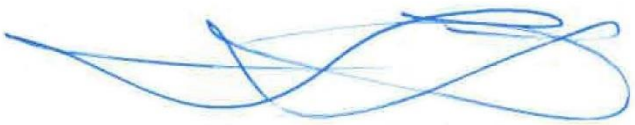
aims of section 5 are in fact best achieved when competitive market forces within and between modes determine viable, effective and efficient transportation services.

92. Bill C-11, which received royal assent in June 2007, introduced the objective of a competitive transportation system as a goal of transportation policy, in addition to a system that is economic, efficient and effective. Competitive access to rail infrastructure is a hallmark of that competitiveness.

93. The policy also places special emphasis on consumption of those services; that is, they exist, not for the producers, but for the users. The best rail services for users are those that are produced at the lowest cost (that is, the most productively efficient) and are sold to users at the lowest possible price (to maximize allocative efficiency). It is in this manner that the right rail resources are allocated to the right users at the right time in the right quantities and qualities. We applaud the Agency's efforts to achieve these objectives, and encourage the Agency to guard against erosions to those objectives.

Please do not hesitate to contact us if we can be of further assistance in the Consultation.

Yours truly,



François Tougas

cc: Teck Resources Limited
Western Grain Elevator Association
Canadian Canola Growers Association
Mining Association of Canada
Western Canadian Shippers Coalition

Schedule "A" – Gould Report

BEFORE THE CANADIAN TRANSPORTATION AGENCY

IN THE MATTER OF THE CONSULTATION REGARDING THE APPROACH TO SETTING REGULATED INTERSWITCHING RATES

COST OF CAPITAL METHODOLOGY

REPORT

Prepared by:

LAWRENCE I. GOULD

Lawrence I. Gould

August 21, 2019

I. INTRODUCTION

The Canadian Transportation Agency (CTA) has initiated consultations on the Agency's approach to setting regulated interswitching rates (the "Consultation"). I was asked by McMillan LLP to provide my independent judgment and opinion to the CTA on the issues pertaining to the CTA's cost of capital methodology in the Consultation.

I am Senior Scholar at the Asper Business School, University of Manitoba. Previously I have been Head, Department of Accounting and Finance at the University of Manitoba and Chairman, Finance and Business Economics at McMaster University.

I received the Bachelor of Science Degree in Economics from the Wharton School of Finance and Commerce, University of Pennsylvania in 1966. I completed the Master of Business Administration Degree in Finance from New York University in 1968 and the Doctor of Philosophy Degree in Finance from the University of Toronto in 1975.

During the last 40 years I have been employed as a consultant in a number of cases that posed a wide range of problems in applying financial theory to the determination of the cost of capital and valuation. I have testified on financial matters before the Canadian Transportation Agency, the Canadian Radio-Television and Telecommunications Commission, the Canadian Human Rights Tribunal, the Public Utilities Board of Manitoba, the New Brunswick Board of Commissioners of Public Utilities, the Newfoundland Board of Commissioners of Public Utilities, the Nova Scotia Utility and Review Board, the New Mexico Public Service Commission and the Federal Communications Commission.

I have also been engaged in academic research to extend the theory of the cost of capital. Among the subjects of this research have been the effects of income taxation on the cost of capital, the impact of growth on the cost of capital, the impact of inflation on the cost of capital, estimating the cost of capital for a non-traded division of a company and the use of the capital asset pricing model in estimating the cost of capital. I have published articles on the cost of capital and related problems in finance in the Journal of Finance, Financial Management, the Journal of Portfolio Management, the Journal of Accounting, Auditing and Finance, the Canadian Tax Journal and elsewhere.

II. STATEMENT OF THE PROBLEM

Railways require continual investment, and that investment must provide a sufficient return on capital. There is a fundamental link between investors' expectations and a railway's ability to raise capital for necessary investment. The objective of maximizing the value of the common shares is linked to a firm's investment decisions. A firm must invest in projects that yield a return greater than a minimum acceptable hurdle rate. Such a rate of return is called the firm's cost of capital.

Generally, regulatory agencies such as the CTA use a historical cost methodology in determining the cost of capital for regulated entities. The purpose of this report is to address Issue 4 in the Consultation. This requires answering two questions:

Q7: Does the CTA's inclusion of a cost of capital and depreciation allowance appropriately inform the consideration of long-term investment needed in the railway companies?

and

Q8: (a) Is the cost of equity model, an input to the cost of capital methodology, currently used by the CTA appropriate for determining an adequate rate of return on investment?

(b) If it is not, which cost of equity model or combination of cost of equity models should be considered by the CTA?

III. COMPETITIVE CAPITAL MARKETS: GENERAL PRINCIPLES

Corporate Objectives

The motivation for investing in a corporation is the expectation of making a larger risk-adjusted return than can be earned elsewhere. The managers of a corporation have the responsibility of administering the affairs of the firm in a manner consistent with the expectation of returning the investor's original capital plus the expected return on their capital. The common shareholders of the firm are the residual owners and they earn a return only after the investors in debt and preferred stock have received their contractual claims. A standard assumption of finance is that the objective of the firm is to maximize its common shareholders' wealth position.

It is recognized that a complete statement of the organizational goals of a business enterprise might embrace a much wider range of considerations. However, the managers of a corporation are acting on behalf of the common shareholders. The common shareholders, the suppliers of the risk capital, have entrusted a part of their wealth position to the firm's management. Thus the success of the firm and the appropriateness of management's decisions must be evaluated in terms of how well this responsibility has been met. Therefore, the primary objective of the firm can be taken to be the maximization of the value of the common shareholder's ownership rights in the firm.

Time, Risk, and the Risk-Return Trade-off

The two primary factors of finance are the elements of time and risk. Because decisions today often affect cash flow for many future time periods and the outcomes of actions are not certain, decision rules must be formulated to take risk and time value into consideration in a systematic fashion. Frequently, the existence of uncertainty means that the decision maker faces alternatives that involve trade-offs of less return and less risk, or more return and more risk.

Cash Flows and Earnings

Any decision that is expected to alter the anticipated cash flows of the firm is likely to alter the value of the firm's common stock. Cash is the common element in all decisions. Investment requires it, creditors are paid with it, and shareholders expect to receive it in the form of dividends or when they sell their stock. Any decision can be characterized by the set of incremental cash flows that its acceptance is expected to cause, and thus most decisions can be reduced to evaluating incremental cash flows.

A decision may be characterized by its effect on earnings as well as by its incremental cash flows. The earnings and cash flows would lead to consistent decisions if it were not for the fact that earnings are affected by many accounting conventions, such as expense versus capitalization decisions and the choice of a depreciation method. Thus an investment might generate substantial cash flows in its late years but adversely affect profits during the early years if the initial investment is depreciated more rapidly than is justified by its economic characteristics. If we assume that the firm has sufficient cash inflows with which to meet its cash obligations, the investment may be desirable regardless of its lack of short-run profitability. Of course, long-run profitability is a necessary condition. If all the relevant expenses cannot be covered over the life of the decision, then the effect of the decision on the shareholders' wealth position will be negative.

IV. THE COST OF CAPITAL

A firm's objective of maximizing the value of its common shares is linked to its investment decisions. A firm must invest in projects that yield a return greater than a minimum acceptable hurdle rate; the riskier the project, the higher that minimum rate should be. Such a rate of return is called the firm's cost of capital.

In measuring the cost of capital from each source, the cost of debt and the cost of preferred capital pose few problems. It is clear that the firm must pay the embedded interest on its outstanding debt and the prescribed dividend on the preferred stock. Both of these measurements involve perfectly straightforward calculations. Somewhat more controversial is the problem of determining the cost of common equity capital.

The cost of common equity capital is the return or yield that investors on average require on a firm's common stock as implied in the price that they are willing to pay to hold the stock. This implied yield is the cost of common equity capital, because the existing shareholders neither gain nor lose as a consequence of additional investment and financing, regardless of the method of financing, as long as the return the company earns on its common equity is equal to the return investors require on the stock. By contrast, when the return on common equity is above the return investors require, each dollar of additional financing raises the value of the existing shares. Conversely, when the firm's operating income less interest on debt, income taxes, and preferred dividends does not leave a return on common equity equal to the return investors require on the stock, there is not only a depressed stock price because of the low return, but also, each dollar of additional investment and financing further depresses the price.

The theoretical basis for the conclusion just stated has been fully developed, but a simple analogy goes a long way in demonstrating the point. Ignoring operating costs, a bank that

borrows at 8% and lends at 10% adds 2% of the amount borrowed and loaned to the earnings of the bank's shareholders. The more the bank borrows and lends with this 2% spread, the more it increases future earnings and the current value of its common stock. The return that investors require on a firm's common stock is, in one form or another, what must be paid for additional equity funds, and, if the company earns more on the money than it must pay to get the funds, the excess adds to the earnings on and value of the existing shares. Conversely, if the company earns a lower rate of return than it pays on additional funds, the difference comes out of the pockets of the existing shareholders.

This view has been widely accepted for regulating Canadian railway and utility companies in a manner that allows them to raise the capital necessary to meet the demand for services without an adverse effect on current shareholder stock. The basis of this rate setting process is the determination of the cost of capital applied to the historical cost investment.

It should be stressed that in the face of a return on capital below its cost of capital, the management of any firm will be reluctant to compound the misfortunes of its shareholders by further depressing the stock price through undertaking additional investment. A difference between the return on capital and its cost is fully reflected in the return on common equity, since the bondholders and preferred shareholders are assured of receiving their prescribed returns on capital regardless of the rate of return on total capital. The long-run dependence of the value of its stock on the service provided to its customers could make it advisable for the company to undertake capital expenditures in the face of a temporary unfavourable difference between the expected rate of return and the cost of capital. However, this amounts to an appropriation of shareholder wealth and it cannot be sustained in the long run.

V. EXPECTED RETURNS ON HISTORICAL COST INVESTMENT

In Section III it was seen that the primary objective of the firm could be taken to be the maximization of the price of the common shares. The importance of using incremental cash flows was also explained as the link to the market value of the stock. These concepts are combined in a frequently used method to value common shares, the DCF (Discounted Cash Flow) Method. It represents the valuation of a share of stock by the expression:

$$P_0 = \frac{D_1}{(1+k)} + \frac{D_2}{(1+k)^2} + \cdots + \frac{D_t}{(1+k)^t} + \cdots + \frac{D_\infty}{(1+k)^\infty} \qquad (1)$$

In this expression:

P_0 = the current price per share;

D_t = the expected value of the dividend the share will pay at the end of Period t; and

k = the yield or return investors require on the share.

An alternate approach to Equation (1) for the price of a share is:

$$P_0 = \frac{D_1 + P_1}{1+k} \qquad (2)$$

Here, we take as the future payments the next period's dividend and the end-of-period price. However, the end-of-period price must be valued to include the dividends paid after the selling date and this substitution plus a little algebra results in Equation (1). Therefore, valuing a share by discounting its dividends up to some point in the future and its expected selling price at that

time is equivalent to valuing a share by discounting all future dividends. It is important to note that investors may place a high value on the shares of a company that does not pay dividends currently, but that value reflects the expectation of future dividends.

The Relationship between the Return on Book Value Common Equity Investment and the Expected Growth in Dividends

Share value is determined fundamentally by the value of future dividends, discounted for time and risk. However, it is a difficult problem to estimate the future dividends. To solve the problem, it is essential to understand the determinants of long-run dividend growth. For simplicity, a constant growth model will be used for illustration, although the same conclusions could be derived under more complex models.

In the constant growth model, future dividends are expected to grow at the rate of g each period, and Equation (1) reduces to:

$$P_0 = \frac{D_1}{k-g} \qquad (3)$$

If a company is expected to earn a rate of return of r on the book value of its common equity and if it retains the fraction b of its earnings, then each year its earnings per share can be expected to increase by the fraction br of its earnings per share in the previous year. Thus, br is a measure of the expected rate of growth in future earnings per share. If the company is expected to have a stable retention ratio and, therefore, a stable dividend payout ratio, it follows that br is also a measure of the expected rate of growth in future dividends per share. That is:

$$g = br. \qquad (4)$$

This relationship is illustrated in Table 1. There the hypothetical initial common equity or book value per share = $10.00, r = .10 and b = .4. The first period earnings are expected to be $1.00 per share and the expected dividend is $.60. The retained earnings raise the book value of equity to $10.40 at the start of the second year, and r times that is $1.04, which is equal to the earnings per share the second year. The dividend in the second year is expected to be $.624, and so on through time. The earnings, dividends, and stock price are expected to grow at the rate br = (.4) (.10) = .04 in every future year.

In fact, a company's return and retention rates do not remain constant over time. However, investors do forecast the rate of return on the book value of common equity investment that they expect that a company will earn and the fraction of its earnings that will be paid out in dividends. The conclusion that the expected rate of return on the book value of the common equity investment is a fundamental determinant of share price can be derived from a wide variety of complex share valuation models.

Conclusions

As can be seen in Table 1, when r = k investors receive the required return on their original investment and on reinvested earnings. The same would be true for new investors, allowing the firm to attract capital for new investment. Table 2 illustrates the situation where a firm can earn a return on the book value of its common equity that is greater than the investors' required return. Share price rises above book value and shareholders benefit even more from additional investment.

The opposite is true when the expected return on book value is below the investor's required return, as shown in Table 3. Not only does the share price fall below the investor's initial investment, but each additional dollar invested increases the loss.

The relationship is clear from these examples. The expected return is a direct link between the book value investment and share price. As long as a firm is expected to earn its required return on the book value of its assets, it will be able to raise capital for new investment and maintain its financial viability. This relationship is also the basis for regulating public utilities and performing certain CTA functions respecting federal railways in Canada.

VI. FINANCIAL VIABILITY

It is possible for a firm to attract capital, but at a cost that impairs the financial integrity of the firm. Therefore, it is necessary to consider the financial position of the firm to determine whether it will be able to maintain its credit and attract funds on reasonable terms.

CN and CP's Financial Performance

As previously explained, from the shareholders' perspective it is the return on equity that is important. Return on equity is defined as net income before extraordinary items divided by total equity. The Canadian Transportation Agency makes an annual determination of the cost of equity capital for CN and CP. Table 4 provides these determinations for CN for the past seven years since Decision No. 425-R-2011 on the review of cost of capital methodology and the actual return on equity for those years. It is clear that CN has achieved returns that exceed its cost of capital in each year, and is currently earning far in excess of its cost of equity capital. In 2018, the CN after-tax return on equity was estimated at 25.2%, 3.1 times the 8.1% level determined by the CTA to be the amount needed for CN to be financially viable. This is consistent with the fact that CN's share price is currently over five times its book value.

Similarly, as shown in Table 5, CP has also achieved returns that exceed its cost of capital in each year by a wide margin. In 2018, the CP after-tax return on equity was 29.85%, 3.2 times the 9.47 level determined by the CTA to be the amount needed for CP to be financially viable. CP's share price is currently over six times its book value.

Financial integrity also includes the ability to raise equity capital without an adverse effect on current shareholders. If shares are sold at less than book value, the book value of the existing shares is diluted, as well as the growth in earnings and dividends. Therefore, financial integrity includes the ability to raise equity at a share price at least equal to book value. Table 6 provides a graph of CN's share price for the period January 1, 2012 – June 30, 2018, and Table 7 provides the same information for CP. Currently, CN's share price is over five times its book value and CP's share price is over six times its book value. At July 11, 2019, CN's price per share was $122.16 and its book value per share was $24.26, resulting in a market-to-book ratio of 5.04. CP's price per share was $310.19 and its book value per share was $48.79, resulting in a market-to-book ratio of 6.36. [1]

DBRS, the Canadian credit rating agency, confirmed CN's long-term debt and commercial paper ratings in its most recent rating report. DBRS commented on CN's performance:

> "The rating confirmations reflect CN's continued strong market position and focus on operating efficiency, which supports growing earnings and cash flow from operations. After substantially increasing its capital expenditure program in 2018, DBRS expects CN to continue to do so in 2019 to support and accommodate strong demand across its network in a manner that preserves its operating efficiency."[2]

In its most recent rating report for CP, DBRS upgraded the Issuer Rating, Medium-Term-Notes rating, Unsecured Debentures rating and Commercial Paper rating. DBRS commented on CP's performance:

> "The upgrade and trend change reflect the Company's strong operating performance and efficiency across its network as well as its commitment to a balanced financial policy that favours funding share repurchases with internally generated cash flows, which resulted in solid leverage and operating metrics which DBRS anticipates are stable going

[1] FPinfomart, www.fpinfomart.ca, July 14, 2019.
[2] Canadian National Railway Company Rating Report, DBRS, March 25, 2019, page 1.

> forward. CP has accommodated strong demand and is well positioned to continue growing in 2019 and 2020 with adequate available capacity and capital investments made."[3]

It is also informative to get the railway's financial outlook. During CN's Investor Day 2019 Webcast, Ghislain Houle, CN's Executive Vice-President and Chief Financial Officer, reaffirmed CN's 2019 financial outlook to deliver 2019 adjusted diluted earnings per share growth in the low double-digit range this year and aims to deliver diluted earnings per share compound annual growth rate in the low double digits for 2020-2022.[4]

It is also worth noting the views of Keith Creel, CP's President and Chief Executive Officer in commenting on the recent Q2 2019 results:

> "We get to share and discuss the record-setting quarter for this company. When I say record-setting, it's a mix of records. Second quarter records are all-time records."
>
> "And as excited as we are about 2019, the opportunities that John and the team put together for 2020 and 2021 from an investor standpoint, we certainly expect not only in 2019 to meet our guidance but to carry strength and momentum in the 2020 and 2021 as well. That's going to bode well for anybody who's invested in this company as well as our employees as well as our customers. "[5]

As shown in Table 4 and Table 5 and supported by the comments of the bond rating agency and comments by the railways' officers, CN and CP's financial performances are well in excess of their cost of equity capital and clearly far exceed the level required to be financially viable.

[3] Canadian Pacific Railway Company Rating Report, DBRS, November 28, 2018, page 1.
[4] CN Investor Day 2019 Webcast, June 4, 2019.
[5] Canadian Pacific Railway Company Q2 2019 Earnings Conference Call Webcast, July 16, 2019.

VII. CONCLUSIONS ON QUESTION 7

Q7: Does the CTA's inclusion of a cost of capital and depreciation allowance appropriately inform the consideration of long-term investment needed in the railway companies?

The fundamental link between investor expectations and a firm's ability to raise capital was examined. It was shown that the primary objective of the firm could be taken to be the maximization of the value of its common shares. Furthermore, financial decisions are based on an incremental cash flow analysis, adjusted for time and risk. This is consistent with the DCF model that values shares based on discounting cash dividend payments to investors. The link between the rate of return on the book value of common equity investment and share price was established, and a decision rule for financing new investment was established: the firm must be allowed to earn its required rate of return on the book value of its common equity.

A railway requires a large investment, and that investment must provide a sufficient return on capital to investors in order to continue to raise funds. It is investors' expectations of future rates of return on the book value of common equity investment that are critical.

The CTA makes annual determinations of the railways' cost of capital using a methodology designed so that, if the railway obtains a financial return equal to the CTA determination, it will be able to maintain its financial viability while raising any capital needed for investment. I conclude that the methodology used by the CTA to determine the railways' cost of capital is reasonable and fair to all parties. This cost of capital is incorporated in the railway costing methodology. Accordingly, it is my conclusion that as long as the railways earn this cost of capital, they will be able to access the capital markets for the needed long term investment.

This conclusion is supported by the experience of Canadian public utilities in raising capital under historical cost regulation.

VIII. THE COST OF EQUITY MODEL

In 2009 the CTA initiated a review of its railway cost of capital methodology. In doing so the CTA noted that while there had not been any major changes in the regulatory environment since the last consultation, it had been more than five years since the current approach had been reviewed, and that it is good practice for a regulatory body to periodically undertake a study to consider how best to exercise its discretionary powers under the law.

The review was conducted in two phases: a study phase, which included a consultant's report concluded on April, 29, 2011, and a hearing phase, which concluded on December 9, 2011. During the hearing phase, railway companies, suppliers, producers and others were given the opportunity to express their opinions on certain recurring issues identified by the CTA and any other issues they considered important. Submissions with expert testimony were provided by the Canadian National Railway Company, the Canadian Pacific Railway Company, the Coalition of Rail Shippers, and the Western Canadian Shippers' Coalition. Submissions were also received from the Canadian Canola Growers Association; Alberta Transportation, Province of Alberta; Manitoba Infrastructure and Transportation, Province of Manitoba; and the Ministry of Highways and Infrastructure, Province of Saskatchewan. The CTA's Decision discussed investment, capital structure, estimating cost rates, and Capital Asset Pricing Model (CAPM) methodology.[6] One consequence of the decision was to use only the CAPM in a specified way to determine the cost of equity capital.

The current cost of equity model

[6] Canadian Transportation Agency, "Review of the Methodology Used by the Canadian Transportation Agency to Determine the Cost of Capital for Federally-Regulated Railway Companies," Decision No. 425-R-2011, December 9, 2011.

The cost of equity capital using the CAPM can be defined as

$$r_s = r_{f1} + \beta_s \; [\text{exp}\, ected \quad market \quad risk \quad premium \quad] \qquad (5)$$

Where

r_s = the expected return for security s;

r_{f1} = the risk free rate; and

β_s = the beta for security *s*.

In order to understand the current model used by the CTA, it is useful to divide the model into four questions:

(1) What should we use for the risk free rate r_{f1}?

(2) How should we estimate β_s, the beta for security s?

(3) If we estimate the expected risk premium as the average of the historical risk premiums, how should we measure the historical risk premiums?

(4) Should we modify the estimate of the cost of equity capital obtained using Canadian data by averaging it with an estimate of the cost of equity capital obtained using U.S. data?

First, consider the model to estimate of the cost of equity capital using only Canadian data.

The risk-free rate

In theory, the risk-free rate should match the period of regulation. That is, if the cost of capital is being determined for one year, the one-year Government of Canada bond yield should be used. Note that under perfect regulation, the return allowed in each year is equal to the investors' required return, regardless of whether the railway industry has a long investment

horizon. However, short-term bond yields are more volatile than the long-term yields, and it is understandable that a regulatory agency might consider stability of rates to be a desirable goal. Currently the CTA uses the Government of Canada 3-5 year marketable bond yields as its proxy for the risk-free rate of return. This current practice of the CTA represents a reasonable approach in accommodating the goal of rate stability.

Beta

The CTA currently estimates beta using five years of weekly return observations. The betas are then adjusted for regression towards the mean using the Blume methodology. This is the standard practice of many financial providers. The current practice of the CTA represents a reasonable approach.

Measurement of the risk premium

The averaging period used to develop the market risk premium should be a long period for which high quality data is available. The S&P/TSX Total Return Index is available for the 62 years 1957-2018 and will be updated each year. It is also possible to obtain a spliced Canadian common stock index for the 96 years 1923-2018.[7] The 3-5 year Canada Bond series is available from 1951-2018 and will be updated each year. Thus, at present there are at least 62 years of data for which the data for these series are available.

The 62 year period 1957-2018 contains a wide range of capital market conditions, including periods of double digit inflation, deflation, oil price shocks, booms, recessions and periods of financial crisis. We may not be able to forecast which specific events will occur in the future, but it is reasonable to believe that these types of events will occur in the future and that the financial effects of these events will occur again.

[7] The Canadian Institute of Actuaries, Report on Canadian Economic Statistics, 1924-2017 uses Urquhart & Buckley H641 (Corporate Composite) for 1924-1946 and CANSIM B4202 (TSE Corporates) for 1947-1956.

It could also be argued that recent events or recent volatility in the capital markets should be emphasized by weighting them more heavily than recent returns. However, there should be a compelling reason to give some years a heavier weight than others. Using all the available data is objective in the forecast it produces and avoids the risk that a weighting scheme will introduce subjectivity and bias.

The CTA uses the period from 1951 to the present, currently 68 years, to develop the market risk premium for the CAPM. While this is a reasonable procedure, it requires six years of data from TSE Corporates before the higher quality S&P/TSX Total Return Index was available. The data from 1957 for the S&P/TSX Total Return Index and the bond series is available and should be used as the averaging period for developing the market risk premium used in the CAPM.

