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Marcia Jones
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Dear Ms. Jones:

Subject: CN Response - Consultations on the Canadian Transportation Agency's Approach to Setting Regulated Interswitching Rates

Thank you for providing CN with the opportunity to make representations on the manner in which the Agency sets regulated interswitching rates following the 2018 amendments to the *Canada Transportation Act* (CTA). CN also appreciates the opportunities it was given, in the form of both the bilateral consultation meeting and the technical workshop, to meet with Agency staff to discuss interswitching rates.

CN agrees with the statement in the Agency's Discussion Paper that the changes to the CTA in relation to interswitching rates brought about by the *Transportation Modernization Act* are intended to ensure that changes to the rates are established and communicated in a timely and transparent manner.

It is CN's great hope that the Agency's publication of the method that it followed in determining the rate (as required under paragraph 127.1(2)(b) of the CTA) and the publication of the rate itself (as required under subsection 127.1(4) of the CTA) will ensure sufficient transparency that industry experts with sufficient knowledge and information will be able to replicate the Agency's calculations and have greater confidence in their reasonableness and fairness.

"Commercially Fair and Reasonable Rate" now to consider Long-Term Investment

CN agrees with the Agency that section 112 of the CTA indicates that the rate set by the Agency must be commercially fair and reasonable to all parties. Section 127.1 of the CTA specifies that the Agency shall "determine the rate per car to be charged for interswitching traffic" annually. It is important to note, as the Agency acknowledges in its discussion paper, that the requirement in section 127.1 is not to determine the cost of interswitching but the rate in a context that is "commercially fair and reasonable" under section 112.

The *Transportation Modernization Act* clarified matters in relation to the interswitching rate to be set by the Agency. In addition to the consideration of the reduction in costs that results from moving a greater number of cars (now found in subsection 127.1(2)) and the **lower limit** on the interswitching rate now found in subsection 127.1(3) (formerly 128(3)) that the rate **cannot be lower** than the "variable costs of moving the traffic", Parliament has signaled that the Agency must consider **any long-term investment needed in the railways**.

Railway companies have long lamented that interswitching rates penalize efficient railways, and are a disincentive to both efficiency and investment in infrastructure. Railway investors have a reasonable expectation that large financial outlays for capital projects will result in quick returns and increased profits. When infrastructure supports regulated interswitching traffic in any substantial manner, those expectations cannot be met. As a result, other infrastructure projects that are less dependent on interswitching traffic are likely to be prioritized, in line with a railway company's corporate obligation to its investors.

The National Transportation Policy specifies in paragraph 5(a) of the CTA that "competition and market forces, [...] are the prime agents in providing viable and effective transportation services". The market is what predicts "commercially fair and reasonable" rates in most cases. While regulated interswitching is used to improve competition by ensuring shippers have access to more than one railway company at commercially fair and reasonable interswitching rates – there is no suggestion in the CTA that those rates are to be set at cost.

This is also echoed in Minister Garneau's September 14, 2017 testimony before the House of Commons Standing Committee on Transportation, Infrastructure and Communities in which the Minister described the changes to the setting of the interswitching rates in his statement as promoting railway investments and compensating railways adequately:

The bill would modernize key grain measures, such as the maximum reserve revenue entitlement, to promote railway investments—and that's a key feature—and ensure that interswitching rates are updated regularly and compensate railways adequately.

Adequate compensation in the context of a railway company is not compensation for cost simply because this is the lowest limit available by law. Adequate compensation, is a rate that is "fair and reasonable to **all parties**", including the railway providing the interswitching service.

In the opinion of CN, a reasonable rate would be based on market rates, which are never lower than variable costs, always consider cost efficiencies when moving a greater number of cars (to improve efficiency, which then helps drive fluidity, which is of benefit to the railways and shippers) and considers long-term investment required in the railway. The market rate is most easily determined through the examination of market driven commercial rates put in place by railway companies not subject to the CTA's interswitching provisions. Provincially-regulated railways in Canada, and reciprocal switching agreements in the U.S., with both Class 1's and shortlines, would offer a good sample of what the market considers fair and reasonable rates for all parties.