Modifying the estimate of the cost of equity capital obtained using Canadian data by averaging it with an estimate of the cost of equity capital obtained using U.S. data

After obtaining an estimate of the Canada cost of equity capital using the CAPM with Canadian data, the current model used by the CTA averages it with an estimate of the U.S. cost of equity capital using the CAPM with U.S. data. The U.S. cost of equity capital is based on the average of two separate CAPM estimates that differ in the risk-free rate used in the calculations. One estimate uses the 3-year U.S. Treasury bond as a proxy for the risk-free rate and the other uses the 5-year U.S. Treasury bond as a proxy for the risk-free rate. These two estimates are then averaged to obtain the U.S. cost of equity rate. Finally, a Canada/U.S. cost of common equity rate is determined as a weighted average of the Canada and U.S. cost of common equity

rates, with the weights for CN and CP based on the volume of their shares traded on the Toronto and New York stock exchanges. Currently the weights are 51% Canada and 49% U.S. for CN, and 38% Canada and 62% U.S. for CP.

In order to assess this modification procedure it is useful to consider the theory on which the CAPM is based. The market portfolio is a central concept of the CAPM methodology. In theory the market portfolio includes all risky assets that can be held by investors. This is far more extensive than the S&P/TSX Total Return Index. It includes assets in all countries, not just Canada, or Canada and the United States, including bonds, private companies, real estate, human capital and much more. In practice, however, a proxy is always used for measuring the market return and in Canada this is typically the S&P/TSX Total Return Index. In the United States it is common to use the S&P 500 Index.

First, note that the current Agency procedure does not create a Canada/U.S. proxy for the market portfolio. Instead it uses averages of different Canada and U.S. CAPM estimates, a procedure not consistent with the CAPM theory.

Second, the weights used to calculate the weighted average are based on the relative amounts of the interlisted shares trading on the Toronto and New York stock exchanges. There is no theoretical relationship between share volumes and market weights in the CAPM theory.

Third, there are major differences in the Canadian and United States capital markets, for example, differences in taxation. It is not correct to use United States data in Canada without adjusting for these differences.

Fourth, the CTA makes annual cost of capital rate determinations for federally regulated railway companies in only specific statutory and regulatory applications:

- As a component in the volume-related composite price index calculation that establishes the maximum revenue entitlement for the movement of Western grain by rail.
- For use in the development of regulated interswitching costs and rates.
- For other regulatory purposes requiring cost determinations such as technical costing assistance in Final Offer Arbitration proceedings between a shipper and a railway; development of rates for running rights; apportionment of the costs of maintaining or constructing railway crossings; determination of rates to be paid by a rail passenger service to its host railway for access and other railway services; and certain railway disputes where the cost of meeting a given level of service or of mitigating railway noise might be a factor to consider.

These are regulatory applications only in Canada. Of course, both CN and CP have operations in the United States that are regulated by the United States Surface Transportation Board (STB). The STB does not use Canadian capital market data to estimate the cost of capital for the railroads that it regulates and the CTA should not use United States data to estimate the cost of capital for railway operations that it regulates.

IX. CONCLUSIONS ON QUESTION 8(a)

Q8 (a): Is the cost of equity model, an input to the cost of capital methodology, currently used by the CTA appropriate for determining an adequate rate of return on investment?

One result of Decision No. 425-R-2011 was to use only the CAPM in a specified way to determine the cost of equity capital. After obtaining an estimate of the Canada cost of equity capital using the CAPM with Canadian data, the current model used by the CTA averages it with an estimate of the U.S. cost of equity capital using the CAPM with U.S. data.

With regard to the estimation of the Canada cost of equity using the CAPM, the procedures for estimating the variables are reasonable and working well. The only change recommended is to use Canadian data from 1957 rather than 1951 to estimate the market risk premium, updated annually. This period uses only the higher quality S&P/TSX Total Return Index.

The modification of the estimate of the cost of equity capital obtained using Canadian data by averaging it with an estimate of the cost of equity capital obtained using U.S. data should not be done. Averaging different Canada and U.S. CAPM estimates is not consistent with the CAPM theory. Furthermore, there is no theoretical basis between the relative amounts of interlisted share volumes and market weights in the CAPM. It is not correct to use United States data in Canada without adjusting for the major differences in the Canadian and United States capital markets.

The CTA is regulating operations only in Canada. Of course, both CN and CP have operations in the United States that are regulated by the United States Surface Transportation Board (STB). The determination of the cost of equity capital in the United States for interlisted

railroads is the mirror image of the Canadian determination, but the STB does not use Canadian capital market data to estimate the cost of capital for the railroads that it regulates. Similarly, the CTA should not use United States data to estimate the cost of capital for railway operations that it regulates.

X. AN ALTERNATIVE COST OF EQUITY MODEL

In Decision No. 425-R-2011 the CTA determined that, in the interests of providing greater certainty and transparency, it would use the CAPM alone to estimate the cost rate of equity for federally-regulated railways. The practice of annually assessing the results of three models and applying judgment on what weight to assign to each was discontinued.[8] Prior to that decision, the CTA had relied on an estimate of the after-tax cost of equity capital obtained from the CAPM. However, in those decisions the CTA stated that it had also calculated the cost of equity capital using the Discounted Cash Flow (DCF) model. For example:

> "After a comparison of the results, the Agency is of the opinion that for the 2010/2011 crop year, the CAPM produces an estimate of the cost of common equity rate that better reflects the state of capital markets and is a better indicator of changes in financial markets through the risk free rates. Major inputs into the DCF model include company-specific share price and estimated earnings growth rate information. These inputs are based on subjective assessments of dividend growth rates and tend to fluctuate significantly. While bond yields can vary as well over the crop year, the Agency finds that such fluctuations are not as dramatic as the fluctuations of the inputs to the DCF model. Therefore the Agency finds that the CAPM has produced a more meaningful result for the upcoming crop year's cost of common equity rate than that produced by the DCF model.[9]

In fact, for each year since 1997, the CTA had reached the same conclusion: that the CAPM provided the best reflection of the state of the capital markets.

The CAPM methodology and an explanation of the inputs were explained in detail in the CTA's decisions. However, these decisions did not explain the specific DCF model or how the inputs for the DCF model were calculated. Of particular importance in the constant growth DCF

[8] Canadian Transportation Agency, "Review of the Methodology Used by the Canadian Transportation Agency to Determine the Cost of Capital for Federally-Regulated Railway Companies," Decision No. 425-R-2011, December 9, 2011, page 38, paragraph 216.

[9] Canadian Transportation Agency, "2010/2011 Crop Year Cost of Capital Rate for the Canadian National Railway Company," LET-R-71-210, April 27, 2010, Appendix A, page 1.

model is the estimate of the g, the expected long-run rate of growth in the dividend or the price of the share.

If investors on average believe that (1) the corporation will earn a return of r on its common equity, and (2) the corporation will retain the fraction b of its earnings, g=br. It is also true that if investors on average expect that the price will grow at a rate Δ in the long run g=Δ.

One objective method for arriving at an estimate of g=br or g=Δ is to take average values of these variables over a pre-specified period in the past. Unfortunately, investors use more information in arriving at their estimates of b and r or of Δ than their past realized values over a fixed time period. Hence, this method which relies upon objective historical data is subject to considerable error and must be rejected.

A second method of estimating g is for an expert witness to take all the historical information that is considered relevant and arrive at an estimate. Unfortunately, this method of estimating a company's cost of equity capital involves the use of judgment, informed judgment, but none the less a person's judgment as to what a rational investor believes. Different judgments by different persons result in different numbers, and the CTA would be compelled to look at the reasoning behind each judgment in deciding which number to accept.

A third method of arriving at g is to take averages of the estimates made by security analysts who are employed by firms that provide investment advice. A simple average of many analysts of their forecast rate of growth in earnings or dividends over the next five (or ten) years has often been proposed as an estimate of g. However, such estimates are biased estimates of g to the extent that r or b is expected to change over the period. For example, if r is expected to rise over the five years, the expected rate of growth in earnings will be above the value of g that provides

the true cost of equity capital. The same problem arises when past rates of growth in dividends or earnings are used for g.

Another version of the DCF model is the multi-stage Discounted Cash Flow model. I have no theoretical objection to using a multi-stage DCF model to estimate the cost of equity capital. However, I do have practical concerns about obtaining estimates for the model and how it could be used by the CTA to determine the cost of equity capital for CN and CP.

There are many versions of the multi-stage DCF model. In general, these models are based on the assumption that companies evolve through stages during their lifetime. For example, in using a three stage model, earnings and dividend growth rates must be forecast for each of the three stages. It is necessary to rely on security analysts to forecast accurately the duration of each stage and the magnitude of the growth rates. Usually individual year forecasts are made in the first stage; the second stage is a transition over some specific duration; and the third stage is long-run maturity.

First, it is important to note that there is not one specific multi-stage DCF model that can be used for all companies or even all railways. The multi-stage DCF model should be based on the number of stages, duration of the stages, and the growth rates determined for the specific company under analysis.

Second, there is the problem of estimating the growth rates in earnings per share. That is, it is uncertain what period is used by each analyst for estimating the growth rate and how the expected growth in operating earnings relates to the expected growth in dividends per share.

Another concern is how many analysts provide long-term estimates for earnings per share. A consensus estimate needs a sufficient number of analysts providing estimates to represent reliably the market expectation. For example, Table 8 provides the number of analysts providing

estimates to Thompson Reuters for CN and CP. The consensus estimate for CN earnings per share were based on 21 analysts for 2019 and 22 analysts for 2020, but for 2022 and 2023 estimates were provided by only three analysts. A similar pattern can be seen for CP: the consensus estimate for earnings per share were based on 22 analysts for 2019 and 22 analysts for 2020, but for 2022 and 2023 estimates were provided by only two analysts.

The DCF method for estimating the cost of equity capital can be very accurate when used by an expert witness who takes all the relevant historical and current information into account, but it is less accurate when used as a rigid formula. The CTA intends to select a cost of capital methodology that will be used for, at a minimum, the next five year period. Without annual hearings and the opportunity to examine the reasoning behind the estimates, the DCF method would be unlikely to produce accurate results.

XI. CONCLUSIONS ON QUESTION 8(b)

Q8 (b): If it is not, which cost of equity model or combination of cost of equity models should be considered by the CTA?

In summary, a DCF model could be used in some regulatory proceedings to obtain an accurate estimate of the cost of equity capital, but the constant growth DCF model and the multi-stage DCF model have severe deficiencies. First, DCF models in general are unlikely to provide accurate results when used in a rigid formula. A one-size-fits-all model will not produce accurate results for CN or CP. Second, the procedure used for estimating the inputs for the model, particularly the growth rates, is unreliable.

At times a regulatory agency may be asked to change its methodology when the companies it regulates are in financial distress and unable to raise capital. That is not the case here. CN and CP have had no difficulty raising capital and are currently earning returns well in excess of their costs of capital. The current methodology used by the CTA to determine the railways' cost of capital is working well and the CTA should continue to rely on the CAPM alone to estimate the cost rate of equity.

Table 1

RELATIONS AMONG A COMPANY'S RETENTION RATE, RATE OF RETURN, RATE OF GROWTH IN DIVIDENDS, AND OTHER VARIABLES WHEN R=K

Year	SOY Book Value[1]	Share Earnings[2]	Share Dividends[3]	Retained Earnings[4]	Prices[5]
1	$10.00	$1.00	$.60	$.40	$10.00
2	10.40	1.04	.624	.416	10.40
3	10.816	1.082	.649	.433	10.816
4	11.249	1.125	.675	.450	11.249
5	11.699	1.170	.702	.468	11.699
6	12.167	1.217	.730	.487	12.167

[1]For year two on, the previous value plus retained earnings in previous year.

[2]10% of start-of-year book value based on r = .10.

[3]60% of share earnings based on b = .4.

[4]Earnings less dividends.

[5]Based on P = D/ (k-g), where D = the dividend for the year, and where in every period k = .10 and g = .04.

Table 2

RELATIONS AMONG A COMPANY'S RETENTION RATE, RATE OF RETURN, RATE OF GROWTH IN DIVIDENDS, AND OTHER VARIABLES WHEN R>K

Year	SOY Book Value[1]	Share Earnings[2]	Share Dividends[3]	Retained Earnings[4]	Prices[5]
1	$10.00	$1.00	$.60	$.40	$15.00
2	10.40	1.04	.624	.416	15.60
3	10.816	1.082	.649	.433	16.22
4	11.249	1.125	.675	.450	16.87
5	11.699	1.170	.702	.468	17.55
6	12.167	1.217	.730	.487	18.25

[1]For year two on, the previous value plus retained earnings in previous year.

[2]10% of start-of-year book value based on r = .10.

[3]60% of share earnings based on b = .4.

[4]Earnings less dividends.

[5]Based on P = D/ (k-g), where D = the dividend for the year, and where in every period k = .08 and g = .04.

Table 3

RELATIONS AMONG A COMPANY'S RETENTION RATE, RATE OF RETURN, RATE OF GROWTH IN DIVIDENDS, AND OTHER VARIABLES WHEN R<K

Year	SOY Book Value[1]	Share Earnings[2]	Share Dividends[3]	Retained Earnings[4]	Prices[5]
1	$10.00	$1.00	$.60	$.40	$7.50
2	10.40	1.04	.624	.416	7.80
3	10.816	1.082	.649	.433	8.112
4	11.249	1.125	.675	.450	8.436
5	11.699	1.170	.702	.468	8.774
6	12.167	1.217	.730	.487	9.125

[1]For year two on, the previous value plus retained earnings in previous year.

[2]10% of start-of-year book value based on r = .10.

[3]60% of share earnings based on b = .4.

[4]Earnings less dividends.

[5]Based on P = D/ (k-g), where D = the dividend for the year, and where in every period k = .12 and g = .04.

Table 4

CANADIAN NATIONAL RAILWAY
COST OF EQUITY CAPITAL AND RETURN ON EQUITY
2012-2018

Year	Agency Cost of Equity Capital (%) 1	Return on Equity (%) 2
2018	8.10	25.24
2017	7.73	34.82
2016	6.85	24.44
2015	6.64	24.90
2014	7.04	23.97
2013	6.90	21.79
2012	6.29	24.70

SOURCE: 1. Estimates are after-tax cost of common equity rates from the annual "Cost of Capital Rate for the Canadian National Railway," Canadian Transportation Agency, 2012-2017. For 2018, the estimate is based on the after-tax cost of common equity rate from the "2019/2020 Crop Year Cost of Capital Rate for the Canadian National Railway Company," Canadian Transportation Agency, April 30, 2019.

2. After-tax rates of return on equity from FPinfomart, www.fpinfomart.ca

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Table 5

CANADIAN PACIFIC RAILWAY
COST OF EQUITY CAPITAL AND RETURN ON EQUITY
2012-2018

Year	Agency Cost of Equity Capital (%) 1	Return on Equity (%) 2
2018	9.47	29.85
2017	9.48	43.48
2016	8.69	33.94
2015	8.21	25.99
2014	8.32	23.23
2013	8.12	14.35
2012	7.52	9.93

SOURCE: 1. Estimates are after-tax cost of common equity rates from the annual "Cost of Capital Rate for the Canadian Pacific Railway," Canadian Transportation Agency, 2012-2017. For 2018, the estimate is based on the after-tax cost of common equity rate from the "2019/2020 Crop Year Cost of Capital Rate for the Canadian Pacific Railway Company," Canadian Transportation Agency, April 30, 2019.

2. After-tax rates of return on equity from FPinfomart, www.fpinfomart.ca

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Table 6

CANADIAN NATIONAL RAILWAY
SHARE PRICE
JANUARY 2012 – JUNE 2019

SOURCE: BigCharts.com

Table 7

CANADIAN PACIFIC RAILWAY
SHARE PRICE
JANUARY 2012 – JUNE 2018

SOURCE: BigCharts.com

Table 8

NUMBER OF ANALYSTS INCLUDED IN THE CONSENSUS EARNINGS FORECAST FOR THE YEARS 2019-2023 FOR CANADIAN NATIONAL RAILWAY AND CANADIAN PACIFIC RAILWAY

Year	Canadian National Railway	Canadian Pacific Railway
2019	21	22
2020	22	22
2021	12	10
2022	3	2
2023	3	2

SOURCE: Consensus Analysts' Estimates, CIBC Investor's Edge, July 22, 2019, www.investorsedge.cibc.com.

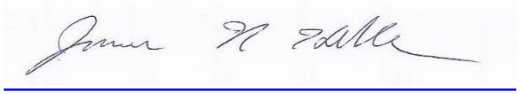
Schedule "B" – Heller Report

BEFORE THE CANADIAN TRANSPORTATION AGENCY

IN THE MATTER OF

ANALYSIS OF CERTAIN COSTING AND OPERATIONAL ISSUES RELATED TO THE CONSULTATION ON THE AGENCY'S APPROACH TO SETTING REGULATED INTERSWITCHING RATES

Expert Evidence prepared by:



Jamie Heller

John Schmitter

August 20, 2019

ANALYSIS OF CERTAIN COSTING AND OPERATIONAL ISSUES RELATED TO THE CONSULTATION ON THE AGENCY'S APPROACH TO SETTING REGULATED INTERSWITCHING RATES

1. Purpose

The purpose of this report is to comment on selected issues raised by staff of the Canadian Transportation Agency (Agency) in the Consultation (the "Consultation") on the *Agency's Approach to Setting Regulated Interswitching Rates*. McMillan LLP has asked us in this report to provide independent judgments and opinions, as cost consultants to shippers and other stakeholders, including government agencies, on questions raised with regard to issues 3,4,7,8,9 in the Consultation. In our capacity as cost consultants, we have developed and apply cost models to calculate railway long run variable costs (LRVC).

2. Qualifications

Mr. James N. Heller is President of Hellerworx, Inc. a transportation, energy and environmental economics consulting firm located in Chevy Chase, Maryland. For 35 years, Mr. Heller has provided consulting services for shippers, utilities, and government agencies related to rail transportation, cost analysis, freight markets, and transportation agreements. On behalf of his clients he has presented testimony on numerous occasions before regulatory commissions, including the Surface Transportation Board (STB or Board), state and federal courts, and numerous arbitration panels in Canada and the United States, including final offer arbitrations (FOA). In 1979 he founded Fieldston Company, which provided economics consulting services to rail shippers among others including numerous electric utilities, commodity companies, energy producers, rail and other transportation companies, developers, various government agencies and the Electric Power Research Institute. In 1983, he formed Fieldston Publications, Inc., which developed publications focused on the railroad and coal industries, and on environmental compliance. Publications included the Coal Transportation Report, the Fieldston Coal Transportation Manual, Coal Daily, Rail Business, Clean Air Compliance Review, Air Daily, and Intermodal Business. In 1995, he co-founded Fieldston Transportation Services Company (FTS) which provided railcar management, leasing and maintenance services to shippers and short line carriers. From 1998 through 2002, he worked as a Senior Vice President and Partner for Hagler Bailly, which acquired Fieldston and then PA Consulting, the acquirers of Hagler Bailly. Mr. Heller has a Bachelor of Science degree in electrical engineering from Northwestern University, and a Master's in Business Administration from the Harvard Business School. Mr. Heller has participated in and provided expert reports in consultations and processes before the Agency.

Mr. John Schmitter is president of KEP, LLC and has over 30 years of experience in transportation. As a consultant, he has worked with companies in the coal, non-metallic minerals, petroleum, steel, chemical, fertilizer, paper, lumber and grain industries as well as shortline railroads, ports, and

government agencies. His consulting experience includes rail cost analysis in support of rail strategy development, rail contract negotiations and regulatory proceedings in both Canada and the United States. Mr. Schmitter has also provided expert evidence before the US Surface Transportation Board. Mr. Schmitter advises rail customers on supply chain strategy, rail operations, rail fleet management, commercial rail contracts and rail costs both in the United States and Canada. Prior to starting KEP, LLC, Mr. Schmitter was Vice President of Business Development at DTE Rail Services, a railcar repair, software, and services company. He was Managing Director of Metals & Ores at Southern Pacific Railroad and intermodal market manager and trainmaster at Conrail. Mr. Schmitter has also held marketing and sales positions in the intermodal and LTL trucking industries. Mr. Schmitter has a master's Degree in business administration from Penn State University and a Bachelor of Science Degree in Business from Northeastern University with a concentration in supply chain management.

3. Issue 3 – Interswitching Zones up to 30 km

Question 4 Should the CTA introduce more factors, such as customer characteristics, train size, or grades of track characteristics to create a broader range of rates?

Additional factors should only be introduced into the RIS calculation if they produce meaningful differences in the costs of RIS movements sufficient to justify the additional complexity. If the Agency introduces additional factors into the RIS analysis, both the data and the methodology should be made public. We address each of these factors below.

Customer Factors

Customer factors are not static. Calculating RIS based on once a year studies would likely produce errors rather than additional precision. Customers can make investments in additional track, change track configuration or plant operating plans to increase efficiency for the railway. Any customer and the railway could work together to modify how the location is served. For example, the customer could agree to block cars for outbound movement, eliminating some work by the railway and increasing efficiency for them. Sometimes those companies could agree to ship to certain destinations on certain days of the week.

The railway could also modify service to particular customers on its own, for example, increasing the number days it provides service or changing the serving yard. The railway local operating plan could also change in multiple ways including bypassing yards where cars for that customer were previously handled, increasing the number of miles in the movement in order to reduce switching or other changes. Changes to local operating plans or shipper service would include all traffic, not just RIS and operating changes are often implemented quickly and potentially multiple times in a year.
Unless the Agency intends to survey every shipper and receiver every year and analyze the current railway operating plans for each shipper and receiver it will miss any year to year changes in operations (once a year observations will miss all intra-year changes) on which to base its cost analysis. Because customer characteristics can change frequently and quickly, including customer factors in the calculation of RIS is likely to create less, rather than more precision.

Train Size

Train size is determined both by the volume of traffic and the railway operating plan to handle the traffic. As with customer characteristics, operating plans are frequently modified. If volume drops, the railway may change the operating plan to consolidate switching, local or road trains. These changes may

result in increases or decreases in the number of times a car is handled. They could also result in cars being hauled greater or fewer miles. The changes made by the railways may increase or decrease the LRVC of a particular movement but reduce costs for the terminal overall. As with customer characteristics, it would be difficult for the Agency to capture all these changes and incorporate them into its RIS rate calculation.

Using the Travacon railway cost model, we estimated LRVC for a single car, Zone 3 interswitch movement using 50 car and 75 cars as the train size for movement from the interchange to delivery at the customer. The LRVC for the movement in a 50 car train is $8.00/car more than if the shipment moves in a 75 car train. This might be meaningful depending on the volumes but, as a practical matter, any one car could move in a 20, 50 or 100 car train depending on the day of week or time of year or the operational convenience of the railway. The operating plan for any car could change multiple times over a year. For example, it could be handled in train X from interchange to yard Y and then delivered by switch crew Z one day, then handled in train A from interchange to yard B and delivered by switch crew Z another day. Once per year observations would not capture these changes.

Track Characteristics

The grade of track installed at any location is a function of the railway's operating plan and volume estimates of total traffic over a route or within a terminal. These decisions are not based solely on RIS traffic, so it is not reasonable to increase contribution margin on RIS based on the characteristics of track installed to handle the total expected volume.

Factors such as cars per train, miles, number of crews, car days consumed, etc. are important to the LRVC calculation and could vary by RIS location. If the Agency has the data to demonstrate that these factors vary in a way that results in meaningful differences in the LRVC among different RIS locations, then differences in RIS by location/terminal might be justified. Using these factors to justify differences in RIS by individual movements within a terminal has the potential to introduce distortions because the fluidity of railway operating plans frequently changes these factors.

4. Issue 4: Long-term investment needs of the railway companies (cost of capital methodology)

Answers to the questions related to this issue are covered in the report of Dr. Gould. Our comments here provide additional context.

The questions related to this issue appear to indicate that the Agency considers investment associated with RIS assets somehow different than the railways' overall investment in fixed assets. Very few (if any) railway investments are based solely on RIS traffic. The assets that are used to serve RIS traffic including yards, terminals, connecting tracks, locomotives, etc. are the same ones used to serve the rest of the railway's traffic.

In addition, as we discuss in our comments for Issue 5, whether the railway handles a shipment in linehaul service or in RIS service is largely based on their providing a rate/service/equipment package that is more attractive to the customer than another railway with access to the location through RIS. Over time, the same movement to an individual customer could be handled in linehaul service one year, month or day and in RIS the next. The investment required to serve the customer is not dependent on whether the movement is linehaul or RIS.

If the Agency has data that show particular assets exist for the sole purpose or largely for the purpose of serving RIS traffic it should publish the data and its analytical methodology leading to the conclusion that RIS traffic requires a higher than average contribution margin to cover fixed costs. Otherwise, for calculating RIS rates, the contribution margin required to cover fixed costs for RIS traffic should be the system average contribution margin required to cover the fixed costs on all traffic sufficient to cover the railway's cost of capital. . The new requirement in the Act that the Agency take into consideration any long term investment needed by the railways is accomplished by providing a contribution margin on RIS traffic sufficient to cover total fixed costs over all traffic.

5. Issue 7: Volume discount rate categories

Q14: Is the current block size minimum of 60 cars sufficient for recognizing the efficiencies gained from moving cars in a block?

The economics resulting from shipping in blocks may be present with blocks smaller than 60 cars. There may also be additional efficiencies achieved in unit train size shipments greater than 60 cars. We recommend that the Agency conduct an analysis to determine the economics at various block sizes.

Q15: Should the CTA determine rates for smaller or larger shipment sizes?

The economics of shipping in blocks of cars might be achieved at smaller block sizes. Blocks of 10, 20 or 30 cars are often handled similarly to a 60 car block with minimal handling at the interchange or at terminals in the RIS area. The work that must be performed by the railway in placing the cars at the facility could also be different depending on the configuration of the facility. If any block, say 20 or 60 cars can be placed on one track in the customer plant, the switch move could likely be made in the same amount of time regardless of block size so the larger the block, the lower the number of switch minutes (and the switching cost) per car. However, if the 20 car block can be placed on one track and the 60 car block must be broken up and placed in multiple tracks in the customer facility, the economics of the 60 vs. 20 car blocks quickly dissipate.

There could also be efficiency improvements with trains much larger than 60 cars. The size of unit trains has grown significantly since the 60 car block threshold was established. Unit trains now can have 130 to even 205 cars. If the interswitch carrier can take an entire train intact with the line haul carrier's locomotives and place it in a plant in one move, the efficiencies are likely to be greater than those achieved for 60 car blocks.

If the Agency has cost data that supports a meaningful difference in RIS rates based on block sizes both smaller and larger than 60 cars, then we recommend the Agency conduct the analysis and publish the data along with its methodology before making any changes. Only if the cost differences between shipment sizes are significant and consistent should this support development of additional categories of RIS rates.

6. Issue 8: Collecting interswitching service units

Q16: Is there another way to collect interswitching service units to accurately calculate the average variable costs of all interswitching movements, as required by subsection 127.1 (3) of the Act?

Please provide a rationale for your response.

We would need more information about the data collection process to make substantive comments. The Agency has published broad details such as the fact that the Agency visits select interchanges and talks with railway company personnel. Additional detail would include:

- Which interchanges did the Agency visit?
- How were these locations selected?
- Does the Agency visit each of them every year or do the locations change each year?
- How does the Agency select which interchanges to visit?
- The Agency indicates that it discusses service to a sample of shippers with railway personnel. How is this sample selected? Are the same shippers discussed each year or does that sample vary? If it varies, what is the process for changing the sample from year to year?
- What are the positions of the railway personnel with whom the Agency discusses switching operations?
- Do the Agency personnel make observations of switching operations over multiple days?
- What is the process that the Agency uses to translate their discussions with railway personnel into switch minutes used in costing?

If the Agency decides to create individual RIS rates by location as discussed in Issue 2, how would the Agency decide the RIS for interchange locations that it doesn't visit or for which it doesn't gather specific information? The Agency should make public a detailed description of its methodology for developing the switch minutes for each interchange, along with the average switch minutes used in the LRVC calculation and the average cost per switch minute. The data and methodology should be published in sufficient detail that stakeholders can understand the reason for the differences in RIS rates by location.

7. Issue 9: Transparency of the regulated interswitching rates and methodology

Q17: How can the CTA make the regulated interswitching rates and/or rate setting methodology more transparent and accessible to Canadians?

The creation of RIS rates is a process required by statute. Therefore, we believe it is desirable for the Agency to provide more detail on the data and process than it might provide for other decisions. This disclosure should take priority over any potential railway data confidentiality issues. The Agency should provide the unit costs and variability percent for at least the major cost categories included in its RIS LRVC, contribution margin, and rate calculations. The data should be published in sufficient detail that stakeholders can understand and duplicate the results. This is particularly important if the Agency creates individual RIS rates by location. Locations and customers that end up with higher RIS rates could become less competitive vs. customers at other locations. They should be able to clearly see through the Agency publication how the differences in railway costs to serve RIS traffic at each location drive the difference in their RIS rates.

Q18: Are there measures that railway companies can take to ensure shippers are aware of the applicable rate? For example, would it be appropriate to require railway companies to show the regulated interswitching rate, as a separate charge on the waybill? Should this charge be paid by the shipper directly to the railway company providing the interswitching service?

Shippers should be aware of the RIS rate since the Agency publishes its decisions. They should also be aware when they are utilizing RIS service on a movement. However, if the Agency in addition, established a rule that allows the shipper to separately pay the RIS charge to the RIS carrier that should eliminate any uncertainty about the applicable RIS rate being assessed on any RIS movement.

mcmillan

August 21, 2019

Schedule "C" – RMI Submission

mcmillan

Reply to the Attention of *François E.J. Tougas*
Direct Line *604.691.7425*
Direct Fax *604.893.2359*
Email Address *francois.tougas@mcmillan.ca*
Date *September 28, 2018*

BY EMAIL TO: ferroviaire-rail@otc-cta.gc.ca

Canadian Transportation Agency
15 Eddy St
Gatineau, Québec
J8X 4B3

Re: Consultation on the Rail Modernization Initiative

We are solicitors for Teck Resources Limited and its affiliates Teck Coal Limited and Teck Metals Limited (collectively, "**Teck**") in connection with the Agency's rail transportation consultation (the "**Consultation**") announced by news release on May 31, 2018 as part of the Agency's regulatory modernization initiative.[1]

In support of our submissions, we have appended letters from the Western Grain Elevator Association, the Canadian Canola Growers Association, the Western Canadian Shippers Coalition and the Mining Association of Canada, all of whose members have extensive dealings with Canadian National Railway ("**CN**") and Canadian Pacific Railway ("**CP**").

Throughout these submissions, we refer to the following documents and defined terms:

Documents

- **"Act"**: *Canada Transportation Act*
- **"ARCM Submission"**: McMillan LLP submission to Agency staff dated February 28, 2017 in response to the Agency's Consultation on the ARCM
- **"Board's Cost Order"**: Order No. 123994 issued April 5, 1967 of the Board of Transport Commissioners for Canada
- **"Decision R-6313"**: Reasons For Order No. R-6313 Concerning Cost Regulations made by the Railway Transport Committee of the Canadian Transport Commission dated August 5, 1969
- **"Discussion Paper"**: the Discussion Paper on Regulatory Modernization for Rail Transportation[2]
- **"Hellerworx Report"**: the expert report prepared by Hellerworx, Inc. entitled "CTA Regulatory Modernization Initiative Consultation" in response to the Consultation, as appended hereto as Schedule "A"
- **"Interswitching Regulations"**: Railway Interswitching Regulations (SOR/88-41)

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[1] Agency news release dated May 31, 2018: https://otc-cta.gc.ca/eng/content/canadian-transportation-agency-launches-consultation-rail-transportation
[2] Available at: https://www.otc-cta.gc.ca/eng/discussion-paper-regulatory-modernization-rail-transportation

- **"Operational Terms Regulations"**: Regulations on Operational Terms for Rail Level of Services Arbitration (SOR/2014-192)
- **"Order R-6313"**: Order No. 6313 of the Railway Transport Committee of the Canadian Transport Commission, dated August 5, 1969
- **"Order R-91"**: Agency Determination in Order No. 2015-R-91
- **"Proposed LHI Guide"**: Agency's proposed guidance document relating to long-haul interswitching applications[3]
- "**Proposed LHI Rules**": Proposed Canadian Transportation Agency Rules of Procedure for Long-Haul Interswitching Adjudication[4]
- **"R-66"**: Agency Decision LET-R-66-2010 entitled "Review of the Railway Interswitching Regulations" dated April 21, 2010
- **"RCR"**: Railway Costing Regulations (SOR/80-310)
- "**UCA**": Uniform Classification of Accounts and Related Railway Records

Defined Terms

- **"AMPs"**: administrative monetary penalties
- **"ARCM"**: Agency Regulatory Costing Model
- **"ARCM Consultation"** means the consultation on the Agency's Regulatory Costing Model[5]
- "**Committee**": Railway Transport Committee of the CTC
- **"CTC"**: Canadian Transport Commission
- **"EBS"**: EBS Management Consultants, Inc.
- **"FOA"**: final offer arbitration under sections 159 – 169.3 of the Act
- **"LHI"**: long-haul interswitching under sections 129 – 136.9 of the Act
- **"LRVC"**: long run variable cost
- **"Macpherson Commission"**: Royal Commission on Transportation commenced by the Order in Council dated May 13, 1959, chaired by Murdoch MacPherson
- **"NTA, 1967"**: *National Transportation Act, 1967*
- **"RIAS"**: Regulatory Impact Analysis Statement
- "**SLA**": arbitration on level of services under sections 169.31 – 169.43 of the Act
- "**StatsCan**": Statistics Canada
- "**STB**": United States Surface Transportation Board
- "**URCS**": the Uniform Rail Costing System prepared by the STB

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[3] Available at: https://otc-cta.gc.ca/eng/long-haul-interswitching-proposed-guidance-material.
[4] Available at: https://otc-cta.gc.ca/eng/proposed-canadian-transportation-agency-rules-procedure-long-haul-interswitching-adjudication.
[5] As initiated by the Agency conducted between January 9, 2017 and February 28, 2017, as described at: https://www.otc-cta.gc.ca/eng/consultation/consultation-agencys-regulatory-costing-model-arcm.

INTRODUCTION

1. Our submissions address Item 1 (Amendments to the *Railway Interswitching Regulations*), Item 2 (Administrative Monetary Penalties), Item 5 (Shipper Remedies) of the Discussion Paper, and, at the Agency's invitation, the Agency's mandate pertaining to the economic regulation of railway companies, which are interspersed throughout these submissions. Our submissions also address the Agency's request for feedback as to whether all of its rail-related regulations should be consolidated into a single regulation and some ways the Agency might expedite its contested processes.

2. Teck and the organizations supporting these submissions are interested in the outcome of the foregoing in that

    a. in connection with Item 1, each of the railway costing processes in which the Agency engages (Interswitching, FOA, other processes) directly or indirectly affects them to a greater or lesser degree, largely in relationship to their degree of captivity and to the extent those processes are available and useful to them,

    b. in connection with Item 2, undiminished access to statutory remedies remains critical to them, notwithstanding administrative monetary penalties that may or may not be imposed by the Agency,

    c. in connection with Item 5, statutory remedies are vital to their ability to overcome, if only to some degree, the effects of CN's and CP's market power, unilateral imposition of terms that impair their viability and ability to supply customers in domestic and world markets and their requirement to forego remedies under the Act as a condition of contract, and

    d. in connection with the Agency's mandate pertaining to the economic regulation of railway companies, they are reliant on the robustness, correctness and fairness of the Agency's processes and the execution of its mandate; indeed, they rely on the Agency to adequately regulate, at the very least, those parts of CN's and CP's rail systems that operate as natural monopolies or otherwise exhibit attributes of entities that can and do exercise market power, whether to extract rents, diminish levels of service or expend resources in preserving their market power.

INITIAL MATTERS:

Consolidation Of All Rail-Related Regulations

3. The Agency seeks views on whether all of its rail-related regulations should be consolidated into a single regulation, for ease of reference.[6] The Agency should not do so for the following reasons:

    a. First, a consolidation of all of the Agency's rail-related regulations into a single regulation would necessarily require a renumbering of the provisions comprising the consolidated regulation. However, many decisions of the Agency and courts apply and interpret the various provisions of those individual regulations based on their current numbering. A consolidation and renumbering would cause unnecessary difficulty in tracking references in Agency and judicial decisions to a consolidated form.

    b. A single consolidated rail regulation would be lengthy, making it difficult for a representative of an interested person, who may or may not be very familiar with the Agency's processes and regulations, to find a specific provision.

    c. So long as all of the Agency's rail-related regulations are available at a single website, which they are and which has served interested persons well to date, consolidation achieves nothing of value, and is potentially harmful.[7]

Agency Proceedings

4. The Discussion Paper invites comments on any area relating to the Agency's mandate pertaining to the economic regulation of railway companies. In relation to Agency proceedings involving shipper remedies, some shippers express concern about the length of time it takes to obtain an Agency order. While we recognize that the timeframes provided in the Act[8] for proceedings before the Agency are generally shorter than what would be required to bring civil litigation to a judgment, the potential for delay can discourage shippers from exercising remedies under the Act.

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[6] The Discussion Paper indicates the Agency "seeks views on whether all of its rail-related regulations should be consolidated into a single regulation, for ease of reference."
[7] See http://laws-lois.justice.gc.ca/eng/acts/C-10.4/index.html.
[8] 120 days from the date on which the originating documents are received, except in the case of level of service complaints (90 days from receipt of an application under s. 116) and applications for LHI (30 business days from receipt of the application).

5. We recommend that the Agency consider making greater use of case conferences to assist in streamlining proceedings before it. An teleconference with parties may provide an important opportunity to manage the process and reduce delay by addressing, for example:

    a. Common procedural matters:

    There are certain procedural matters that commonly arise in Agency proceedings, such as requests for confidentiality. To the extent that hearing submissions from the parties by way of conference call can expedite a determination in relation to routine procedural issues, a case conference may assist in facilitating an expeditious process.

    b. Time frames for various intermediate steps such as written questions and requests to produce documents and other preliminary objections or requests:

    The *Dispute Adjudication Rules* permit both of these measures to be taken at any time before the close of pleadings. A party who serves written questions and requests to produce documents towards the end of the time allotted for the filing of a pleading may request an extension until a time after responses are received. Where such a request is then followed by a further request of a preliminary nature again filed at the end of the now extended timeframe, significant successive delays can result. A case conference early in the proceeding could provide an opportunity to clarify whether either party is contemplating these or similar steps and to set appropriate deadlines for such matters *in advance*, thereby reducing the need for successive extensions after the fact.

ITEM 1: AMENDMENTS TO THE *RAILWAY INTERSWITCHING REGULATIONS*

6. The Agency, in the Discussion Paper, has inquired about the four following sets of questions in connection with the Interswitching Regulations:

    1. What amendments, if any, to the *Railway Interswitching Regulations* would help ensure clarity on how the CTA calculates regulated interswitching rates?
    2. What guidance material would be useful in understanding the CTA's development of regulated interswitching rates?
    3. Taking into account that Long Haul Interswitching rates are to be set on a case-by-case basis, what type of guidance material would be useful in understanding how the remedy works and how the CTA will make rate determinations?
    4. Are any provisions of the *Railway Costing Regulations* of current relevance? What information would be useful regarding how costing is set by the CTA?

Consultation Question 1: What amendments, if any, to the *Railway Interswitching Regulations* would help ensure clarity on how the CTA calculates regulated interswitching rates?

7. We begin here with the need for costing data generally, including in connection with the statutory requirement to set interswitching rates on the basis of cost, within the context of the Agency's economic regulatory mandate. We then make submissions regarding the impact on stakeholders arising from the lack of data, the need for disclosures and possible amendments relating to the new statutory requirement relating to long term investments by railway companies.

Economic Regulation Mandate

8. There are several reasons why railway costing data is necessary for the Agency to fulfill its mandate pertaining to the economic regulation of railway companies:

    a. *Compliance with the Act*: the Agency's processes require it to conduct costing exercises, not just for regulated interswitching, but also FOA and other processes. The Agency should not be impaired in any way, either by Transport Canada, StatsCan, other arms of the federal government, CN or CP or any other person, in the conduct of this particular aspect of its economic mandate. We submit that the Agency has been unduly constrained, either internally or externally, to the detriment of its mandate and the broader economy, and further submit that these constraints impair Canadian competitiveness. We do not agree that all information kept confidential by the Agency, as argued or demanded by CN and CP, is just or warranted, particularly in light of the disclosures CN and CP make in the United States.

    b. *Stakeholder assurances*: to the extent that costing processes used by the Agency can be replicated outside the Agency, stakeholders enjoy a greater degree of comfort that the Agency is in compliance with the Act, that government bodies are assisting rather than hindering the Agency in its economic regulatory mandate, and that its processes are valid and costing determinations accurate.

    c. *Shipper-carrier relations*: valid and accurate costing determinations that can be replicated help avoid unnecessary misunderstandings about CN's and CP's rates and levels of service, eliminate unnecessary resort to remedies under the Act and permit far better forward planning for development of shipper production facilities that are often exposed to information vacuums in which to advance large infrastructure projects, the result of which threatens Canadian economic output, growth and competitiveness.

projects, the result of which threatens Canadian economic output, growth and competitiveness.

Lack of Data

9. Insufficient publicly available information undermines third party ability to reproduce the Agency's regulatory cost determinations. In part, the availability of such information is diminishing due to the conduct of CN and CP. For example, one publicly available resource that was formerly useful to persons seeking to estimate railway costs was "Rail in Canada" published by StatsCan.[9] Rail in Canada formerly contained detailed financial and statistical data disaggregated into cost categories. StatsCan discontinued this publication following the 2009 version, reportedly because CN or CP or both declined to provide permission to publish the data.[10]

10. Following the 2009 version of Rail in Canada, StatsCan discloses data for only 35 accounts for the operations in Canada of CN and CP combined, whereas before that time, it disclosed annual data for 112 accounts for CN and CP's operations in Canada separately.[11] This reduction in available data affects the degree to which third party railway costing models can be updated.

11. In cases where there are alternative, effective, adequate and competitive means of transporting all of a shipper's traffic, disclosure of railway costing information might not be needed, but disclosure is necessary to the extent effective competition is lacking. It is no answer to say that (a) the information CN or CP provides to the Agency for use in the ARCM is confidential to that railway company, or (b) that the information could be used in a statutory process, such as FOA or otherwise, by a shipper. First, substantial information about CN and CP is disclosed both inside and outside of U.S. rate proceedings, such that shippers in Canada are at a considerable disadvantage relative to U.S. shippers in their respective dealings with CN and CP. Second, statutory remedies exist for the very reason that CN or CP may exert market power as a result of the market structure in which they operate; the remedies may constrain the exercise of that market power in some circumstances.

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[9] *Rail in Canada, 2009*, Statistics Canada, Catalogue No. 52-216-X: https://www150.statcan.gc.ca/n1/pub/52-216-x/2009000/part-partie1-eng.htm.
[10] Comments Prepared for the Western Canadian Shippers Coalition and the Coalition of Rail Shippers by Hellerworx, Inc. dated January 31, 2013 in the Canadian Transportation Agency's Staff Consultation on Amendments to the Uniform Classification of Accounts: https://www.otc-cta.gc.ca/sites/all/files/consultations/wwcms-cra.pdf.
[11] ARCM Submission, page 9.

12. The use of the ARCM in setting interswitching rates and other rate-setting purposes is opaque, especially to CN's and CP's customers. Customers rely on the ARCM and the Agency's processes to accurately set interswitching rates, and parties often rely on cost determinations in FOA proceedings and in rate negotiations. However, third parties can neither see the inputs nor how they are used, to say nothing of their ability to reproduce results or to contest the correctness of the inputs or the results of the ARCM cost determinations.

13. The ARCM situation contrasts sharply with other regulated rate environments, where regulators often facilitate stakeholder access to data and cost models, while protecting commercially sensitive information.

14. The asymmetry of access to data between railways and shippers is rather striking in the FOA setting, in which the railway company has all of the necessary information, the shipper has a few bits of it and the arbitrator has none. An FOA arbitrator can obtain an estimate of the LRVC from the Agency, on whom parties rely to provide an objective determination of the LRVC of a subject movement of goods, based on the service units provided by the parties. The shipper can engage third party consultants, who may make observations to calculate service units. Thus, the shipper's means of obtaining service unit information results in an estimate based on observations over time, making the FOA process that much more expensive and time-consuming. The unit costs must be estimated by other third party consultants. However accurate those estimates may be, they are calculated in an asymmetrical, opaque, incontestable setting. On the other hand, a railway company knows the actual costs, but is not subject to examination, again unlike other regulated rate settings not dissimilar to rail.

15. In the context of regulated interswitching, the asymmetry of information is no less. There is no opportunity to contest the rates, the inputs used to determine the rates, the costs on which those rates are based, or the methodology used to determine them.

Amendments to the Interswitching Regulations

16. In order to bring some semblance of balance to the asymmetry of information between railway companies and shippers in the interswitching context, the Agency should disclose all information regarding its costing inputs, processes, methodology and supporting information.

17. Following the implementation of the *Transportation Modernization Act*, the Agency is now required to make its determination of the interswitching rates annually, in advance of the year for which the rates are to apply, and is required to publish the method that it followed

for determining the rates,[12] both of which reflect the importance of those rate determinations to shippers that use them directly, as well as those who may be subject to them under the LHI remedy.

18. We further submit that the Agency should amend the Interswitching Regulations to disclose its actual methodology and the inputs the Agency used for that year, as contemplated by subsection 127.1(4):

> "The Agency shall, when it makes its determination under subsection (1), publish the method that it followed for determining the rate."

19. We submit that advance publication of the Agency's methodology, by amendment to the Interswitching Regulations, would increase public confidence (i) in the Agency's interswitching rate setting process, (ii) that the process is consistent, and (iii) that the process is seen to be consistent, from year to year. Doing so would increase transparency, thereby allowing shippers to be confident, in advance, that the rates will be determined in a valid, predictable and accurate manner, thus enabling shippers to plan accordingly.

Long-term Investment

20. The *Transportation Modernization Act* imposes a new requirement for the Agency to consider "any long-term investment needed in the railways" in setting interswitching rates.[13] The Agency already takes into account that investment requirement in the cost of capital calculated for CN and CP; consequently, the Agency should not add any amount to the cost basis for long term investment that is already taken into account in the cost of capital. To the extent there is an amount that is not taken into account, the Agency should disclose, in its annual publication of interswitching decisions:

    a. the factors the Agency considered in taking such costs into account;

    b. a description of amounts taken into account or added to the rate, separated from the variable cost and the margin above variable cost added to derive the rate;

    c. confirmation that any such costs were taken into account at book value for new capital items only.

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[12] Subsection 127.1(1) of the Act states: "The Agency shall, no later than December 1 of every year, determine the rate per car to be charged for interswitching traffic for the following calendar year."
[13] Paragraph 127.1(2)(b) of the Act.

21. As a matter of transparency, the Agency also should disclose, in advance, by amending the Interswitching Regulations, how the Agency will meet the requirement in s.127.1(2) of the Act, including the factors it will consider.[14] As indicated in the Hellerworx Report, the Agency should also disclose the methodology for applying the long-term investment costs to the interswitching rates.[15]

22. We submit that there are numerous considerations that should and should not be taken into account in this examination, keeping in mind that long term investment is already accounted for in the cost of capital. We refer to five such considerations.

    a. The Agency should disclose and justify the duration of the "long-term" investments by reference to actual plans that are consistent with past practice. Too often, both CN and CP have announced but failed to implement infrastructure projects and conflated announcing new capital projects with expenses for sustaining capital. Therefore, no amount for long term investment not already in the cost of capital should be entertained until actually spent and then only to the extent of such capital cost, without double counting an amount in the cost of capital.

    b. "Long-term investment needed in the railways" should be discrete and considered only to the extent that such investment is required to provide interswitching services, and not in any way should the Agency consider the overall long-term investment needed across the networks of CN and CP to provide service across the networks. The Agency should identify how such investments are not otherwise captured in the Agency-determined cost of capital, and disclose why the long-term investments are required for interswitching services.[16]

    c. If the Agency determines the "long-term investment needed in the railways" is to be applied on an interchange by interchange basis, the Agency should disclose why each specific interchange requires long-term investment.[17]

    d. "Long-term investment needed in the railways" should be limited to such investment in Canada.