CN notes the short time allotted to respond to the Agency's consultation, over the annual vacation period. This precludes in-depth analysis of the numerous important issues and questions raised by the Agency's consultation paper. However, a preliminary and cursory look at the rates paid and received by CN for interswitching, exchange switching, reciprocal switching, and haulage similar to interswitching, yields the results shown in Table 1.

Of note, in the U.S., where there is no regulated interswitching, CN has almost as many transactions as with Class 1's in Canada where interswitching is regulated, even though CN's U.S. traffic is approximately half that of Canada. The absence of regulated interswitching in the U.S. does not lead to the absence of switched traffic. Quite the opposite, it would seem that having a higher, market-determined compensation encourages the railways to do relatively more such transactions.

Rate Range \$/Car	U.S. Class 1 & Shortlines		Canada Shortlines		Canada Class 1	
	Volume Cars/y	Avg Rate CAD/car	Volume Cars/y	Avg Rate CAD/car	Volume Cars/y	Avg Rate CAD/car
100 -						
101-200						
201-300						
301-400						
401-500						
501-600						
601-700						
701-800						
801-900						
901-1000						
1000 +						
ALL						

Table 1 2018 CN Transactions for Interswitching, Exchange Switching, Reciprocal Switching and Haulage

In the U.S., the average rate for switched traffic is about [REDACTED] CAD. About 20% of the traffic moves at about that rate, 30% of the traffic moves at higher rates, and the remaining 50% moves at lower rates. Having negotiated commercial rates does not lead to all traffic moving at higher rates.

For Canadian shortlines, almost 200,000 cars were switched at an average rate of [REDACTED] which is about the same as the average U.S. rate. The largest tranche, representing 25% of the traffic, moves at an average rate of \$ [REDACTED] per car, most likely influenced by available regulated interswitching rates. Another 20% moves at lower rates, however the remaining 55% of traffic moves at rates that are higher than the regulated ones.

Taking Vancouver as an example, the major Canadian hub for rail traffic for both CN and CP, the Southern Railway of British Columbia (SRY), a provincially regulated short-line railway that handles about 70,000 cars annually and interchanges traffic with four Class 1's (CN, CP, BNSF and UP), charges from \$ [REDACTED] per car for export grain to [REDACTED] per car for vehicles.

The evidence in Table 1 shows that regulations in Canada skew transactions between Class 1's towards the single car rate of [REDACTED] (45% of traffic) and the car-

block rate of █████ (40% of traffic). The remaining 15% represents exchange switching and haulage agreements that average █████ per car.

Comparing the Canadian Class 1 results to the two other results in Table 1, it is clear that interswitching regulations are distorting the market for switching services. We recommend removing such distortions and bring the regulated interswitching rates more in line with commercially negotiated rates as seen in the U.S. and with provincially regulated Canadian shortlines.

The change brought about by the *Transportation Modernization Act* to consider the long term investment needs of railway companies therefore suggests that the rate should be higher than it is now, where only costs are considered (and the variable portion of which are the lower limit). CN would therefore expect that the interswitching rates should increase as a result of the amendments.

CN is Disproportionately Affected by Interswitching Rates

When regulated interswitching was initially proposed to be added to the CTA, the prevailing view was that neither of the largest Class 1 railway companies, CN and Canadian Pacific Railway (CP), would be disadvantaged since both would provide interswitching services, and benefit from their competitors interswitching services when they are the connecting carrier. This balance of interswitched traffic has not been reflected in reality.

CN provides substantially more interswitching services annually than CP. For example, for the last 5 years, CN has provided almost 3 times more switching services to CP than CP has supplied to CN as shown in Table 2.