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[14] Subsection 127.1(2) of the Act states: "In determining an interswitching rate, the Agency shall take into consideration (a) any reduction in costs that, in the opinion of the Agency, results from moving a greater number of cars or from transferring several cars at the same time; and (b) any long-term investment needed in the railways."
[15] Hellerworx Report, pages 10 - 11.
[16] *Supra*, note 15.
[17] *Supra*, note 15.

e. The Agency perhaps should account for a significant investment in information technology that may not be allocable to a particular jurisdiction, not by some remote connection but only to the extent it is applicable to regulated interswitching and not accounted for or duplicated by an amount in the cost of capital.[18]

23. In our view, all of these factors should be published in the Interswitching Regulations. If the Agency decides not to amend the Interswitching Regulations as described above in respect of the "long-term investment needed in the railways", at the very least, it should publish a guidance document that describes the method for calculating interswitching rates, as described in the Hellerworx Report:

> "Each year, as part of its required publication of the method for calculating interswitching rates, the Agency should include the specific investment items included in determination of the interswitching rate, the amount of investment costs and how any contribution margin used to determine each of the interswitching rates is modified to account for the addition of long term investments not otherwise captured in the Agency-determined cost of capital."[19]

24. Again, if the Agency prefers a guidance document over amendments to the Interswitching Regulations, guidance is preferable in advance of issuance of a decision as described in §21.

Consultation Question 2: What guidance material would be useful in understanding the CTA's development of regulated interswitching rates?

25. Below we identify the various material, information, documents and other disclosures that would be useful in understanding the Agency's development of interswitching rates.

Disclosure of the ARCM

26. We do not see that the Act prevents the Agency from disclosing the ARCM or related information regarding its processes or methodology for regulatory costing. Public disclosure of the ARCM would serve many useful purposes, including

a. advancing transparency and increasing stakeholder engagement and empowerment, which is lacking at present,

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[18] For example, CN's 2017 Annual Report indicates that in 2017, CN spent "$0.4 billion on strategic initiatives to increase capacity and support growth opportunities, including line capacity upgrades and information technology initiatives, $0.4 billion on implementation of Positive Train Control (PTC)..."
[19] Hellerworx Report, page 11.

b. increasing certainty regarding the correctness of the ARCM, thereby minimizing the potential for disputes, including during the course of proceedings, the setting of regulated interswitching rates and any revision to the annual MRE determination that might involve a re-examination of its premises in relation to cost,

c. allowing a shipper to better estimate the extent to which its traffic contributes to a railway company's constant costs, and thereafter assess that contribution in light of the service that it is receiving, and

d. allowing a shipper to make better-informed decisions as to whether to seek a remedy in respect of its traffic, and if so, which remedy is most appropriate.

27. The secretiveness surrounding the ARCM contrasts sharply with the regulatory system of the United States. We have testified before surprised members of the House Standing Committee on Transport, Communities and Infrastructure and the Senate Standing Committee on Transportation and Communications regarding this contrast. We think the issue deserves a fresh look.

28. As described in the Hellerworx Report, the STB's website allows a person to download and use URCS, which is a general purpose railroad costing system. The STB uses URCS for a variety of statutory and non-statutory functions, including "to provide the railroad industry and shipper community with a standardized costing model".[20] URCS allows shippers and their representatives to apply railroad unit costs to user-defined rail carrier shipments, and thereby assess rail freight rate competitiveness. URCS has allowed third parties to determine revenue and variable cost ratios and contribution margins on individual movements and allowed interested parties to make informed decisions as to whether to challenge a rate before the STB.

29. While there are many important differences between railway price and output regulation in Canada and the United States, and quite different policy objectives, the disclosure of costs under URCS represents a much more common and proven approach to the regulation of network industries, such as rail transportation, even in Canada, that starts with transparency. In this respect, Canadian rail regulatory practice is out of step with other Canadian regulatory environments, as described in detail in our ARCM Submission.

30. For these reasons, the Agency should make the ARCM publicly available, in its present form, just as the STB has done in respect of URCS. The possibility that third parties will learn something about CN's or CP's costs cannot be a reason to withhold such information

[20] Hellerworx Report, page 6 and Appendix 1. Also, see: https://www.stb.gov/stb/industry/urcs.html.

from disclosure, since both CN and CP are required to make such disclosures in the United States. The resulting dichotomy puts shippers in Canada at a distinct disadvantage to their American counterparts.

31. In any event, the increased disclosure of railway costing information in URCS and its components in the United States has not caused a decrease in the number of revenue adequate railroads; in fact, as the Hellerworx Report indicates, the profitability of railroads in the United States has increased significantly since 2005 despite greater disclosure.[21]

32. As described in the Hellerworx Report, it is not clear that changes to the ARCM, or its underlying components, are necessary.[22] Accordingly, we recommend that the Agency not change the ARCM. However, if the Agency determines that changes to, or a recalibration of, the ARCM are required, it should make such changes only after fulsome consultation with interested stakeholders during which those stakeholders are provided with access to sufficient information and data to provide meaningful submissions.[23] If, following that consultation, the Agency determines that changes to the ARCM and its components are required, the Agency should issue a report that discloses any such changes, including, as described in the Hellerworx Report, any "changes in cost/operating statistics relationships, cost calculation methodology, unit costs and cost variability by individual account or groups of accounts for CN and CP", together with the rationale for each such change.[24] The report should also contain a description of the likely impact each change will have on the ARCM and the determination of interswitching rates.[25]

33. If the Agency determines that it will not disclose the information described above, we recommend that the Agency decline to change the ARCM.[26]

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[21] Hellerworx Report, Appendix 1.
[22] Hellerworx Report, pages 8 – 9.
[23] Hellerworx Report, page 8. The Hellerworx Report describes "recalibration" as meaning "the fundamental relationships between the operating and cost parameters would remain intact, but the constants and regression coefficients on the independent variables could change as a result of updated data and analyses."
[24] Hellerworx Report, page 9. The Hellerworx Report describes the following example of a potentially satisfactory disclosure in respect of a change to the ARCM as: "For example, the report could state that, when implemented, a specific change in the ARCM will cause the variability of gross tonne mile costs to increase by X percent for CN and Y percent for CP."
[25] Hellerworx Report, page 9. The Hellerworx Report provides the following example of a potentially satisfactory description of the likely impact of a change to the ARCM: "For example, a particular change will decrease the variability percent of unit cost per gross tonne mile, which is likely to have an X percent change in the interswitching rates in the next update."
[26] Hellerworx Report, pages 8 – 9.

Economic Regulation Mandate (Disclosure of the ARCM):

The disclosure of the structural form of the ARCM is important, because to the extent information is not freely and fully available to all parties, the inefficiencies of market failure will remain.[27] *The most basic of the Agency's mandate pertaining to the economic regulation of railway companies is economic efficiency, which is no different than the basic mandate of other economic regulatory bodies and federal schemes to regulate competition. In this regard, the disclosure of information makes both competition and efficiency feasible. The Agency's mandate is not to protect railways from competitive and efficiency-enhancing processes. Several of the following disclosure submissions fall also within this mandate.*

Disclosure of Rail in Canada information

34. As discussed above and in the Hellerworx Report, the information that was provided in the former Rail in Canada publication in 2009 and earlier is important to ensure that third party costing models have sufficient data, including in respect of the relationships between cost and operating statistics, to produce reliable cost estimates.[28] We recommend disclosure of past or archived information, including cost and operational data, formerly contained in the Rail in Canada publication. While the Agency may lack jurisdiction to make such information public, we recommend that the Agency request, in writing, that StatsCan and Transport Canada resume the disclosure of this information, and that such disclosure would assist the Agency in its efforts to increase the transparency of the Agency's costing processes.[29] If StatsCan and Transport Canada determine not to release current information, we recommend that StatsCan and Transport Canada could release three year old information, thereby addressing any reasonable confidentiality concerns, while disclosing useful information that railway costing experts might use to calibrate their costing models and estimates.[30]

Disclosure of Unit Costs

35. The Hellerworx Report indicates that the CN and CP unit costs are critical to enabling shippers and other parties to calculate railway variable costs.[31] We recommend that the Agency, as part of its annual interswitching decisions, disclose the unit costs by account or account grouping that it calculates for each of CN and CP, as part of updating the ARCM. We also recommend that it do so in the context of FOA costing determinations, made from time to time.

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[27] ARCM Submission, Gillen Report, pages 6 – 7.
[28] Hellerworx Report, pages 3 – 4, 7.
[29] Hellerworx Report, pages 5, 7.
[30] Hellerworx Report, page 6.
[31] Hellerworx Report, page 5.

36. To the extent that the Agency determines that it cannot disclose the unit costs by individual carrier or cost category, we request that the Agency disclose unit cost information by cost account grouping.[32]

Disclosure of Drivers and Variabilities

37. We understand that the extent to which a railway cost, as identified in the UCA, varies with various drivers thought to have caused that cost, forms the basis of the ARCM. We fail to see why the identity of the drivers for each cost account or the variabilities are considered confidential information.

38. A non-railway party in possession of all of the drivers and variabilities without access to that railway company's UCA filing lacks the base data from the UCA with which to use the drivers and variabilities to produce the unit costs for the requisite railway cost components. Third party rail costing consultants currently perform this exercise, based on proprietary railway costing models. Those consultants then assess and use observations and data in respect of a subject movement to produce the service units for the movement, to which the consultant applies unit costs in order to produce an estimate of the LRVC.

39. Full disclosure of the drivers and variabilities would allow shippers and their representatives to confirm that a costing model, such as the ARCM or a third party model, uses the most accurate information possible at a given time. Disclosure of the actual disaggregated costs provided in a railway company's UCA filings would lead to even more accurate estimates. Disclosure of the drivers and variabilities would reduce the potential for disputes between shippers and railway companies as to the quality of the shipper's LRVC estimates, whether in negotiations or otherwise.

40. At a minimum, we see no reason why the drivers could not be disclosed in their entirety and in detail and submit that the Agency should release such information regularly and, in any event, no less than annually.

Disclosure of Agency Manuals

41. The Agency has disclosed that it possesses at least the following manuals that are relevant to railway costing matters:

    - CN and CP Costing Manuals

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[32] Hellerworx Report, page 5.

- CN Procedures for the Annual Statutory Determination of CN Revenue and Revenue Caps;
- CN and CP Procedures for the Annual Statutory Determination of the Volume-Related Composite Price Index (VRCPI Procedure);
- CP Procedures for the Annual Statutory Determination of CP Revenue and Revenue Caps;
- The Revenue Cap Program: An Overview of the Agency's Internal Program which fulfills the legislated mandate contained in the Canadian Transportation Agency (Revenue Cap Program Manual);
- The Volume-related composite price index: A Component of the Revenue Cap – An overview of the Agency's internal program which fulfills the legislated mandate contained in the Canadian Transportation Agency (VRCPI Program Manual);[33] and
- Generalized Regulatory Costing Manual.[34]

42. The shipping and receiving stakeholders that rely on interswitching should be able to review the various manuals that are relevant to the Agency's regulatory costing functions. The Agency should disclose Agency manuals that allow the Agency to make its own determinations of the cost variabilities and unit costs to be used in the ARCM, and analyses supporting unit cost determinations.[35]

43. To the extent the Agency has prepared Agency manuals that do not contain the confidential information of CN and CP, the Agency should disclose these in their entirety, including any analyses supporting Agency decisions regarding unit cost determinations.

44. To the extent that manuals relevant to the determination of interswitching rates may contain a mixture of information prepared by the Agency and information provided by CN or CP that is in fact confidential under the Act, which we conclude must be a small set, the Agency should redact the confidential information and release the remaining portion. If the Agency determines that such disclosure is not permissible, the Agency should disclose a public version of the Agency manual that contains (a) average causal relationships for accounts rolled up into larger groupings than used by the ARCM, and (b) combined cost/operating statistics for CN and CP by account or by account group, all as described in the Hellerworx Report.[36]

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[33] The Agency's website discloses the existence of these manuals on its "Sources of Federal Government and Employee Information" page: https://www.otc-cta.gc.ca/eng/publication/sources-federal-government-and-employee-information.
[34] The Agency's Generalized Regulatory Costing Manual is referenced in the title of the consultation document the Agency issued in connection with the ARCM Consultation.
[35] Hellerworx Report, page 5.
[36] Hellerworx Report, page 7.

45. As we understand it, CN and CP costing manuals describe the form of analysis (e.g., regression, direct assignment, etc.) that relate costs to operating parameters. While it is possible that stakeholders could understand generally how revised analyses would be performed, they would not allow others to easily produce unit costs. Stakeholders should know how the Agency receives information from CN and CP and how the Agency will direct CN and CP, using its authority under subsection 157(5), especially the "form and manner" language, to specify how they are to capture, process and produce information. For example, will the Agency require divisional data? To the extent that CN and CP produce the processed inputs relied on by the Agency for modeling (e.g., unit costs), the more important it is for stakeholders to know what is in the CN and CP costing manuals.

46. To the extent that the Agency determines that it is unable to disclose one or more manuals or such disclosed manuals can only contain a high level non-quantitative description of the relationships between the cost and operating accounts, we recommend that the Agency issue a public supplement to the Agency manual that discloses the (a) average causal relationships for accounts rolled up into larger groupings than used by the ARCM, or (b) cost/operating statistic relationships for CN and CP by account or by account groups.[37]

Disclosure of CN and CP Costing Manuals

47. The Agency's website describes the railway costing manuals as follows:

> "The railway companies' *costing manuals* document the identified causal relationships between expenses and operating statistics....
>
> In accordance with the *Railway Costing Regulations*, railway companies are required to prepare and file with the Agency a costing manual containing complete descriptions of the costing methods and procedures it follows in the development of its costs. The Agency is responsible for confirming the costing manual as filed, or with such changes as the Agency may direct.
>
> The manuals identify the grouping of the expenses for cost analysis purposes (*dependent variable expenses*), the causal factors (*independent variables*), the years of analysis and the method of cost development (direct assignment, direct analysis, regression analysis)."[38] [italics in original]

48. We understand that these manuals specify the account aggregations used in the costing process, the driver(s) to which each cost or cost aggregate is related, and the procedure used

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[37] Hellerworx Report, page 7.
[38] According to the Agency's website entitled "Overview of the Agency's regulatory costing model": https://www.otc-cta.gc.ca/eng/overview-agencys-regulatory-costing-model.

to quantify the relationship. We understand that numeric values for these quantifications are not included in the manuals.

49. To the extent that the railway manuals contain information that is not confidential under the Act, the Agency should redact the confidential information and disclose the remainder of the railway manuals, at the very least to shippers or intermediaries who rely on the uses to which railway company variable costs are put.

Disclosure of Interswitching Rate Setting Methodology

50. To the extent, if at all, that the amended Interswitching Regulations do not address portions of the Agency's methodology for the determination of interswitching rates, the Agency should disclose that methodology in detail in guidance documents. Such methodological information should include, for each interswitching rate determined and for each interchange location analyzed, the identity and average amount of each service unit. The public will not have access to CN or CP unit costs; they will be unable to determine the variable cost incurred by each, although such disclosure would allow third parties to make reasonable estimates of such costs. We address this topic in more detail below in response to Item 1, Question 4, Part 2.

Disclosure of Form and Manner of Reporting of Unit Costs

51. Subsection 157(5) of the Act requires CN and CP, each year, to provide to the Agency "in the form and manner specified by the Agency" all unit costs, output units and other financial, statistical and supporting information for the preceding calendar year that is required for the Agency's costing processes. The Agency should disclose the form and manner in which it will require CN and CP to provide the requisite information; we do not believe that doing so would involve disclosure of confidential information.

Fixed vs. Variable Costs

52. Certain other clarifications would be helpful to ensure clarity on how the Agency calculates regulated interswitching rates. Order R-91 summarized the Agency staff's review of the variability factors used in the ARCM, including the variable and fixed portions of railway cost accounts. Issue #5 of Order R-91 changed the Agency's determination of the system average contribution to fixed (constant) costs that must be applied to system variable costs to cover system total costs for each of CN and CP.[39]

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[39] Paragraph 30 of Order R-91 states: "This means, for CN, the system average contribution to fixed (constant) costs that must be applied to system variable costs to cover system total costs increases from 19 percent to 56 percent, and for CP, it increases from 20 percent to 61 percent. These higher contribution levels are also in better alignment with U.S. practice,

53. As discussed in the Hellerworx Report, the Agency should publish guidance that addresses how the change in the ratio of variable costs versus fixed costs would differentially affect line haul costs and interswitching costs, and whether the ratio is expected to act similarly on each.[40] Similarly, the Agency should explain the reason for any future changes in the overall ratio of variable costs versus fixed costs for each of CN and CP, and any differential impact on line-haul costs versus interswitching costs.[41]

54. In addition, the Agency has made various pronouncements regarding the contribution markup above the LRVC, which was calculated using the "old" variable/constant ratio, required to cover CN's and CP's system wide total costs. Guidance as to the effect under the "new" variable/constant cost ratio is necessary so that parties know how to interpret the "old" variable/constant ratio statements, including in the context of interswitching.[42] The Agency should also issue guidance as to how any future changes in variabilities would impact these ratios and how the change will affect the determination of interswitching rates.[43]

Economic Regulation Mandate (Fixed vs. Variable Costs):

The present uncertainty regarding the interpretation of the fixed costs versus variable costs ratio is not workable. Agency staff has provided guidance regarding how to make adjustments and account for the effects of R-91 currently. If the Agency makes changes that disturb this guidance, the Agency should issue equally useful guidance. The Agency's costing processes, particularly in the interswitching and FOA contexts, are intended to provide relief to captive shippers, in the forms of competitive access and more attractive rates and conditions of service, respectively. To advance clarity and to allow shippers to gain confidence in the exercise of remedies under the Act, the Agency should issue guidance on the interpretation of variable versus fixed cost ratios.

Consultation Question 3: Taking into account that Long Haul Interswitching rates are to be set on a case-by-case basis, what type of guidance material would be useful in understanding how the remedy works and how the CTA will make rate determinations?

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where by legislative mandate a contribution of up to 80 percent on the calculated variable costs is not eligible for rate disputes before the Surface Transportation Board."

[40] Hellerworx Report, page 5.
[41] *Ibid.*, note 40.
[42] *Ibid.*, note 40.
[43] *Ibid.*, note 40.

55. The Agency has already prepared and circulated to interested stakeholders the Proposed LHI Guide and the Proposed LHI Rules. In general, the Proposed LHI Guide provides some useful guidance, although it could be improved by addressing certain other items.

56. To avoid unnecessary confusion, it would be helpful for the Agency to clarify that the overall approach to determining LHI rates is limited to the LHI process, and it is not intended for use in other Agency processes, including FOA or regulated interswitching.

57. The Proposed Guidance Material for LHI applications should reflect amendments made to Bill C-49 regarding access to LHI orders for facilities within 30km of an interchange as well as those that are dual served. As it stands, the Guidance Material definitions of "local carrier" and "Long-haul interswitching point" state require that the point of origin or the point of destination be *exclusively* served by the Class 1 rail carrier. Likewise, under the "Eligibility" section, the Guidance Material states that a shipper may apply for an LHI order if *the shipper has access to the lines of only that railway company at the LHI point*, which is repeated again at point *8.a.* in the "What to include in an application" section of the Guidance Material. In fact, C-49 was amended such that the points of origin or destination do not have to be exclusively served by a Class 1 rail carrier. Rather, the amended s.129(1)(a) requires a "shipper has access to the lines of only that railway company at the point of origin or destination of the movement of the shipper's traffic in the reasonable direction of the traffic and its destination."

58. An example of how the Guidance Material, and indeed the guidance referred to in Item 5 of our submissions, might be improved by using plain language as follows:

> *"Typically, a facility would only have access to an LHI order if it is served by only one Class 1 rail carrier. However, in some circumstances there are facilities that are served by two Class I rail carriers or have access to interswitching and are nevertheless eligible for LHI. The key is whether such a shipper has access to only one Class I rail carrier at origin or destination that is in the reasonable direction of the traffic and the destination of that traffic. Interested shippers should speak with Agency staff before applying for an LHI order."*

59. Subsection 135(4) of the Act requires the Agency, in setting the LHI rate, to have regard to "the density of the traffic on the lines of the local carrier on which the traffic is to be moved and any long-term investment needed in those lines".[44] The Proposed LHI Guide should be

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[44] Subsection 135(4) of the Act states: "The Agency shall determine the rate described in paragraph (1)(b) by having regard to the factors described in subsection (3), the density of traffic on the lines of the local carrier on which the traffic is to be moved and any long-term investment needed in those line."

expanded to describe how the Agency will use density data in setting LHI rates, how it will determine the extent of the long-term investment needed in the relevant railway lines that is not already captured elsewhere, including how such costs may be amortized, and any related matters.

60. In addition, paragraph 136.6(2)(a) of the Act makes the connecting carrier responsible for a prorated share of the costs of operating and maintaining the interchange during the period during which the LHI order applies.[45] The Proposed LHI Guide should be expanded to disclose the methodology and inputs that the Agency intends to use in making any determination of the costs of operating and maintaining any interchange, and how it will prorate the share among various users (by carloads, by gross ton-miles, etc.). The Proposed LHI Guide should also disclose whether the Agency will focus on (i) the location that CN and CP actually interchange railcars, or (ii) the place where the line of one railway company connects with the line of another railway company, in situations in which the two are not the same.

61. In addition, paragraph 136.6(2)(b) of the Act makes the connecting carrier responsible for the capital cost of making any change to the interchange that may be necessary for transferring the LHI traffic. The Proposed LHI Guide should identify how the Agency will determine if any changes to an interchange are required, and if so, what changes are required, as well as how the Agency will determine the requisite capital cost and whether and the extent to which those costs can be passed on by the paying railway company to other shippers, to other shippers that use the interchange or just the applying shipper. Failure to disclose on this latter point would simply shift cost burdens from one shipper to others without notice.

62. As the Agency determines a rate for comparable traffic, the basket of comparable traffic should include competitive rates for the remedy to have any value to the shipper seeking the rate and for the LHI remedy to have any meaning. To do so would require an assessment of the degree to which the rates are closely coupled to cost, failing which the rates would exhibit characteristics of monopoly rather than competition. The Agency should disclose the methodology for the determination of the variable cost and contribution margin for the comparable traffic, if not publicly, then to the parties.

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[45] For reference, subsection 136.6(2) of the Act states: "(2) Subject to any agreement to the contrary, the connecting carrier is, in respect of the interchange referred to in paragraph 129(1)(c), responsible for (a) a prorated share, determined in accordance with subsection (3), of the costs of operating and maintaining the interchange during the period in which the long-haul interswitching order applies; and (b) the capital cost of making any change to the interchange that may be necessary for transferring the traffic that is the subject of the long-haul interswitching order."

63. As the Agency builds a body of procedural and substantive decisions in respect of the LHI remedy, the Agency should publish a description of the issues determined, without disclosing the parties or confidential information, as it has done for the FOA remedy.[46] At the very least, the Agency should disclose its analysis of the factors it is statutorily required to consider in determining what traffic constitutes comparable traffic, its consideration of the traffic density on the relevant lines of the local carrier, and any long-term investment needed in those lines, and the justifications for each.

64. Certain items should be readily disclosable without issue, including the Agency's determination of the manner in which the local carrier is to fulfill its service obligations in respect of the subject traffic. That determination is no more confidential than an Agency decision following a level of service complaint, except to the extent that the service characteristics would disclose the identity of the applicant shipper.

Economic Regulation Mandate (LHI Guidance Material):

Parliament has determined that economic regulation of CN and CP in particular are required by section 5 of the Act, particularly in the absence of competition and market forces. The LHI remedy was implemented as an attempt to add some degree of balance to the relationship between railway companies and captive shippers. To advance the efficacy of the LHI remedy as an articulation of national transportation policy, and to make it as accessible, predictable and useful as possible for potential LHI applicants, the Agency should expand the Proposed LHI Guide to address the various matters identified above.

Consultation Question 4 (Part 1): Are any provisions of the Railway Costing Regulations of current relevance?

Background

65. The MacPherson Commission was a foundational proceeding in relation to railway costing matters during which CN and CP submitted extensive evidence to demonstrate their financial losses incurred in handling statutory grain and grain products. The MacPherson Commission ultimately led to the implementation of the NTA, 1967, sustained the Agency's costing work through deregulation, the *National Transportation Act, 1987*, and the Act as it stands today. Importantly, it informs the Agency's analysis of railway cost issues to this very day.[47] The NTA, 1967 established a new national transportation policy that

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[46] Available at: https://otc-cta.gc.ca/eng/publication/issues-determined-during-final-offer-arbitration.
[47] See subsection 157(2) of the Act: "(2) The Agency may also consider (a) the principles of costing adopted by the Royal Commission on Transportation appointed by the Order in Council dated May 13, 1959 in arriving at the conclusions

represented a first step towards deregulation of the Canadian rail industry and made certain amendments to the then applicable *Railway Act*, including the grant of subsidies for uneconomic operations. One of the amendments to the *Railway Act* required that the "items and factors" relevant in the determination of costs for any of the purposes of the *Railway Act* be prescribed by regulation. Shortly thereafter, the Board of Transport Commissioners for Canada prescribed the regulations set out in the Board's Cost Order. The Board's Cost Order was controversial; the Provinces of Alberta, Manitoba and Saskatchewan petitioned the Governor-in-Council for an order to rescind it and to require the CTC to hold a public hearing into a replacement railway costing order. The Governor-in-Council ultimately dismissed the petition.[48]

66. Following the formation of the Committee in September 1967, the CTC decided to hold a public hearing regarding the formulation of new costing regulations and to secure the services of a consulting firm, EBS, to obtain expert and independent advice. During the early winter of 1967-1968, the Committee met informally and consulted with interested parties, and recognized the complexity of the issues before it, leading ultimately to a significant public proceeding (the "**Proceeding**") on February 5, 1968 to address railway costing matters. Shortly thereafter, the Committee assigned to the principal of EBS the task of assembling a technical committee comprised of representatives of railways, provincial governments, shippers, the trucking industry and other industry groups to support the Proceeding. Between February 5 and June 30 of 1968, the technical committee produced many working papers and exhibits, all of which were distributed to the parties participating in the Proceeding. Between June 30 and August 1 of 1968, the parties prepared and submitted their submissions to the Committee. The hearing in connection with the Proceeding started on September 10, 1968, continued through November 14, 1968, and culminated in the issuance of Decision R-6313 and Order R-6313.

67. The present-day RCR substantially codified Order R-6313. The RCR have not been significantly amended since they became effective in 1980 and not at all since the Act came into force.[49] Despite the outdated statutory references in the RCR, certain provisions and principles set out in the RCR undoubtedly remain useful for various Agency functions, including those not strictly governed by any law or regulation.

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contained in its report; and (b) later developments in railway costing methods and techniques and current conditions of railway operations."

[48] Order-in-Council P.C. 1967-2063, dated October 31, 1967.

[49] Section 5 of the RCR was amended by SOR/86-26 dated December 19, 1985 to permit the inclusion of income tax as a normal business expense in the determination as to whether a line or service is uneconomic, and by SOR/87-149 dated March 16, 1987 to eliminate a discrepancy between the English and French versions of the provision. Both revisions pre-date the implementation of the Act.

68. We acknowledge that the new subsection 157(5) of the Act, which came into force with the recent passage of the *Transportation Modernization Act,* crystallizes into the Act the Agency's ability to require CN and CP to provide costing information:

> "No later than August 31 of every year, the Canadian National Railway Company and the Canadian Pacific Railway Company shall provide to the Agency, in the form and manner specified by the Agency, all unit costs, output units and other financial, statistical and supporting information for the preceding calendar year that is required for the determination of costs by the Agency under this Part."[50] [underlining added]

69. We also acknowledge that the scope of subsection 157(5) of the Act largely replicates, with the exception of the word "financial", the scope of information required under section 10 of the RCR:

> "Railway companies shall make available to the Committee all unit costs, output units and other statistical and supporting information required by order from time to time by the Committee in determining whether cost submissions are acceptable for the purposes of the Act." [underlining added]

70. Accordingly, at least in relation to CN and CP, so long as subsection 157(5) remains in the Act in its present form, we raise no objection to the repeal of section 10 of the RCR. However, subject to our acknowledgments at §68, §69 and §83, we oppose a wholesale or partial repeal of the RCR. Any such repeal could permit a railway company to argue that the CTC, when it enacted the RCR, considered it necessary to include the various other sections of the RCR in addition to section 10, so the repeal of some or all of the sections of the RCR other than section 10 may imply that the issues addressed in those repealed sections are beyond the scope of the Agency's jurisdiction under ss.157(5) of the Act. There is no reason to set up a potential jurisdictional limitation in this manner, unless addressed specifically in legislation.

71. We think the following provisions of the RCR remain particularly relevant and important for the reasons set out below.

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[50] We also acknowledge that in the context of the rate per car to be charged for interswitching of traffic, the Agency also has a new power to require information in the new section 128.1 of the Act: "No later than August 31 of every year, a railway company shall provide to the Agency, in the form and manner specified by the Agency, the information or documents that the Agency considers necessary to exercise its powers or perform its duties or functions under section 127.1."

Railway Manuals (Section 9 of the RCR)

72. As described in detail above, we understand that the railway manuals are an important source of railway costing information that may be lost if section 9 of the RCR were to be repealed. Decision R-6313 helpfully describes the purpose of railway costing manuals:

> "He [W. B. Saunders of EBS] recommended that instead, each railway be required to file, as a document supplementary to the Cost Order, a complete description of the methods and procedures for applying the principles contained in the Cost Order.
>
> The recommendations of EBS in this respect were accepted in principle by all parties but some were of the opinion that such descriptive matter referred to herein as a "Costing Manual" should not be adopted for use in costing without the Committee's prior approval thereof; others suggested that the Costing Manuals should be developed by the Committee as part of the Cost Order.
>
> In our consideration of these suggestions, we are impressed not only with the desirability but also the necessity for such a Costing Manual. Section 387B of the *Railway Act* requires us to prescribe "items and factors" and we have done so in the Cost Order; the Act, however, does not similarly obligate us to prescribe the methods or procedures for applying such items and factors.
>
> We recognize that it is essential for all concerned to be aware of the methods and procedures and that such methodology be in conformity with the regulations prescribed pursuant to section 387B. We also recognize that there can be no departure from the principles contained in the Cost Order through the medium of some provision in the Costing Manuals, nor can proposed amendments to the Costing Manuals suspend any proceedings pursuant to the *Railway Act* and the Cost Order."[51,52] [underlining added]

73. Accordingly, Order R-6313 included a provision that required preparation and submission of railway costing manuals.[53] That provision is substantially replicated in section 9 of the RCR:

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[51] Decision R-6313, page 410.
[52] For reference, section 387B(1) of the *Railway Act* stated: "The Commission shall by regulation prescribe for any of the purposes of this Act the items and factors, including the factors of depreciation and the cost of capital as provided in subsection (1) of section 387A, which shall be relevant in the determination of costs, and, to the extent that the Commission deems it proper and relevant to do so, the Commission shall have regard to the principles of costing adopted by the Royal Commission on Transportation appointed by Order-in-Council dated the 13th day of May, 1959, in arriving at the conclusions contained in the report thereof, and to later developments in railway costing methods and techniques and to current conditions of railway operations."
[53] Section 7 of Order R-6313 states: "Cost submissions made pursuant to this Order shall be prepared in accordance with such Costing Manuals as the Committee shall require."

"Costing Manuals To Be Filed

Cost submissions made pursuant to these Regulations shall be prepared in accordance with such costing manuals as the Committee shall, by order, require."

74. At the same time as it issued Order R-6313, the CTC issued Order R-6314 that, among other things, required CN and CP to submit their costing manuals to the secretary of the Committee, serve a copy on all parties of record to the Proceeding, and prohibited changes to the manuals thereafter without the written leave of the Committee. Thus, we conclude that the costing manuals of CN and CP are significant documents without which one might be unable to correctly identify the methods and procedures applied to the underlying data. If section 9 of the RCR were to be repealed, the Agency's ability to require CN and CP to disclose the methods and procedures for applying railway costing data may be diminished, or perhaps lost altogether, which creates an unnecessary risk of losing the valuable explanatory information contained therein.

75. The enduring value of section 9 of the RCR is apparent in a 2016 Agency decision regarding the maximum revenue entitlement for the movement of western grain:

> "The Agency's Costing Model is supported by the Agency's *Railway Costing Regulations* (SOR/80-310), which updated the previous CTC Order No. R6313, originally issued in 1967. Section 9 of these regulations requires railway companies to maintain costing manuals that embody the costing approach used for regulatory purposes, and to prepare cost submissions in accordance with those manuals. CN's costing manuals have always listed Yard Switching Minutes (YSMs) as a dependent variable for both below and above the wheel costs including certain crewing costs, and train maintenance costs."[54]

Economic Regulation Mandate (Railway Manuals):

In the absence of disclosure of the railway manuals, the Agency is the only party that is able to confirm the appropriateness of the methods and procedures applied by each of CN and CP. The continued requirement for CN and CP to prepare and submit manuals to the Agency should ensure a degree of rigour, consistency and fairness in the methods applied by the manuals that may be lost in the absence of Agency review. This is particularly crucial for shippers that are dependent on the Agency's costing processes, including captive shippers. In any event, without appropriate oversight and review of the railway manuals, stakeholders will have no assurance that CN and CP are not modifying their costing processes to their respective benefit.

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[54] Agency Decision No. 334-R-2016 (Determination by the Canadian Transportation Agency on whether the Maximum Revenue Entitlement (MRE) should include additional mileage for eligible grain movements to the ports of Vancouver, British Columbia and Thunder Bay, Ontario), endnote 2.

Definition of Variable Costs (Section 7 of the RCR)

76. Similarly, the definition of variable costs in section 7 of the RCR remains relevant. As recently as 2017, the Agency cited subsection 7(a) of the RCR as the applicable law regarding variable costs:

> "…This question is addressed by reference to the definition of variable costs in the RCR, which is provided in subsection 7(a)."[55]

77. Similarly, the 2004 RIAS in respect of Regulations Amending the Interswitching Regulations recognized the same point:

> "The rules for determining railway variable costs are set out in the *Railway Costing Regulations* (SOR/80-310), which stipulate that variable costs shall include increases and decreases in rail operating expenses resulting from changes in the volume of traffic…"[56] [underlining added]

78. Agency Decision No. 425-R-2011 recently acknowledged the continued relevance of subsection 7(b) of the RCR in the context of the Agency determination of cost of capital rates for federally regulated railway companies:

> "[16] Underlying all of these Decisions is a principle set out in the Railway Costing Regulations, which came into effect on December 10, 1980. Specifically, paragraph 7(b) of those Regulations requires the Agency, when setting rates for the carriage of goods, to apply the associated rate to the "variable portion of the net book value of the asset."
>
> [78]….Furthermore, paragraph 7(b) of the Railway Costing Regulations requires the Agency, when setting rates for the carriage of goods, to apply the associated cost of capital rate to the "variable portion of the net book value of the asset"."[57] [underlining added]

79. In our view, section 7 of the RCR retains its relevance in the modern freight rail context and, unless replaced by something of equal or better legislative authority, ought to be retained.

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[55] See Agency Determination No. R-2017-198 (Determination by the Canadian Transportation Agency of the methodology to be used by federally-regulated railway companies to determine the working capital amounts and capital structure for regulatory purposes), at paragraph 18. See also paragraph 13.
[56] RIAS in respect of the Regulations Amending the Railway Interswitching Regulations (SOR/2004-201), page 1409. See, also, the RAIS in respect of the Regulations Amending the Railway Interswitching Regulations (SOR/2013-28), page 587.
[57] Agency Decision No. 425-R-2011 (Review of the methodology used by the Canadian Transportation Agency to determine the cost of capital for federally-regulated railway companies), at paragraphs 16 and 78.

Economic Regulation Mandate (Definition of Variable Costs):

The definition of variable costs is foundational to the ARCM and railway costing generally. Without a uniform and generally accepted definition of variable costs, potential for varying interpretations of the term may exist, which may lead to inaccuracies in cost determinations. Any such potential is completely unnecessary, would significantly decrease the confidence of stakeholders in the Agency's rail costing, and could be avoided by simply retaining section 7 of the RCR. Rail participants that are subject to the market power of CN and CP require a robust railway costing regime to counteract, to some extent, that market power; the addition of any uncertainty to that process is likely to act to the detriment of those and other participants.

Section 8 (Use of Specific Costs)

80. The Agency's decision in Agency Decision No. 67-R-2008 confirmed that the principle set out in section 8 of the RCR that specific costs should be used when known or readily determinable remains relevant, even beyond the rail costing context:

> "[107] The use of a system-wide or specific measure of inflation is different from Issue No. 3 (the contribution to constant costs applicable to 1992) as there is no legislation that provides clear direction here. That is, while the Revenue Cap provisions in the CTA direct that the VRCPI is to be developed and applied annually, Clause 57 provides no specific direction concerning the technical calculations that are required for the hopper car maintenance adjustment.
>
> [108] It is appropriate to use specific measures of inflation in the determination of both "embedded" and "actual" hopper car maintenance costs. This is consistent with Clause 57 which calls for an adjustment to reflect costs relating to hopper car maintenance, and is consistent with section 8 of the *Railway Costing Regulations* which supports the use of specific information when such information is known or can be readily determined."[58] [underlining added]

81. A further example of the use of section 8 of the RCR can be found in the determination of net salvage value in connection with a railway line discontinuance. In Agency Decision No. 530-R-1998, the Agency stated:

> "In a valuation exercise involving net salvage value, the Agency is guided somewhat by the *Railway Costing Regulations*, promulgated pursuant to section 157 of the CTA. These Regulations prescribe items and factors that the Agency shall consider in considering railway costs in the course of carrying out its statutory duties under Part III of the CTA. Section 8 thereof states "Whenever specific costs are known or can readily be determined

[58] Agency Decision No. 67-R-2008 , paragraphs 107 and 108. See, also, paragraphs 113 and 160.

> from [railway] company records, such costs shall be used in lieu of averaged or allocated costs." The Regulations, including section 8, have been and continue to be used for various regulatory purposes wherein the Agency and its predecessors have been called upon to calculate railway company costs. In this net salvage value determination, the Agency will use specific costs when they are known or can readily be ascertained as they are often the best evidence of 'value' in any given circumstance. However, if these costs are not known or cannot be substantiated, the Agency will rely on system-wide averaged or allocated costs. This approach is consistent with the Regulations and the definition of net salvage value as set out by the Agency, above. It is an approach which is respected in the industry and has provided objectivity and consistency over time."[59] [underlining added]

82. The principle that specific costs should be used when known or readily determinable remains relevant. While previous Agency decisions and adopted practices may preserve that principle, the Agency's decisions and practices would remain non-binding. In addition, the repeal of section 8 of the RCR without replacement may set up an argument that the repeal amounts to a diminishment or even repudiation of that principle, which we doubt is intended.

83. In stating the foregoing, we acknowledge that we have insufficient insight into Agency process and the bases on which the Agency asserts authority and jurisdiction to perform its costing functions. While we accept that subsection 157(5) confers broad authority to compel CN and CP to provide the breadth and depth of information conferred by the RCR, and then some, it is not obvious to us that no harm can or will come by its repeal, including, if only, the usual approach of CN and CP to raise the stakes of a shipper's pursuit of a remedy in order to discipline that and future shippers by pursuing spurious judicial review applications and appeals of Agency decisions, etc.

84. Consequently, we urge caution in contemplating the repeal of the RCR. Shippers rely on a robust Agency regulatory costing system and methodology and any change that impairs that vital Agency function, even to a minor extent, has the potential to operate to the detriment of shippers across Canada, especially for those many shippers who are in no position to bargain with either CN or CP due to the market power of those railway companies and their willingness and pattern of exercising it.

85. We recommend, however, that the Agency modernize the statutory references in the RCR, perhaps by replacing the RCR with a modernized version.

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[59] Agency Decision No. 530-R-1998 (Application by the St. Lawrence & Hudson Railway Company Limited for a determination of the net salvage value of the Goderich Subdivision between mileage 31.75 and mileage 34.9….).

Economic Regulation Mandate (Use of Specific Costs):

The use of specific costs, where known or readily determinable, as opposed to averaged or allocated costs, is a common sense means to avoid unnecessary imprecision in rail costing estimates. No party could claim any harm by the principle remaining intact. However, its removal could easily lead to adverse results. In the present context in which CN and CP know all of their cost data, and shippers and other stakeholders have access to none, any move away from using specific costs can only give CN or CP, as the case may be, the opportunity to modify the applicable average or allocation to its advantage, thereby potentially harming the very stakeholders that rail costing processes are intended to protect.

Consultation Question 4 (Part 2): What information would be useful regarding how costing is set by the CTA?

86. As we explained in some detail above and in the ARCM Submission, insufficient publicly available information exists in respect of regulatory cost determinations under the Act. As a result, the few pieces of information that shippers and their representatives are able to glean from government and railway pronouncements regarding costs are particularly valuable.

Disclosure of Required Contribution to Fixed Costs

87. A particularly useful piece of information is the overall contribution to rail fixed costs that is required for all traffic for CN and CP to cover their respective total costs. For example, a 1997 RIAS described the fixed/variable cost ratio for the movement of western grain traffic, observed that contribution margins were lower for competitive traffic and determined that a 7.5% contribution margin to fixed cost was appropriate for interswitching rates.[60]

88. More recently, a 2013 RIAS in respect of amendments to the Interswitching Regulations updated the required contribution to 20.3%[61]

89. Even more recently, the 2014 RIAS in respect of amendments to the Interswitching Regulations stated the following:

> "The Agency calculates the system average contribution to fixed cost separately for each carrier. The amount of fixed cost is calculated as the total system cost (available from

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[60] RIAS in respect of the Regulations Amending the Railway Interswitching Regulations (1997), Canada Gazette Part I, August 2, 1997, pages 2227 – 2228.
[61] RIAS in respect of the Regulations Amending the Railway Interswitching Regulations (SOR/2013-28), page 590.

financial reports provided to the Agency) less the system variable cost (calculated by the Agency costing model). The system contribution to fixed costs is the amount of fixed costs expressed as a proportion of the system variable costs (calculated for this exercise to be 24%)."[62] [underlining added]

90. None of the total system cost, the system variable cost, or the ARCM itself is publicly available. The Agency should disclose, for each of CN and CP, the total system cost, broken down by total U.S. system cost and total Canadian system cost, and the system variable cost, again broken down by U.S. system variable cost and Canadian system variable cost. Disclosure of this information would allow shippers to determine the allocation of costs between fixed and variable costs for each of CN and CP in each jurisdiction, and thereby calculate a corresponding contribution required to cover CN or CP's fixed costs in each jurisdiction, all of which would allow shippers to assess the reasonableness of railway freight rates.

Economic Regulation Mandate (Disclosure of Contribution Margins):

The separate breakdown of Canadian and U.S. total system costs and total variable costs, by railway company, also would allow the Agency and shippers to confirm that that neither CN nor CP are shifting variable or fixed costs from one jurisdiction to another to further their interests at the expense of shippers. Of course, the main rationale for this disclosure is to allow a shipper to get a sense of the economic bargain it achieves after rates and conditions of service are imposed by CN or CP. With sufficient information, that shipper may compare its rates to those paid on average, considering its particular level of and access to service. Without it, CN and CP both extract the producer surplus at the expense of the shipper and the broader economy and to the detriment of Canadian competitiveness.

In the context of rates for regulated interswitching, disclosure of this information allows all shippers to know that the remedy that was designed to make competitive access effective is, in fact, working to that result and that the Agency is safeguarding that access for the benefit of those intended.

Disclosure of Submissions of Interested Stakeholders

91. The Agency should expand its current practice of summarizing the submissions of interested stakeholders in its decisions and other pronouncements regarding costing,

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[62] Subsection 10(4) of the Transportation Information Regulations (SOR/96-334) states: "A class I rail carrier that transports freight must provide to the Minister railway costs and rate determination information, as well as supporting information, for the rail carrier's Canadian operations, in respect of each annual reporting period, including (a) average long-term variable costs for the rail system; (b) operating statistics for the rail system and rail cost centres and by equipment type and type of service; and c) operating expenses for the rail system and rail cost centres and by equipment type and type of service."

including amendments to the Interswitching Regulations. For example, the RIAS in respect of the 2004 amendments to the Interswitching Regulations includes the following:

> "CN stated that the current contribution to fixed costs is inadequate to allow railways to earn their cost of capital. Rather, a contribution level of 50 percent would be commercially justified so that railways could recover their variable and fixed costs as well as earn their cost of capital…
>
> CP submitted that in providing interswitching services to another railway, the switching railway should receive compensation that provides for full cost recovery. Since the interswitching rates are the same regardless of the commodity switched, the contribution level incorporated in the interswitching rates should therefore reflect at a minimum the average contribution required across all services for the railway to recover its constant costs. CP stated that this required average contribution level is in the order of 25 percent."[63] [underlining added]

92. The disclosure of these contribution requirements, though not authoritative, is nevertheless informative. It is beneficial for a shipper to understand the rationale for CN's or CP's stated revenue requirements in any rate or service negotiation, where those are possible and not imposed by CN or CP.[64] A comparison of individual costs to system costs can become a subject of legitimate examination, both for the carrier and the shipper.

93. In the interest of increasing the transparency of the Agency's processes, the Agency should disclose the entirety of any and all submissions it receives in respect of costing matters, with commercially sensitive information redacted to the extent necessary to protect relevant commercial interests. In any event, in each and every pronouncement the Agency makes regarding costing matters, the Agency should include a fulsome summary of the salient points made by interested parties in their submissions to the Agency.

Economic Regulation Mandate (Disclosure of Submissions of Interested Stakeholders):

The Agency has not, and should not, accept the high contribution margins demanded by CN and CP, since there is no evidence that such margins are necessary to cover their respective fixed costs and cost of capital. As a matter of consistency with other industries that enjoy the market power associated with natural monopolies, no increase should transpire without stakeholder input. The Agency has sought stakeholder input to interswitching reviews it has previously conducted and should continue to do so. However, as part of its mandate, the

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[63] RIAS in respect of the Regulations Amending the Railway Interswitching Regulations (SOR/2004-201), page 1412.
[64] The RIAS in respect of the Regulation Amending the Railway Interswitching Regulations (SOR/2013-28), pages 590 – 594, contain a similarly helpful description of the submissions of the interested stakeholders.

Agency should ensure that it discloses information to interested stakeholders sufficient for them to make informed submissions.

Disclosure of Methodology and Assumptions

94. Detailed disclosure of the methodology used to determine railway costs, the assumptions on which the methodology relies, etc., and the rationale for any change to the methodology are all necessary to ensure the legitimacy and correctness of railway cost determinations. For example, the information contained in Order R-91 and its associated "Report – Development of Variabilities" disclosed certain methodological processes and reached particular conclusions that changed expectations of those who rely on the ARCM. Some were even surprising. Stakeholders need to understand the ARCM, the methodology and assumptions underlying it, and to have confidence in the determinations derived through use of the model, whether for negotiations, regulated interswitching decisions, FOA or other processes. That confidence can be achieved through disclosure of the methodologies and the data, assumptions, formulas, accounts, etc., used to make those determinations.

95. As set out in the Hellerworx Report and elsewhere in these submissions, the Agency should publish the variable costs considered in the development of the interswitching rate for each interswitching zone and disclose the detailed methodology used in calculating those variable costs.[65] Such disclosure would provide all parties with insight as to how to interpret the contribution margins associated with the interswitching rates relative to the costs that underpin those rates.

96. The Hellerworx Report also describes why the Agency should publish the methodology it used in making the determination of any reduction in costs resulting from moving multiple cars and how that methodology was applied to calculate the interswitching rates for car blocks, including how the minimum car block size was determined.[66] The Hellerworx Report also recommends that the Agency also publish the variable costs used in making the determination of interswitching rates for car blocks or other distinct types of interswitching movements in order to allows interested parties to know why the Agency selected various car block sizes, and how interswitching rates for various size car blocks vary relative to the costs that underpin those rates.[67] If the Agency adds or modifies the types of movements for which it calculates distinct interswitching rates, such as distinguishing between urban

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[65] Hellerworx Report, page 9 and response to Item #1, Consultation Question #2 at paragraphs 25 – 54 above. Also, see subsection 127.1(3) of the Act.
[66] Hellerworx Report, page 10. See subsection 127.1(2)(a) of the Act.
[67] Hellerworx Report, page 10.

and non-urban railway yards, the Agency should disclose the same information for each type of movement.[68]

97. As discussed in the Hellerworx Report, the Agency should disclose in its guidance material the contribution margin over variable costs used by the Agency to determine the interswitching rates, the Agency's method for calculating the contribution margin it applies to set the interswitching rates, and what that contribution margin represents (*e.g.* system average contribution for all carriers, or the average of CN and CP's average contribution margins, in which case the Agency should disclose what the individual margins would be).[69] As described below, the Agency has typically made similar statements in its occasional determination of interswitching rates, and such statements are of significant assistance to shippers and their representatives in seeking to assess the competitiveness of rail freight rates, so the somewhat increased disclosure described above should not represent a large departure from the Agency's current practice.

98. We submit that the Agency should disclose the number of movements for which the Agency determined the variable cost for each interchange. The Agency might also disclose the number of railcars interchanged at each interchange or, perhaps, a listing of the top ten interchange locations by annual number of railcars interchanged.

99. In addition, previous Agency decisions regarding interswitching rates have contained helpful information regarding methodology. We have excerpted examples of such decisions in Schedule "B". We recommend the Agency expand the disclosure of the Agency's analyses in such decisions.

Economic Regulation Mandate (Disclosure of Methodology and Assumptions):

At present, stakeholders are left with Order R-91 that contemplates the adoption of a "new Rail Costing System". No such system has been adopted, the ARCM Consultation has not been completed, and statements about the variable/fixed ratio are hanging in a vacuum. We very much encourage the adoption by the Agency of guidance materials to assist stakeholders in understanding the Agency's current methodology and underlying assumptions. We also encourage the Agency to increase the transparency of its railway costing processes, decisions and other public pronouncements.

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[68] Hellerworx Report, page 10.
[69] Hellerworx Report, pages 9 - 10.

ITEM 2: ADMINISTRATIVE MONETARY PENALTIES

Consultation Question 1: What (if any) provisions of the Act and/or CTA orders should be designated as eligible for enforcement through AMPs?

100. To the extent that AMPs offer a simpler, less costly and timelier means of enforcing statutory obligations and Agency orders, the designation of contraventions as violations under section 177 in Part VI of the Act could provide a valuable additional tool to facilitate compliance with the rail-related provisions of the Act. At the same time, there is a potential that AMPs may not be effective in securing compliance in some circumstances and that the designation of certain rail-related provisions as violations may affect the operation or application of existing enforcement mechanisms.

AMPs in relation to matters not directly involving third parties

101. A number of the examples of rail-related provisions identified in the Discussion Paper for the potential application of AMPs involve non-compliance for which prosecution may be the only enforcement mechanism currently available. These provisions tend to relate to matters that may require an application to the Agency but ordinarily do not include a contested proceeding involving another party. We include in this group the provisions relating to certificates of fitness, approval of railway construction, and requirements to maintain or provide information to the Agency or the Minister. AMPs may offer a useful alternative to prosecution for these types of provisions.

AMPs in relation to matters involving third parties

102. Some rail-related provisions may be addressed through the use of statutory remedies or adjudicative proceedings initiated by third parties. These provisions include, for example, compliance with Agency orders issued on application by a shipper, the provisions governing regulated interswitching (including rates) and the requirement to issue a tariff on request by a shipper.

103. While the use of AMPs possibly could provide an *additional* enforcement mechanism in relation to these third party provisions, in the absence of statutory amendments, designating these provisions for the purposes of AMPs creates the potential for mischief and may in some cases run the risk of being ineffective. For the reasons set out below, we believe that before embarking on designating these types provisions as violations under section 177, the Agency should engage in a further, separate review of each individual potential candidate for designation, with a view to identifying any cases where it may be prudent to refrain from designation in the absence of statutory amendments ensuring that shippers' access to

existing enforcement mechanisms and remedies remains unaffected and that AMPs can function as effective deterrents.

Potential overlap with existing enforcement mechanisms

104. There are certain areas where the use of AMPs could potentially overlap with other enforcement mechanisms. For example, the Discussion Paper lists compliance with Agency orders related to railway service obligations as a potential candidate for enforcement through AMPs. The Agency's order is subject to appeal with leave, on questions of law or jurisdiction only, in accordance with the provisions of section 41.

105. If the shipper is of the view that the railway company is not complying with the Agency's order, the shipper may register the Agency's order in court and use the court's processes to enforce the order. In the case of an order under paragraph 116(4)(c.1) of the Act requiring a railway company to reimburse a shipper for expenses incurred as a result of the railway company's breach, this is a relatively straightforward process. The same would be true in the case of orders specifying readily measurable steps the Agency requires the railway to take.

106. The shipper may also decide to ask the Agency to take action under subsection 33(4) to enforce its order. For example, there may be a dispute over whether the railway company is continuing to breach its service obligations, whether as a result of not complying with the Agency's order or because the railway invokes circumstances arising after the issuance of the original order as justifying the level of service it is providing at that time, or both in combination.

107. In each of these scenarios, the availability or actual imposition of AMPs raises the potential of:

    a. separate review proceedings before the Transportation Appeal Tribunal of Canada (the "**Tribunal**"), in which the review panel has jurisdiction to make its own determination of whether the Agency order has been breached, rather than the more deferential review accorded Agency decisions under the appeal provisions in section 41;

    b. preliminary motions in the context of any court or Agency proceedings requesting that the proceedings be stayed pending the outcome of review and appeal proceedings before the Tribunal;

c. preliminary motions objecting to shipper-initiated proceedings on the basis that the AMP regime displaces other enforcement mechanisms in whole or in part;

d. issues arising in the context of shipper-initiated proceedings as to the effect, if any, to be given to review panel findings of "mitigating circumstances" justifying a reduction in the amount of the AMP imposed;

e. the Agency declining to take action under subsection 33(4) in favour of the AMPs process.

108. Regardless of the ultimate merits of any one or more objections and arguments that may be advanced, the designation of these kinds of rail related provisions as violations could result in unnecessary and costly hurdles and delay for a shipper seeking to use existing enforcement mechanisms. Given the lengthy process required to amend regulations, removing the designation if and when these issues arise is not a practical option. We submit that the Agency should seek and use express statutory language clarifying these issues and ensuring that a designation in no way affects a shipper's right to invoke other remedies.

Insufficiency of Maximum Amounts

109. The effectiveness AMPs to secure compliance with rail-related provisions will also depend on the magnitude of the penalties that can be imposed and the provisions to which they are applied.

110. We understand that the Agency is planning to have a sufficient number of enforcement officers to expand all of the enforcement practices that are currently being used in relation to existing designated provisions to rail matters and that this would include targeted investigations, periodic inspections and consideration of AMPs based on findings of non-compliance by Agency members.

111. With respect to the magnitude of the penalties that can be imposed, section 177 sets the maximum amount the Agency can prescribe as an AMP applicable to a railway company at $25,000. The Agency's current enforcement regime contemplates a graduated approach to AMPs. In all but the most serious cases, a first violation attracts a formal warning rather than an AMP, and only at the more severe end of the spectrum and only in cases involving repeat violations will the maximum penalty ever be imposed. The deterrent effect of sanctions in this range will vary depending on the nature of the violation and on the potential gain from non-compliance.

112. Non-compliance with statutory or regulatory requirements or with an Agency order is not necessarily – or even typically – a single event; it often involves a continuing state of affairs. Unlike similar legislation[70], the current provisions governing AMPs do not address the issue of violations that are of a continuing nature. Once a violation has been found and an AMP imposed, the designation may provide little if any additional incentive to remedy ongoing non-compliance sooner rather than later. In the case of non-compliance with section 118, for example, a shipper who cannot ship any of its traffic until the railway issues the requested tariff will take little comfort in the fact that an AMP has been imposed.

113. Even in relation to non-compliance that can be characterized as a discrete event, AMPs may have limited deterrent effect if they are insignificant in comparison with the potential gain from non-compliance. For example, non-compliance with 127(3) by applying the single car rate rather than the car block rate to the movement of a multi-car shipment within interswitching limits could easily represent a difference of over $20,000 in interswitching revenues. The application of Rule 11 rates published in an open tariff instead of regulated interswitching rates could multiply that difference several times. In comparison, the maximum amount that can be imposed under the current provisions of Part VI of the Act may not be an effective deterrent.

114. It is possible, perhaps likely, that the current magnitude of AMPs and the graduated enforcement approach is suitable for rail provisions involving no third party. However, we urge the Agency to consider AMPs involving third party provisions more thoroughly before beginning the process of designating those provisions as contemplated and to take into consideration the impacts and methods of applying AMPs in those circumstances.

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[70] See, for example, subsection 40.13(2) of the *Railway Safety Act,* R.S.C., 1985, c. 32 (4th Supp.) which provides as follows: "40.13(2) A violation that is committed or continued on more than one day constitutes a separate violation for each day on which it is committed or continued."

ITEM 5: SHIPPER REMEDIES

Consultation Question 1: What tools or information would be useful in accessing and understanding the shipper remedies that are available, and understanding how they will be applied?

115. We address below certain of the remedies specifically highlighted in the Discussion Paper, following which we identify some potentially useful guidance material and conclude by providing comments in relation to guidance generally.

Item 5, bullet 1: "A new definition of "adequate and suitable" rail service"

116. Any guidance the Agency issues in respect of what constitutes "adequate and suitable" rail service, including under the items enumerated in the new subsection 116(1.2) of the Act, should preserve the three step "Evaluation Approach" to the adjudication of level of service complaints established in *Louis Dreyfus Commodities Canada Ltd. vs. CN*:

> "1. Is the shipper's request for service reasonable?
>
> 2) Did the railway company fulfill this request?
>
> 3) If not, are there reasons that could justify the service failure?
>
> (a) If there is a reasonable justification, then the Agency will find that the railway company has not breached its level of service obligations;
>
> (b) If there is no reasonable justification, then the Agency will find that there has been a breach of the railway company's level of service obligations and will look to the question of remedy."[71]

117. The requirement at Step 3 for the railway company to demonstrate "that it was not reasonably possible for it to furnish adequate and suitable accommodation despite its efforts to do so and based on factors clearly not under its control" must not be disturbed.[72] We do not think it would be difficult conceptually or otherwise for the Agency to continue to apply the Evaluation Approach in the context of the factors described in the new subsection 116(1.2). In particular, we think paragraphs (b), (c), and (d) of subsection 116(1.2) of the Act readily could be addressed at Step 1 of the Evaluation Approach, with the balance of

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[71] Letter Decision 2014-10-03, at paragraph 36.
[72] *Supra*, note 71, at paragraph 56.

factors enumerated in paragraphs (a), (e), (f), (g), (h) and (i) of subsection 116(1.2) of the Act properly considered at Step 3.

118. With respect to paragraph 116(1.2)(g), that is, "the company's obligations in respect of the operation of the railway under this Act", we have already experienced shipper reluctance to use the LOS remedy due to this particular consideration. A shipper that contracts with a railway company for the carriage of its goods anticipates that its goods will be shipped. It is an unusual feature of rail regulation that allows a contract to be overridden by the obligations owed by one contracting party to third parties. Through the very common experience of a carrier's service failure, shippers learn that they are usually left without an ability to enforce their contracts or fear retribution for doing so. Those who are required to ship under tariff, because the carrier imposes one-sided terms or compels the shipper to give up its remedies or otherwise, are even more prone. That is what the LOS remedy is supposed to cure, but the record demonstrates that shippers are expected to provide a lot of evidence about the railway's business in order to succeed in LOS proceedings. The consideration in paragraph 116(1.2)(g) exacerbates that very problem. Shippers are in no position to attest to the carrier's other obligations. As a consequence, they must hire outside experts to review those carrier obligations and assess how the Agency will allow those obligations to impact the level of service the Agency will determine is owed to the complaining shipper. If the opinion of the experts and counsel results in an indeterminate outcome, the greatest likelihood is that no complaint will be made. The Agency should address this problem through guidance, by setting out specific principles by which it will abide and providing concrete examples. All of these can be illustrative rather than part of some exhaustive set.

Item 5, bullet 3: "The ability for shippers to seek reciprocal financial penalties in the Arbitration on Level of Services"

119. The ability of a shipper to obtain reciprocal financial penalties in SLA proceedings may be beneficial if those imposed on CN or CP are significant enough to prevent poor service or otherwise reward adequate service. With that objective in mind, the Agency should issue guidance confirming that the discretion of an arbitrator in a SLA proceeding is very broad, and includes the power to impose terms the arbitrator deems appropriate, without fettering that arbitrator's discretion in any way. Given that an arbitrator is not required to impose penalties at all, after hearing fulsome submissions on point, one consideration must be whether such penalties are significant enough to alter behaviour. Financial penalties that

are set too low[73] do not compare well to the harm suffered by shippers following railway service failures, which harms may include lost sales, re-handling costs, trucking costs, and other harms that might be on the order of millions of dollars or more. Any penalty imposed on a carrier must be meaningful to alter the carrier's behaviour, rather than just becoming the cost of business.

Item 5, bullet 4: "A permanent authority for the CTA to prescribe the operational terms of service that can be submitted to Arbitration on Level of Service"

120. The Act does not define the phrase "operational terms" or otherwise constrain the Agency's interpretation of that term. While the former Operational Terms Regulations identified the types of railway service matters that were eligible for SLA in a broad and generally satisfactory manner, they omitted certain other matters that could prevent shippers from securing the level of railway service required for their businesses.

121. For example, there are some contractual terms that would not arise in a competitive market structure. In practice, they unjustly deprive a shipper of needed rail service, excuse the rail carrier from performing its obligations or otherwise make the receipt of such service unjustly expensive.

122. The following is a non-exhaustive list of the kinds of provisions that should be open to contesting in an SLA setting, as well as in other settings:

- provisions giving a railway company the right to unilaterally increase contract rates on 30 days' notice, despite a stated contract term of one or more years;
- provisions giving a railway company the right to avoid its contractual commitments if the railway company embargoes, abandons, sells or otherwise disposes of a line of railway or facility on which service is provided;
- provisions requiring the parties to negotiate a modification to a contract if a ruling or action by a regulatory authority, such as the Agency, imposes significant additional costs to a railway company's operations and performance obligations under that contract and, if the parties fail to agree on a modification, giving the railway company the right to terminate the contract, thereby exposing the shipper to punitive tariff rates;
- provisions purporting to allow a railway company to unilaterally modify rates in response to such additional costs to its operations;

[73] For example, Item 5700 of CN tariff 9000 effective as of July 16, 2018 imposes a financial penalty on CN of a mere $100 per railcar for orders that are in CN's Planned Service Report but not supplied on time.

- provisions incorporating a railway company's tariffs into a contract, some of which inappropriately purport to reduce a railway company's service obligations;

- provisions limiting a railway company's liability in respect of loss, damage or delay to the commodities to a certain monetary value, notwithstanding that negligence or breach of service obligations by the railway company may have caused the loss, damage or delay;

- provisions imposing onerous credit terms, which can be unilaterally modified by the railway company, and where breach of those terms gives a railway company the right to terminate a freight contract.

123. Any regulations that prescribe the scope of "operational terms" for the purposes of SLA should define that term broadly enough to allow a shipper to craft its submission to SLA in such a way that it is able to obtain the rail service it needs, while avoiding any unilateral ability of the railway company to avoid its service obligations or impose additional costs on the shipper, including as described above. We underscore that simply allowing a shipper to address such matters in its submission to SLA does not guarantee, or even imply, that a shipper would be successful on any such matter, because the arbitrator would retain jurisdiction to impose terms. However, inclusion of the foregoing under the heading "operational terms" would at least enable a shipper to make relevant submissions to an arbitrator.

124. Any regulations that prescribe the scope of "operational terms" for the purposes of SLA should avoid provisions that tend to relieve a railway company of its service obligations (*i.e.*, its obligation to comply with operational terms imposed by an arbitrator in SLA) due to circumstances that are in whole or in part of its own making. For example, the former Operational Terms Regulations included "circumstances that would make it impossible for the railway company to comply with an operational term…" as an "operational term", but went on to include "derailment", "a breakdown in a component of the railway", and certain other matters as comprising such circumstances, even though they do not make it "impossible…to comply with an operational term" in many cases.[74] While such events invariably affect a railway's ability to operate efficiently, they are not necessarily beyond the railway's control in every instance. Where they result from a failure by the railway to properly maintain infrastructure or equipment, for example, a railway should not be excused from service obligations. In addition, where there is a derailment, a railway company may be able to serve a customer via another route, or in the case of "a breakdown in a component

[74] Subsection 2(i)(iv) and (x) of the Operational Terms Regulations.

of the railway" involving equipment, the railway company might provide service using alternate equipment, or even pay for trucking.

125. We think there may be a question as to whether or not the Agency's jurisdiction to make regulations in respect of operational terms extends to circumstances that make it impossible for a railway company to comply with an operational term; the scope of the new subsection 169.31(1.1) of the Act only allows the Agency to make regulations as to what constitutes an operational term for the purposes of subsections 169.31(1)(a) to (c) of the Act, none of which contemplate scenarios in which the railway company may not be able to comply with an operational term imposed by a SLA arbitrator.[75] However, if the Agency determines it has such jurisdiction, we submit that any description of the circumstances in which a railway company is relieved from its obligation to comply with an operational term should be crafted narrowly to avoid allowing the railway company to inappropriately avoid its service obligations.

Item 5, bullet 5: "The ability for shippers to extend, at the outset of the FOA process for rates disputes, the application of an arbitrated rate from one year to two years"

126. This bullet warrants correction, as it implies that the shipper must choose a period of application of either one year or two years. The Act actually allows a shipper to designate a period "not exceeding two years" for which the decision of the arbitrator is to apply, thereby leaving open the possibility that a shipper may designate ANY period less than two years for the application of the arbitral decision.[76] We ask that the Agency clarify the Discussion Paper and any other public materials to this effect.

Item 5, bullet 6: "A higher cap to use the streamlined FOA process (raised from $750,000 to $2 million)"

127. The summary process FOA sections of the Act have consistently lacked clarity as to how one should calculate the upper monetary limit. The Agency should issue guidance as to

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[75] Subsection 169.31(1.1) of the Act states: "The Agency may make regulations specifying what constitutes operational terms for the purposes of paragraphs (1)(a) to (c)." In turn, paragraphs 169.31(1)(a) to (c) state: "...(a) the operational terms that the railway company must comply with in respect of receiving, loading, carrying, unloading and delivering the traffic, including performance standards and communications protocols; (b) the operational terms that the railway company must comply with if it fails to comply with an operational term described in paragraph (a); (c) any operational term that the shipper must comply with that is related to an operational term described in paragraph (a) or (b);..."

[76] Subsection 161(2)(b) of the Act states: "...(b) the period requested by the shipper, not exceeding two years, for which the decision of the arbitrator is to apply;".

how one should interpret the phrase "involves freight charges in an amount of not more than $2,000,000".[77] Questions that arise include the following:

a. Does the use of the word "charges" instead of "rates" mean that the Agency will include amounts paid or payable as incidental charges or as a fuel surcharge in the $2,000,000 limit?

b. While the language "the Agency determines that a shipper's final offer…involves freight charges…" suggests that the determination is forward-looking, the Agency should confirm whether or not that is the case. If it is, the Agency should issue guidance as to how it will determine the quantum of

   i. revenue from freight rates, which is dependent on the volumes that the shipper may or may not ship in the arbitral period in response to changes in the market for the shipper's products,

   ii. fuel surcharge revenue (if included at all), which can vary wildly with changes in fuel prices, and

   iii. incidental charges (if included at all), which depends heavily on the behaviour of the shipper and the railway company.

128. Our view is that the Agency's determination as to whether or not the shipper's final offer "involves freight charges" of not more than $2 million should be backward looking to allow shippers and their representatives to accurately assess whether summary FOA is available in any given set of circumstances. Any other approach is likely to involve highly speculative calculations that may leave the shipper uncertain as to whether or not the summary process FOA remedy is even available.

129. In addition, to increase the availability of the summary process FOA and thereby make it at least potentially more useful, the Agency might consider issuing guidance that interprets the phrase "involves freight charges in an amount of not more than $2,000,000" to mean the differential between the total amount of the charges (however interpreted by the Agency) in the shipper's final offer and those in the railway company's final offer. To interpret the phrase otherwise significantly reduces the number of disputes that are eligible for summary

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[77] Subsection 164.1 of the Act states: "If the Agency determines that a shipper's final offer submitted under subsection 161.1(1) involves freight charges in an amount of not more than $2,000,000, adjusted in accordance with section 164.2, and the shipper did not indicate a contrary intention when submitting the offer, sections 163 and 164 do not apply and the arbitration shall proceed as follows…"

process FOA, because any shipper's final offer that involves charges in the range of $2 million would imply a differential between the charges in that offer and the railway company's final offer that is far, far less than the $2 million, which lesser differential is quite possibly not high enough to warrant the costs of a contested proceeding.

Item 5, bullet 7: "A new recourse mechanism for shippers to challenge rail tariffs that allocate liability contrary to the Act"

130. The new remedy in section 137.1 of the Act raises a range of potential issues, and it is important for shippers to understand how this remedy may be useful.[78] Presumably, the remedy will allow a shipper to file a complaint with the Agency that asserts that a railway company has limited, or purported to limit, in some manner its liability in respect of the movement of the shipper's traffic other than by a written agreement signed by the shipper, perhaps by way of railway tariff.

131. A question remains as to whether the remedy is of any use to a shipper that is party to a contract that incorporates by reference all of the railway company's tariffs.

132. The *Canexus et al. vs. CP* proceedings that culminated, in part, in a Federal Court of Appeal decision confirmed that section 120.1 of the Act is unavailable to contest the reasonableness of provisions in a tariff that are not "associated with a charge" within the meaning of the Act.[79] In the absence of any further decisions of the Agency or the Federal Court of Appeal on the issue, it appears section 120.1 is unavailable to contest onerous liability terms in a tariff on the basis that they are not associated with a charge.

133. CN and CP tariffs impose onerous liability terms, albeit in somewhat different respects. To the extent that CN and CP insist on the incorporation of all of their tariffs into their confidential contracts, a shipper is exposed to liability for conduct and moral hazards they cannot control, such as indemnification by a shipper for third party liability claims against CN or CP. In the absence of a contract, CN and CP set punitive rates in their tariffs for captive shippers, including shippers of dangerous goods. There is nothing that prevents CN and CP from forcing shippers to agree to the incorporation of tariffs.

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[78] Subsection 137.1 of the Act states: "If, after receiving a complaint, the Agency finds that a railway company is not complying with subsection 137(1), the Agency may order it to take any measures that the Agency considers appropriate to comply with that subsection." The relevant language of subsection 137(1) of the Act states: "Any issue related to liability, including liability to a third party, in respect of the movement of a shipper's traffic shall be dealt with between the railway company and the shipper only by means of a written agreement that is signed by the shipper…"

[79] *Canadian Pacific Railway Company v. Canexus Chemicals Canada*, LP, 2015 FCA 283.

134. The Agency should issue guidance as to how, if at all, the new section 137.1 of the Act could assist shippers in such circumstances.

Item 5, bullet 8: "Expanded informal dispute resolution services, including facilitation on an anonymous basis"

135. We are aware that the Agency and its staff currently assist parties in resolving potential disputes on an informal basis before the matter escalates to adjudication. We ask that the Agency clarify how, if at all, the new subsection 36.11(2) of the Act will change any of the Agency's current processes or activities in respect of informal dispute resolution.[80]

FOA

136. While FOA is one of the best tools available to captive shippers seeking relief from excessive rail freight rates and inferior conditions of service, it remains a somewhat opaque process from the shipper's point of view. Shippers have benefitted from the Agency's webpage that describes the Issues Determined During Final Offer Arbitration.[81] However, the Agency could increase the transparency of its processes. Shippers would benefit from Agency guidance material that explains the Agency's FOA processes and procedures in detail ("**FOA Guidance**").

137. In particular, FOA Guidance should include an illustration of the timing of the various steps in FOA (*e.g.* notice, submission of final offers without dollar amounts, submission of final offers with dollar amounts, etc.), ideally in a readily understandable format, such as a timeline or calendar, using examples that straddle holidays and fall on weekends.

138. FOA Guidance should clarify the extent of the administrative, technical and legal assistance the Agency is able to provide at the request of the arbitrator under subsection 162(2) of the Act and that it may include a determination of the LRVC of the subject movement.[82] Such guidance should clarify that an arbitrator appointed under section 162 of the Act need only request assistance from the Agency to receive it and, in particular, that agreement of both parties is not required, in accordance with the statements of the Minister of Transport:

> "As part of this [FOA] process, an arbitrator is already allowed to request technical assistance, including costing and legal assistance, from the Canadian Transportation

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[80] Subsection 36.11(2) of the Act states: "A member of the Agency or its staff may attempt to resolve in an informal manner with a railway company any issue raised by an interested person to whom it has provided information and guidance. In doing so, the member or staff shall not reveal the identity of the interested person without their consent."
[81] Available at: https://otc-cta.gc.ca/eng/publication/issues-determined-during-final-offer-arbitration.
[82] Subsection 162(2) states: "The Agency may, at the request of the arbitrator, provide administrative, technical and legal assistance to the arbitrator on a cost recovery basis."

> Agency. There is nothing in the act that obligates the arbitrator to seek the consent of railways for such assistance. The arbitrator can hold any failure on the part of the railways to disclose information against the railway when making a final decision."[83] [underlining added]

139. Further, the document might include guidance as to how an arbitrator should understand and interpret an Agency LRVC determination, and how that determination relates to the final offers of the parties to the FOA in question.

140. When contemplating the extent to which it intends to issue further FOA guidance material, the Agency should be mindful of its present guidance. In that context we note that the Agency's website entitled "Selecting an Arbitrator: A Resource Tool" contains some incorrect and misleading statements regarding the potential challenge of a FOA arbitrator following his or her appointment:

> "Once the Agency has appointed an arbitrator, a party may challenge that appointment only if it becomes aware, after the appointment has been made, of circumstances that cause it to perceive bias or to doubt the arbitrator's impartiality or independence.
>
> A party must challenge the appointment immediately: no later than three days after becoming aware of any circumstances that cause the party to perceive bias or to doubt the candidate's impartiality or independence.
>
> A party wishing to challenge an arbitrator must notify the Agency, the other party and the arbitrator, giving reasons in writing for the challenge.
>
> If one party challenges the arbitrator and the other party concurs with the challenge, the arbitrator will withdraw. The challenged arbitrator may also withdraw when the parties do not concur. In neither case does the withdrawal imply acceptance of the validity of the grounds for the challenge."[84]

141. While we do not in any way contend that the Agency should not express its position in relation to the foregoing, we submit that the appropriate place to do so is in the context of a properly-documented judicial review application. We do not believe that the Agency has jurisdiction to remove an arbitrator after making the appointment. We think that after the appointment of an arbitrator, the Agency is *functus officio*, and any challenge to the appointment of the arbitrator should properly be brought via a judicial review application to

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[83] Bill C-49, An Act to amend the Canada Transportation Act and other Acts respecting transportation and to make related and consequential amendments to other Acts", *House of Commons Debates,* 42-1, No 291 (3 May 2018) at 1025 (Hon. Marc Garneau).

[84] Agency's website as accessed on September 28, 2018: https://otc-cta.gc.ca/eng/publication/selecting-arbitrator-a-resource-tool.

the Federal Court. If the Agency is in agreement, we ask that the Agency revise its webpage accordingly.

142. In addition, the Agency's website formerly contained a document that set out the Agency's rules of procedure for use in FOA (the "**Agency FOA Rules**") under subsection 163(1) of the Act, which provides that the Agency's rules of procedure apply if the arbitrator and the parties are unable to agree as to the procedure to be followed.[85] The Agency FOA Rules no longer appear on the Agency's website or anywhere else online that we have been able to identify. We think procedural fairness dictates that the parties know the procedure to be followed before embarking on a FOA, including those rules that are to apply if the parties and the arbitrator fail to agree on procedural rules. Consequently, we urge the Agency to make the Agency FOA Rules publicly available on the Agency's website.

Extended Interswitching

143. Shippers are generally aware that the Agency may permit an application for interswitching beyond the 30 kilometre interswitching limit where a point of origin or destination is "reasonably close" to an interchange.[86] Applications for extended interswitching have been relatively rare, and the decided cases indicate that the actual distance of the shipper facility from the interchange is not the sole determining factor.[87] If the Agency has any intention of making this remedy more accessible to shippers, it should publish guidance as to the circumstances in which the Agency will grant the remedy, including any clarifications regarding the Agency's interpretation of "reasonably close", together with a listing of points the Agency has determined to be "reasonably close" to an interchange.

General Comments

144. The new subsection 36.11(1) mandates the Agency to publish "general information on its Internet site" as a "measure to inform the public" about the provisions of Parts II and IV. While guidance materials are a valuable resource to anyone dealing with a railway issue or contemplating an application to the Agency, it is trite law that such materials must not fetter the discretion of Agency Members in deciding actual cases before them. The new

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[85] Subsection 163(1) of the Act states: "In the absence of an agreement by the arbitrator and the parties as to the procedure to be followed, a final offer arbitration shall be governed by the rules of procedure made by the Agency."
[86] Subsection 127(4) of the Act states: "On the application of a person referred to in subsection (1), the Agency may deem a point of origin or destination of a movement of traffic in any particular case to be within 30 km of an interchange if the Agency is of the opinion that, in the circumstances, the point of origin or destination is reasonably close to the interchange."
[87] In Decision 269-R-1988, the Agency's predecessor granted an application where the radial distance from the shipper's facility to the interchange exceeded the 30 kilometre limit by over 23%. In Decision 165-R-1990, the shipper's facility was found not to be reasonably close to the interchange, even though the radial distance exceeded the limit by only 18%.

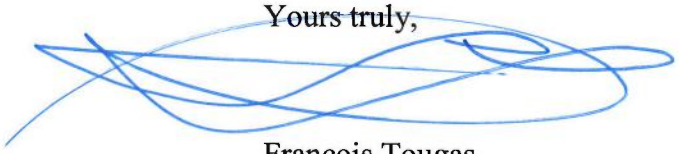
subsection does not contemplate the establishment of binding interpretations. Members must remain open to receiving and giving full consideration to arguments and submissions that advocate a departure from guidance materials in a particular case. The Agency might accordingly include in any guidance materials it issues a reminder of the purpose of guidance materials and of the fact that guidance materials are not legally binding.

145. At this time, the Agency does not have the benefit of prior experience with actual cases in relation to the new provisions of the Act. Particularly in relation to these new provisions, but also in connection with remedies that have been in place for some time, it will also be important to ensure that guidance materials are updated on a regular basis to reflect any new jurisprudence.

146. We also recommend that the Agency consider other important sources of guidance for the public and practitioners which are more appropriately suited for providing information about specific or narrower issues. In particular, the Agency should expand the information about decided and pending cases it makes available on its website. Many administrative tribunals offer on-line access to a comprehensive record in all matters before them.[88] These records include public filings by parties as well as procedural directions, and interim and final decisions issued. They are an important source of guidance for anyone with potential matters before these tribunals. While most of the Agency's final decisions are accessible in the "Decisions and Determinations" section of its website, many letter decisions are not. Non-confidential materials filed with the Agency in a matter can generally be obtained on request, but are not readily accessible on-line.

Please do not hesitate to contact us if we can be of further assistance in the Consultation.

Yours truly,



François Tougas

cc: Teck Resources Limited
Western Grain Elevator Association
Canadian Canola Growers Association
Western Canadian Shippers Coalition
Mining Association of Canada

[88] For example, the National Energy Board and the Competition Tribunal.

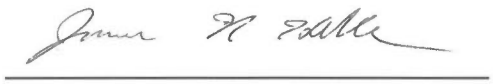
Schedule "A" – Hellerworx Report

BEFORE THE CANADIAN TRANSPORTATION AGENCY

IN THE MATTER OF

CTA Regulatory Modernization Initiative Consultation

Expert Evidence prepared by:



Jamie Heller

John Edsforth

John Schmitter

September 28, 2018

CTA Regulatory Modernization Initiative Consultation
Hellerworx Expert Report

1. Purpose

The purpose of this report is to comment on Item 1 (Amendments to the *Railway Interswitching Regulations)* raised by staff of the Canadian Transportation Agency (Agency) in the Consultation (the "Consultation") on the Agency's Regulatory Modernization Initiative ("RMI"). McMillan LLP has asked us to provide independent judgments and opinions, as cost consultants to shippers and other stakeholders, including government agencies, on the questions raised in Item 1 of the Consultation, Amendments to the *Railway Interswitching Regulations*. In our capacity as cost consultants, we have developed and apply cost models to calculate railway long run variable costs (LRVC).

2. Qualifications

Mr. James N. Heller is President of Hellerworx, Inc. a transportation, energy and environmental economics consulting firm located in Chevy Chase, Maryland. For 35 years, Mr. Heller has provided consulting services for shippers, utilities, and government agencies related to rail transportation, cost analysis, freight markets, and transportation agreements. On behalf of his clients he has presented testimony on numerous occasions before regulatory commissions, including the Surface Transportation Board (STB or Board), state and federal courts, and numerous arbitration panels in Canada and the United States, including final offer arbitrations (FOA). In 1979 he founded Fieldston Company, which provided economics consulting services to rail shippers among others including numerous electric utilities, commodity companies, energy producers, rail and other transportation companies, developers, various government agencies and the Electric Power Research Institute. In 1983, he formed Fieldston Publications, Inc., which developed publications focused on the railroad and coal industries, and on environmental compliance. Publications included the Coal Transportation Report, the Fieldston Coal Transportation Manual, Coal Daily, Rail Business, Clean Air Compliance Review, Air Daily, and Intermodal Business. In 1995, he co-founded Fieldston Transportation Services Company (FTS) which provided railcar management, leasing and maintenance services to shippers and short line carriers. From 1998 through 2002, he worked as a Senior Vice President and Partner for Hagler Bailly, which acquired Fieldston and then PA Consulting, the acquirers of Hagler Bailly. Mr. Heller has a Bachelor of Science degree in electrical engineering from Northwestern University, and a Master's in Business Administration from the Harvard Business School. Mr. Heller has participated in and provided expert reports in consultations and processes before the Agency.

Mr. John Edsforth is president of Travacon Research, Ltd. a consultancy based in Seattle, Washington. The Travacon Research Limited Railway Cost Model is used to estimate the long run variable costs incurred in handling specified rail shipments. For Canadian carriers, it is based on Travacon's analysis of public data sources. For US carriers, it is based on Uniform Rail Costing System (URCS) data released by STB, together with Price Index data published by the Association of American Railroads (AAR). Mr.

Edsforth has utilized the model in FOA proceedings; freight rate negotiations for most major commodity movements originating and/or terminating in Canada; preparation of evidence presented to Committees, including Standing Committees, of the Canadian House of Commons and Senate respecting Canadian rail legislation (Western Grain Transportation Act, National Transportation Act, 1987, Canada Transportation Act); estimation of variable costs incurred by Canadian railways in handling statutory grain and grain products; three Canadian regulatory proceedings respecting non-compensatory railway freight rates; feasibility studies for railway short line operations; fifteen applications for abandonment of rail lines for Canadian railways and numerous processes and consultations before the Canadian Transportation Agency and its predecessors, including with respect to regulatory costing. Mr. Edsforth holds a Master of Science degree from California Institute of Technology and a Bachelor of Engineering from McGill University.

Mr. John Schmitter is president of KEP, LLC and has over 30 years of experience in transportation. As a consultant, he has worked with companies in the coal, non-metallic minerals, petroleum, steel, chemical, fertilizer, paper, lumber and grain industries as well as shortline railroads, ports, and government agencies. His consulting experience includes rail cost analysis in support of rail strategy development, rail contract negotiations and regulatory proceedings in both Canada and the United States. Mr. Schmitter has also provided expert evidence before the US Surface Transportation Board. Mr. Schmitter advises rail customers on supply chain strategy, rail operations, rail fleet management, commercial rail contracts and rail costs both in the United States and Canada. Prior to starting KEP, LLC, Mr. Schmitter was Vice President of Business Development at DTE Rail Services, a railcar repair, software, and services company. He was Managing Director of Metals & Ores at Southern Pacific Railroad and intermodal market manager and trainmaster at Conrail. Mr. Schmitter has also held marketing and sales positions in the intermodal and LTL trucking industries. Mr. Schmitter has a master's Degree in business administration from Penn State University and a Bachelor of Science Degree in Business from Northeastern University with a concentration in supply chain management.

3. Consultation Issue 1 – Amendments to the *Railway Interswitching Regulations*

Bill C-49, the *Transportation Modernization Act,* which received Royal Assent on May 24, 2018, made significant changes to the Canada Transportation Act (Act). Among those changes were the requirement for the Agency to set the regular interswitching rate each year by December 1 and publish in the Canada Gazette by December 31 the method by which the new rate was determined.[1]

The legislation also specified the requirement for CN and CP to report their cost information to the Agency by August 31 each year. The reporting includes all unit costs, output units and other financial, statistical, and supporting information for the preceding calendar year that is required for the determination of costs by the Agency under this Part.[2]

As a result of these legislative changes, the Agency has stated that it *may be beneficial to provide greater clarity on how the CTA calculates interswitching rates, including the first 30 km of a Long Haul Interswitching movement.* [3]

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[1] Canada Transportation Act Section 127.1 (1) and (5).
[2] Canada Transportation Act Section 157 (5).
[3] CTA, Discussion Paper on Regulatory Modernization for Rail Transportation Item 1

In the Discussion Paper, the Agency also stated that the railway costing methodology at the CTA should be as clear as possible, given that railway costs are used by the CTA in the development of interswitching rates (among other purposes).[4] As part of this consultation, the Agency is seeking input from stakeholders on the relevance of the cost regulations and on what information would be beneficial to stakeholders in elaborating how the CTA establishes railway costs. The Agency asked stakeholders to address four questions on Item 1.

1. What amendments, if any, to the Railway Interswitching Regulations would help ensure clarity on how the CTA calculates regulated interswitching rates?
2. What guidance material would be useful in understanding the CTA's development of regulated interswitching rates?
3. Taking into account that Long-Haul Interswitching rates are to be set on a case-by-case basis, what type of guidance material would be useful in understanding how the remedy works and how the CTA will make rate determinations?
4. Are any provisions of the Railway Costing Regulations of current relevance? What information would be useful regarding how costing is set by the CTA?

We address these questions and provide our recommendations in the sections below.

4. Historical Perspective

Railway cost calculations are a fundamental building block of the regulatory structure in Canada. The Agency uses them to develop interswitching rates and other cost determinations.[5] Because these decisions have significant impacts on the rates paid by railway customers, we recommend as much transparency as possible into the costs and the costing processes that underpin these regulatory decisions.

In addition to the Agency's use of railway costs for regulatory purposes, the ability to calculate railway costs is a valuable tool for shippers who need to negotiate agreements with railways in an environment where the railway generally has significant market power. Railway customers rely on cost calculations along with other market information to develop, predict and understand the rates which railways are likely to charge. Customers use railway cost estimates to understand how a change in their shipment characteristics (shipment size, car type, improving switching efficiency, etc.) would affect the railway's economics. They also use railway cost estimates as one of the factors in determining the feasibility of seeking rate relief through FOA; and, they are fundamental to the usefulness of these remedies to shippers. We have developed and used railway cost estimates hundreds of times with clients for these purposes.

The Travacon model was developed as a tool to assist shippers by calculating railway long run variable costs (LRVC) in a manner that attempts to mimic the costing model used by the Agency. When the Travacon model was developed, there was more transparency than there is today regarding railway cost data and the costing process used by the Agency. The Travacon model uses the data provided by the 1984 Western Grain Transportation Act (WGTA) costing review. That review provided data for the various accounts for each railway for grain operations, separated by line-related and volume-related

[4] CTA, Discussion Paper on Regulatory Modernization for Rail Transportation Item 1
[5] CTA, Discussion Paper on Regulatory Modernization for Rail Transportation Item 1.

variable components. The variable component of certain cost parameters was a key element in the initial model development.

Over time, railway cost information has become less transparent. The Travacon model is updated quarterly using data from CN and CP financial statements. It was also updated annually through 2009 using data published in Statistics Canada Report 52-216, Rail in Canada. Through 2009, this report provided annual data for 112 accounts for CN and CP's operations in Canada based on the Uniform Classification of Accounts (UCA). Publication of Rail in Canada was discontinued in 2010. CN and CP provide data in their financial statements for only 35 accounts for their respective system-wide (Canada and United States) operations based on GAAP. Statistics Canada annually provides some aggregated regulatory cost data for CN and CP combined.

While we are still able to produce accurate calculations of railway costs, the decline in transparency of railway cost data has made this task increasingly difficult. The ability of shippers to calculate railway costs remains a critical tool used in negotiations with CN and CP, including in connection with interswitching rates, as we describe below. For these reasons, it is important that sufficient data on railway costs and the Agency costing process continue to be publicly available.

5. Recommendations and Supporting Information

5.1. Overview

In Item 1 of this consultation the Agency has asked for input on potential amendments to the interswitching regulations that would provide additional clarity on the process.[6] It has also asked for input on the relevance of the Railway Costing Regulations and on what information would be beneficial to stakeholders in elaborating how the CTA establishes railway costs.[7]

All the provisions of the Railway Costing Regulations are of current relevance for the reasons described in Section 4. Our recommendation would be for the Agency to:

1) Publish the unit costs that it develops for CN and CP;
2) If the Agency will not publish the unit cost information, then we ask that an Agency Costing Manual[8] and the information that was provided in the Rail in Canada publication prior to 2009 be made public.[9]

We recognize that the data contained in the Rail in Canada report is now considered confidential. That very significant change apparently occurred without any consultation or opportunity for stakeholder input. The railways presumably recognized that denying shippers access to that data would frustrate their ability to understand changes in railway costs, and both Transport Canada and Stats Canada complied. The data which we are requesting be made public were historically made public in Canada and are still made public in the US. Our recommendations are designed to maintain sufficient transparency in rail cost data and in the Agency cost methodology over the long term to allow shippers and other stakeholders the continued ability to calculate railway costs and utilize the various shipper remedies in the Act. While we understand that the Agency lacks the

[6] CTA, Discussion Paper on Regulatory Modernization for Rail Transportation Item 1
[7] CTA, Discussion Paper on Regulatory Modernization for Rail Transportation Item 1.
[8] A costing manual contains calculation procedures for unit costs without actual railway data.
[9] Example - https://www150.statcan.gc.ca/n1/pub/52-216-x/52-216-x2009000-eng.htm

authority to make such data public, we recommend that the Agency indicate in writing to Stats Canada and Transport Canada that it would view a decision on their part to make such data public favorably and of assistance to the Agency in its efforts to bring greater transparency to the costing process.

The following subsections elaborate upon these recommendations.

5.2. Specific Recommendations

5.2.1. Unit Costs

The Agency calculates railway unit costs and makes determinations by cost account or by account groupings. The unit costs are critical to enabling shippers and other parties to calculate railway variable costs. We recommend that the Agency, as part of its annual interswitching decision, make public the unit costs by account or account groupings that it calculates for CN and CP as part of updating the ARCM.

We realize there may be confidentiality requirements governing the release of information provided by CN and CP. However, the Agency could create its own costing manual and make its own determinations of the cost variabilities and unit costs to be used in the Agency Rail Costing Model (ARCM), in which case we request that the Agency release its calculations of unit costs along with the analyses supporting the decisions that it makes with regard to unit cost determinations. If the Agency cannot make such data available by individual carrier or cost category, it could do so by cost account groupings.

The Agency should also publish guidance that addresses how the most recent changes in overall variabilities for CP and CN defined in Order No. 2015-R-91 would differentially affect line haul costs and switching costs, and whether the ratio is expected to act similarly on each. For any future changes in the overall CP and CN ratio of variable costs versus fixed costs the Agency should explain the reason for the changes and the differential impact on line haul costs and switching costs.

In addition, the Agency has described, at a high level, how the contribution margin above LRVC calculated, using the "old" variable/constant ratio, required to cover CN's and CP's system wide total costs would change using the "new" variable/constant ratio defined in 2015-R-91.[10] We request that the Agency provide more detailed guidance on this change, on how any future changes in variabilities would impact this ratio, and on how the changes will affect the determination of interswitching rates.

There is precedence for the release of railway cost data, including variabilities, in the U.S. along with support from CN for transparency in this process. In the U.S., the Surface

[10] Paragraph 30 of Order R-91 states: "This means, for CN, the system average contribution to fixed (constant) costs that must be applied to system variable costs to cover system total costs increases from 19 percent to 56 percent, and for CP, it increases from 20 percent to 61 percent. These higher contribution levels are also in better alignment with U.S. practice, where by legislative mandate a contribution of up to 80 percent on the calculated variable costs is not eligible for rate disputes before the Surface Transportation Board."

Transportation Board (STB or Board) maintains the Uniform Rail Costing System (URCS) which is a model similar to the ARCM. All of the data, including operating statistics, operating statistic/cost relationships, unit costs, variabilities, and other data for each railway (including the U.S. operations of CN and CP) are public. The URCS model itself is also public without apparent negative impact on the profitability of railways in the United States, including CN and CP. Appendix 1 describes the U.S. rail costing process in more detail.

CN also supported a transparent process for determining variabilities in its submission in the 2017 ARCM consultation.

CN finds that an open and transparent process of determining variable costs is vastly superior to an opaque process where many arbitrary choices are made for technical reasons without any industry input or discussion.[11]

5.2.2. **UCA and Railway Costing Manual**

If the Agency decides that it cannot release the unit costs as described in Section 5.2.1, we recommend that the Agency develop its own costing manual and make that costing manual public along with all subsequent updates. Our preference would be that the Agency costing manual contain detail by the UCA accounts or account groupings used by the Agency individually for CN and CP. In addition, we recommend that the Agency recommend to Transport Canada and Stats Canada that each year it resume releasing the cost and operational data that was contained in the Rail in Canada report prior to 2010. As an alternative releasing that data with, for example, a three-year time delay would be useful.

Once the Agency makes a determination in the consultation on changes to the ARCM begun in 2017, we recommend that the Agency release the complete revised UCA list along with any groups of accounts that the Agency has created, eliminated, or changed. We also recommend that the Agency make public all subsequent changes to the UCA, including changes to account groups and publish the complete account list when changes are made. The UCA should be updated on the Agency website based on the results of the most recent consultation.

The regulations require CN and CP to submit costing manuals. These costing manuals document the identified causal relationships between expenses and operating statistics.[12] The manuals also identify the grouping of expenses for cost analysis purposes (dependent variable expenses), the causal factors (independent variables), the years of analysis and the method of cost development (direct assignment, direct analysis, regression analysis).[13]

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[11] ARCM Consultation 2017, Appendix D P2.

[12] https://www.otc-cta.gc.ca/eng/overview-agencys-regulatory-costing-model

[13] https://www.otc-cta.gc.ca/eng/overview-agencys-regulatory-costing-model

The cost and operational data are reported to the Agency using the rules and standards provided in the UCA. The expenses and operating statistics provide the Agency with the information required to maintain a costing capability for regulatory purposes.[14]

The Travacon model operates in much the same way as the ARCM. Transparency of changes or updates to the UCA, costing manuals and the Agency process for calculating railway costs are therefore critical to the continued ability of shippers and other stakeholders to calculate railway costs and utilize the shipper remedies in the Act.

This creates a dilemma for cost consultants, shippers, and other stakeholders. The original rail costing manual was developed at a time when the Agency (or its predecessors) was engaged in a broader range of regulatory actions than it is currently. In that environment, the Agency conducted a largely transparent process to develop costs largely related to abandonment of branch lines so that the parties could comment on the process and understand the results. As the scope of Agency ratemaking has narrowed, CN, except as noted above, and CP have become more aggressive in claiming confidentiality with regard to not only costing processes, but also the publication of financial and operational data.

One of the results of this position by CN and CP was the discontinuance of individual railway financial and statistics reporting by Statistics Canada (52-216), the result of which has made calculation of railway costs by shippers and stakeholders other than the Agency and the railways more difficult. Rail in Canada was a key source of data used to update these cost/operating statistics relationships. The result is that our ability to guide shippers on railway costs following the Agency modeling approach has been eroded by railway-imposed limits on data availability. While we understand that the Agency lacks the authority to make such data public, we recommend that the Agency indicate in writing to Stats Canada and Transport Canada that it would view a decision on their part to make such data public favorably and of assistance to the Agency in its efforts to bring greater transparency to the costing process.

Potential alternatives

If the Agency decides that the Agency costing manual will only contain a high level non-quantitative description of the relationships between the cost and operations accounts, then we recommend several alternatives that would provide additional summary data in various forms. For example:

- A public supplement to the Agency costing manual could contain average causal relationships for accounts rolled up into larger groupings than used by the ARCM.

- A public supplement to the Agency costing manual could combine the cost/operating statistic relationships for CN and CP by account or by account groups.

[14] https://www.otc-cta.gc.ca/eng/overview-agencys-regulatory-costing-model.

Any changes to the costing manual should be published annually with a detailed explanation of the changes made during the past year and their impact on the costing process.

5.2.3. ARCM changes

We do not believe that major changes to the ARCM are necessary. If the Agency uses additional data provided by the railways to calibrate the model and if changes are made, all stakeholders affected by the Agency's calculation of railway costs should have sufficient data to understand and to project the impact that any proposed changes might have on their ability to calculate railway costs. Recently, the Agency has proposed changes to the UCA by disaggregating or changing account groupings.[4] The Agency has already changed its calculation of the CN and CP overall cost variabilities in Order No. 2015-R-91. We agree with comments in CN's filing in that consultation that elements of the new component variabilities do not comport with a common sense understanding of railway economics and operations.[15] While it may be tempting to construct a new model because new data are available, it is not clear to us that the current model is flawed.

The costing results can implicitly be tested by comparing the prices that railways charge in a highly competitive environment with the LRVCs in those environments. In our experience, the competitive rates are above the LRVCs by the level of contribution margins (as disclosed in the Interswitching decisions) one would expect if the rates and LRVCs are reasonable.

If the Agency significantly alters its modelling approach without providing transparency on the new approach to parties other than CN and CP, that secret alteration will irrevocably damage our ability to assist shippers in commenting on Interswitching regulations, supporting FOA positions, and defining rate proposals in negotiations.

We strongly urge the Agency to provide advance notification of proposed changes in the ARCM or the results of any recalibration[16] of the ARCM and that the Agency continue to conduct consultations on any proposed model changes to seek input from stakeholders. The consultation should include the following.

- Description of proposed changes.
- For each specific change, the Agency analysis or other driver that led the Agency to conclude that the proposed change would improve the ARCM.
- The Agency's estimated impact of each change on the calculation of railway costs for CN and CP with a description of the Agency's analysis.

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[4] Consultation on the Agency Regulatory Costing Model.

[15] Canadian Transportation Agency Stakeholder Consultation on ARCM and the Generalized Costing Manual, Appendix D, Page 9.

[16] The notion of recalibration means that the fundamental relationships between the operating and cost parameters would remain intact, but the constants and regression coefficients on the independent variables could change as a result of updated data and analyses.

Once the consultation is concluded, we recommend that the Agency publish a report describing the changes. The report would include details on expected changes in cost/operating statistics relationships, cost calculation methodology, unit costs and cost variability by individual account or groups of accounts for CN and CP. For example, the report could state that, when implemented, a specific change in the ARCM will cause the variability of gross tonne mile costs to increase by X percent for CN and Y percent for CP.

The Agency report should contain a description of the impact that the changes will have on the calculation of interswitching rates and on the methodology for calculating long haul interswitching rates. For example, a particular change will decrease the variability percent of unit cost per gross tonne mile, which is likely to have an X percent change in the interswitching rates in the next update.

Most importantly, once the ARCM changes are implemented, stakeholders should have the required data to understand the impact of the changes on how the Agency calculates railway costs. They also should have enough information so that they can continue to make their own calculations of railway costs consistent with the Agency's methodology.

If the Agency chooses not to provide sufficient public transparency of proposed changes to the ARCM, unit costs, and descriptions of how the ARCM changes would impact interswitching rates and other cost related matters, we strongly recommend that the ARCM not be changed.

5.2.4. Interswitching decisions

Bill C-49 changed the Act to require the Agency to determine by December 1 of each year, the interswitching rates for the following year and publish the rate no later than December 31 before the beginning of the year for which the rate applies.[17] The Act also requires the Agency to publish the method that it followed for determining the rate.[18]

The availability of interswitching and the level of rates for interswitching are critical to shipper supply chain decisions, warranting as much transparency as possible regarding the data and methodology used in making the decision each year. We recommend that the Agency include the following information in its annual publication of the interswitching rate determination methodology.

- The Act requires the Agency to consider the average variable costs of all the movements that are subject to the rate and the rate shall not be less than the variable costs of moving the traffic as determined by the Agency. [19] We recommend that the Agency publish the variable costs considered in the development of the interswitching rate for each interswitching zone along with the detailed methodology used in calculating those variable costs. This will provide all parties with insight as to how to interpret the contribution margins associated with the interswitching rates relative to the costs that underpin those

[17] Canada Transportation Act 127.1(1), (5).
[18] Act 127.1(4).
[19] Act 127.1(3)

rates. Should the Agency add modify the type of movements for which it calculates distinct interswitching rates (e.g. ports, or urban yards), we recommend that the same data be made available for each type of movement.

- The Act requires the Agency to consider any reduction in cost that, in the Agency's opinion, results from moving a greater number of cars or transferring several cars at the same time.[20] We recommend that the Agency publish the methodology used in making the determination of any reduction in costs resulting from moving multiple cars and how that methodology was applied to calculate the interswitching rates for car blocks, including how the minimum car block size is determined. We recommend that the Agency also publish the variable costs used in making the determination of interswitching rates for car blocks or other distinct types of interswitch movements. This will provide insight as to why the Agency selected various car block sizes, and how interswitching rates for various size car blocks vary relative to the costs that underpin those rates.

- We recommend that the Agency include the contribution margin over variable costs used by the Agency to determine the interswitching rate; the Agency's method for calculating the contribution margin it applies to set the interswitching rates; and what that contribution margin represents (e.g. system average contribution for all carriers, the average of CN and CP's average contribution margins and what the individual margins would be). Because of the confidentiality associated with both rail rates and costs, it is difficult for shippers to develop benchmarks for different types of movements. The Agency has periodically provided useful information in the commentary accompanying its occasional interswitching decisions related to contribution margins. This is very valuable information because no other published and public sources of such data exist in Canada. While individual shippers with many movements may be able to derive some benchmarks, small shippers and captive shippers are likely to lack such information. By providing insights on the contributions margins associated with its interswitching rate decisions on an annual basis, the Agency can help alleviate the benchmarking problem without disclosing any confidential rate information.

The Act now also requires the Agency to consider *any long-term investment needed in the railways.*[21] It is unclear to us in the context of how variable costs are calculated that any special adjustments would be needed to reflect "long term investments". The Agency determined cost of capital used in the LRVC calculations is already constructed to allow for a market return on railway investments and the ability to attract additional capital for future investments. We recommend that, prior to implementation of this provision, the Agency conduct a consultation and consider input from all interested parties regarding how the provision will be applied. Questions to be addressed in the consultation would include:

- The time period to be considered "long-term" in the context of this provision.

[20] Act 127.1(2a)
[21] Act 127.1(2b)

- What specific investments are to be considered as "needed?" Investments to be considered should be only those that may be required to provide interswitching service.
- Proposed Agency methodology for applying the interswitching investment costs to the interswitching rates.
- What kinds of long-term investments are eligible for inclusion that are not otherwise captured in the Agency-determined cost of capital.
- If the long-term investment adjustment is to be applied only to interswitching at a specific location, the criteria which caused it to be applied in a particular instance and the impact should be clearly stated.

The Agency should then publish a report describing its methodology for determining any long-term investments needed to provide interswitching service.

Each year, as part of its required publication of the method for calculating interswitching rates, the Agency should include the specific investment items included in determination of the interswitching rate, the amount of investment costs and how any contribution margin used to determine each of the interswitching rates is modified to account for the addition of long term investments not otherwise captured in the Agency-determined cost of capital.

We recommend that the Agency initiate a consultation allowing for input from all parties whenever it considers a change to the terms and conditions governing interswitching traffic or changes in the distance zones as provided in Section 128(1) of the Act.

Section 127(4) of the Act provides authority for the Agency to allow extension of interswitching rates.

> *"On application of a person referred to in subsection (1), the Agency may deem a point of origin or destination of a movement of traffic in any particular case to be within 30 km of an interchange if the Agency is of the opinion that, in the circumstances, the point of origin or destination is reasonably close to the interchange."*

We request that the Agency publish guidance on how this provision will be implemented, including the definition of "reasonably close" and the circumstances the Agency would consider in determining that a point outside of the 30 km from interchange is to be considered within the interswitching limits. We also request that the Agency publish any points it rules to be within 30 km of an interchange under this provision.

5.2.5. Long Haul Interswitching (LHI)

We recommend that the Agency release its detailed methodology for determining Long Haul Interswitching rates (LHI). While each LHI may involve an individual confidential determination, presumably the Agency will be following some general principles and methodologies to make its determinations.

Since the overall approach to determining LHI rates seems uniquely peculiar to the LHI process, it is presumably not intended as a surrogate for use in other processes like FOA or regulated interswitching. The Agency should explicitly state this principle to avoid confusion since different methodologies are used for different remedies.

Since costs and contribution margins presumably will be used by the Agency in arriving at a prescribed LHI rate, it would be helpful for the Agency to define the principles, processes, and procedures it intends to use in rate setting. While the data may be confidential, the process items if made public would help shippers understand the potential utility, if any, of the LHI procedure to their individual situations.

How much information the Agency provides about its process should be a function of whether the Agency is willing to state that the methodology used in this remedy is not intended for other remedies. If this distinction is made, then more detail about how comparable rates are determined, information on distributions of contribution margins, and how rate determinations are made could be helpful to shippers considering use of the LHI remedy. However, if the Agency implies that this process has use in other venues or leaves the topic ambiguous, then it should not provide detail to avoid misuse of the process in non-LHI situations.

Appendix 1

U.S. Process for Rail Cost Modeling

In the U.S., all of the information that we are requesting about the railway costs and calculation methodology is publicly available. The U.S. Surface Transportation Board (STB or Board) maintains the Uniform Rail Costing System (URCS), which is a general-purpose rail costing system used to estimate the variable and total unit costs for US Class I Railroads.[22] The Board uses URCS for a variety of statutory and non-statutory purposes, including making the jurisdictional determination in railroad maximum rate reasonableness proceedings, determining whether a challenged rate is reasonable and what relief a shipper should receive. URCS is used in US railroad line abandonment proceedings and to cost the STB Carload Waybill Sample. URCS also provides the railroad industry, shipper community and other interested parties with a standardized costing model and basic cost information.

The Board annually publishes URCS costs for all US Class I railroads (including the US operations of CN and CP). The railroad cost and operational data used in URCS is publicly available. The complex methodologies underlying URCS calculations and operation of the model are also transparent. Each year, the Board makes public the URCS cost model and the data required to make cost calculations. Rail customers, consultants and other parties can replicate URCS model results and provide meaningful comments to the STB on potential changes to URCS.

Exhibit 1 shows the summary of the variability percentages from the regressions for the US portion of CP for the year 2016 as an example of the data that is publicly available in the US.

Exhibit 1

CP 2016 Run: 01/25/2018 12:10:52 PM
WORKTABLE C SUMMARY
SUMMARY OF VARIABILITY PERCENTAGES FROM REGRESSIONS

Regr No.	Tab	Regression Name	Regression Description	Regression Equation	Current Year Variability	2 Year Average Variability	3 Year Average Variability	4 Year Average Variability	5 Year Average Variability
1	C1	RMAINT	RUNNING TRACK MAINTENANCE	RMAINT = (3446.6 * TR) + (0.0004328 * GTMC)	56.898%	59.562%	59.704%	59.227%	58.400%
2	C2	MAINTOH	TRACK MAINTENANCE OVERHEAD & OTHER EQUIP MAINTENANCE & OVERHEAD	MAINTOH = (7036.2 * TR) + (0.0004811 * GTMC)	41.819%	44.506%	44.652%	44.163%	43.323%
3	C3	RUNWAGE	RUNNING CREW WAGES	RUNWAGE = (4895.9 * TR) + (6.792 * TM)	64.690%	68.117%	68.991%	69.449%	69.705%
4	C4	TRANSOH	TRANSPORTATION OVERHEAD EXPENSE	TRANSOH = (2082.7 * TR) + (2.4038 * TM)	60.384%	63.997%	64.925%	65.412%	65.686%
5	C5	RUNFUEL	TRANSPORTATION FUEL EXPENSE	RUNFUEL = (662 * TR) + (1.3747 * LRM)	87.000%	88.363%	88.528%	88.730%	88.879%
6	C6	RLOCREP	ROAD LOCOMOTIVE SERVICE, REPAIRS, & OVERHEAD	RLOCREP = (4348.5 * TR) + (1.1052 * LRM)	45.026%	48.170%	48.571%	49.074%	49.449%
7	C7	TRNINSP	ROAD TRAIN INSPECTION	TRNINSP = (1452 * TR) + (0.5834 * TM)	34.667%	38.225%	39.187%	39.700%	39.990%
8	C8	CLWRCK	WRECK CLEARING EXPENSES	CLWRCK = (522.1 * TR) + (0.2139 * TM)	35.109%	38.686%	39.652%	40.167%	40.458%
9	C9	SWMAINT	SWITCHING MAINTENANCE & OVERHEAD	SWMAINT = (196.2 * ST) + (4.7 * THS)	87.715%	89.292%	89.951%	90.519%	90.861%
10	C10	YARDOPS	YARD OPERATIONS	YARDOPS = (10634.3 * YST) + (54.6 * THY)	53.974%	58.513%	60.461%	62.688%	64.404%
11	C11	SWWAGE	SWITCHING CREW WAGES	SWWAGE = (4019.8 * YST) + (79.5 * THY)	81.875%	84.455%	85.487%	86.616%	87.452%
12	C12	YLOCREP	YARD LOCOMOTIVE REPAIRS	YLOCREP = (586.5058 * YST) + (7.4542 * THY)	74.378%	77.735%	79.103%	80.616%	81.748%
13	C13	CAREP	CARLOAD-RELATED EXPENSES	CAREP = (97.2531 * TR) + (4.0232 * CLOR)	87.907%	88.410%	88.372%	88.125%	87.957%
14	C14	GENADM	GENERAL & ADMINISTRATIVE EXPENSES	GENADM = (4940.9 * TR) + (0.0012912 * GTMC)	73.313%	75.401%	75.510%	75.143%	74.500%
15									
16	C16	CAROH	FREIGHT CAR REPAIR OVERHEAD EXPENSES	CAROH = (2048.9 * TR) + (0.01159 * CMPD)	15.247%	16.747%	17.177%	17.539%	17.429%

These variability percentages based on the regression equations are applied to 78 percent of the total expenses. The remaining 22 percent of expenses are assigned default variability factors based on judgments made by the STB's predecessor, the Interstate

[22] https://www.stb.gov/stb/industry/urcs.html

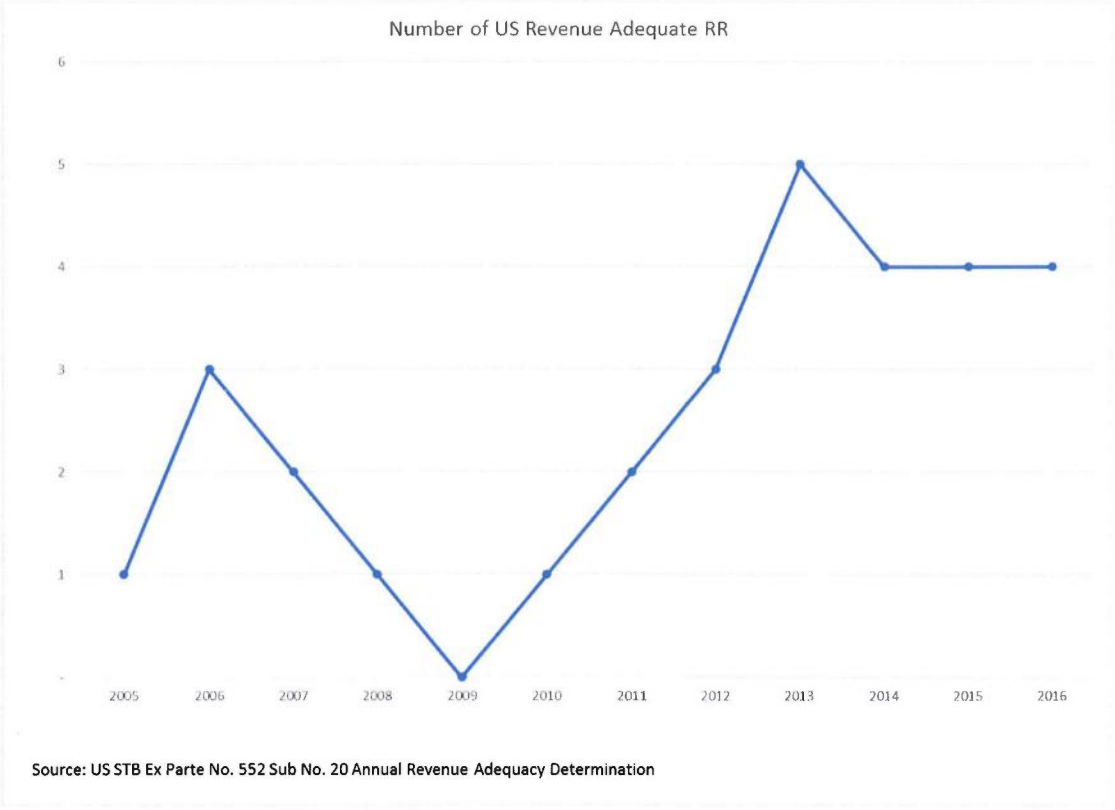
Commerce Commission (ICC). The unit costs can then be applied to the operating parameters of a movement to determine the variable costs for the movement.

The URCS worktables for each railroad for each year are available on the STB website in Excel format. Utilizing these worktables, it is possible to track each calculation that was part of the unit cost determination along with the original data source. Since all the cost data and the costing methodology are available publicly, it is possible for parties other than the railroads and the Board staff to provide meaningful comments in Board proceedings where cost information is important.

To enhance transparency, in 2009, the STB received authorization and funding to automate all the steps used from taking the data reported by the railroads annually to producing the railroad specific unit costs that are used in the costing function. Also, certain functionality was added to assist parties in more easily calculating costs. The CN and CP data for their US operations are included in these files.

The US rail cost data has been publicly available since at least the 1980s. During this time the number of railroads determined to be revenue adequate has increased as shown in Exhibit 2 below. The railroads have become increasingly profitable despite the availability of costing data, regardless of whether they are yet revenue adequate.

Exhibit 2



Source: US STB Ex Parte No. 552 Sub No. 20 Annual Revenue Adequacy Determination

Schedule "B" - Excerpts of RIAS Regarding Interswitching Regulations

1. The RIAS in respect of the 2013 amendments to the Interswitching Regulations stated:

> "The Agency, through its review of the *Railway Interswitching Regulations*, made changes to its methodology for calculating interswitching rates to better reflect costs associated with interswitching operations. Specifically, Agency staff eliminated the use of linear regression as it forces a relationship which the current data does not support. Linear regression was previously used in the development of interswitching rates to smooth out the results so that the rates increased proportionately with an increase in distance from the interchange. Agency staff found that rates do not necessarily increase proportionately with increases in distance from the interchange. The reasons for this include the fact that the rail network is composed of different grades of track and that customers and their sidings are not identical.
>
> Also, in previous determinations, the Agency had based its assessment of the interswitching variable costs, in respect of trains of 1 to 59 cars, on a three-year moving average of the traffic counts to minimize the effect of the variations in the traffic distribution patterns and ultimately reduce the variability of the results. In the present proposal, the process was modified to use only data relating to the actual traffic interswitched from the most recent year available. This change will allow the analysis to more closely capture the evolving operational environment and respond to observed material changes in the work activities, and reflect more accurately the cost of interswitching.
>
> ...During this review, the Agency adopted a more robust methodology that captures the operating data of the railway companies more effectively. The 20.3% contribution reflects what the Agency considers to be "required" contribution. It is based entirely on railway costs and reflects the difference between the variable costs as calculated by the Agency's Regulatory Costing Model and the total costs incurred by the railway companies as supplied to the Minister of Transport and used in the Agency's variable cost calculations."[89] [underlining added]

2. The RIAS in respect of the 2014 amendments to the Interswitching Regulations to introduce a new Zone 5 described the methodology in general terms, but without detail, without assumptions about changes in work activities in Zone 1 to 4 relative to Zone 5, and with possibly insufficient attention to the well-known cost-tapering effect to which distance gives rise:

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[89] RIAS in respect of the Regulations Amending the Railway Interswitching Regulations (SOR/2013-28), pages 588 - 589. Agency Decision LET-R-66-2010makes substantially the same points in respect of the elimination of the use of linear regression and three-year versus single year moving average of traffic counts under the headings 2.2.1 (The use of linear regression) and 2.2.2 (Single-year results versus multi-year average), respectively.

"The Agency's costs are based on a method that captures operating costs, as well as capital costs including depreciation of assets, and returns on investment in those assets. The returns on investment are a weighted average of the returns on debt and the returns on equity, and are determined by the Agency according to its cost of capital methodology....That is, the revenues from providing interswitching service are modeled to be equal to the expected variable cost of providing the service, including a return on debt and equity invested in providing rail service, plus a contribution to the fixed costs.

For all cost determinations, the Agency staff measures the quantity of each activity or process involved in the movement or service, multiplies the quantity of each activity or process by its pre-determined unit cost (including applicable overheads), and sums the costs of all activities or processes.

The measured workloads at each interchange location are multiplied by the unit workload costs. The estimated variable cost in a zone is a weighted average of the interchange variable costs in that zone for CN and CP. Weights are based on the number of cars interswitched at each interchange. A system average contribution to fixed costs is added to the variable costs for each zone to arrive at the interswitching rate for the zone.

The Agency calculates the system average contribution to fixed cost separately for each carrier. The amount of fixed cost is calculated as the total system cost (available from financial reports provided to the Agency) less the system variable cost (calculated by the Agency costing model). The system contribution to fixed cost is the amount of fixed costs expressed as a proportion of the system variable costs (calculated for this exercise to be 24%)"[90]

3. The 2013 amendments to the Interswitching Regulations made specific reference and allowed stakeholders to assess the difference between work activities and associated costs as between Zone 4 and Zone 3, down to two geographic centres:

"...The traffic originating or terminating in Zone 4 is highly concentrated in a limited number of interchanges in the Vancouver and Edmonton areas. The geography and the operational conditions prevailing at these interchanges and their associated rail yards are such that their inherent work activities and costs are either similar to or lower than the system weighted average cost for Zone 3 traffic." [91]

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[90] RIAS in respect of the Regulations Amending the Railway Interswitching Regulations (SOR/2014-193), page 2318 - 2319.
[91] RIAS in respect of the Regulations Amending the Railway Interswitching Regulations (SOR/2013-28), page 589.