Year	CP for CN	CN for CP	Ratio
2015	█████	█████	2.6
2016	█████	█████	2.8
2017	█████	█████	3.0
2018	█████	█████	2.9
2019 Jan to July	█████	█████	2.6
Grand Total	█████	█████	2.8

Table 2 Regulated Interswitching transactions between CN and CP

This is on account of the nature and extent of CN’s network, and proximate interchanges with CP, aggressive pricing by CP in areas where CN is vulnerable and to other market forces. However, it is important to note that the depression of the interswitching rate benefits CP to CN’s detriment, since interswitching is paid between railway companies, and the connecting carrier benefits from the long-haul (market-

driven) rate, while the interswitching carrier only receives the regulated interswitching rate which is markedly below commercially negotiated rates as Table 1 demonstrates.

As a result, the Agency's decision to limit or depress the interswitching rate has a vastly more detrimental effect on CN than any other railway company in Canada by a significant margin.

In relation to the specific questions in the Agency's Discussion Paper, CN provides the following additional responses.

Issue 1: Federally regulated short-line railway companies

Q1: (a) Should separate regulated interswitching rates be determined for short-line railway companies? If yes, should there be rates for individual short-line railway companies or one single average for all short-line railway companies?

CN does not believe that shortline railway companies should have separate interswitching rates. While CN acknowledges the issues raised under "Issue 1" in the consultation paper, as they relate to shortlines, CN is of the position that shortline railway companies have higher train running costs for interswitching due to lack of efficiencies and lower traffic volumes.

As discussed below, interswitching costs, and thus current interswitching rates, are not primarily driven by distance as a factor. Instead, CN believes that other main drivers, tied to economies of scale, disadvantage shortlines in the same manner that they disadvantage smaller interchanges of the Class 1 railway companies. If the Agency were to reconsider the manner of determining interswitching rates in a more equitable manner, rather than a cost-based approach, the interswitching rate would be commercially fair and reasonable to the shippers, shortlines and Class 1 railway companies without needing to have disparate, discriminatory rates for some railway companies and not others with similar local operations.

In addition, if shortlines were to be allocated separate rates, this would increase the administrative burden on both the shortline companies and Agency with no perceived benefit to shippers. In CN's opinion, the least desirable outcome would be to have different rates for different companies (shortlines v. Class 1 railways) in the same general area or location since this would effectively compensate inefficient operations with higher rates to the detriment of some shippers, and would effectively be discriminatory.

(b) Should the CTA expand the current regulated interswitching rate development methodology to include the interswitching service units performed by and the unit costs of participating shortline railway companies?

In CN's view, this would be a tremendous burden on shortline railway companies without associated benefit to shortline railway companies since, assuming the current distance-based rate for interswitching zone system persists, the shortline railway company volumes are not likely to have a significant impact on the overall determination of the rates.

Additionally, it is CN's observation that shortlines have generally lower spending on infrastructure maintenance and renewal. Thus, any rates that would be based on such low costs would not sustain adequately future maintenance and renewal, and therefore would be unsustainable in the long-run.

(c) Should the CTA continue to rely solely on the costs of CN and CP to develop the regulated interswitching rates?

CN is of the opinion that regulated interswitching rates should be market-based and not cost-based. As such, the rates should be the same for all railways, Class 1's and shortlines alike. The verification of CN and CP costs should be a secondary step to satisfy the statutory requirement that rates not be set below variable costs. For shortlines, a less burdensome approach would be canvassing one or two shortlines per year to verify costs in relation to CN and CP. This would provide the Agency with more information in relation to shortline costs; however, it is unlikely to be of sufficient benefit to include every shortline every year.

Issue 2: Regional and commodity-specific regulated interswitching rates

Q2: (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?

Over time, it has been clear that interswitching distance is not the main driver of costs. This is acknowledged by the Agency given that the single-car zone 3 rate (10 to 20 km) is higher than the zone 4 rate (20 to 30 km).

In CN's view, the volumes handled at each interchange location and the car block size are the main drivers of interswitching costs and that the Agency should modernize

the interswitching rates by devising an alternative approach to setting interswitching rates based on these two main drivers of interswitching costs. This new approach would address many of the problems raised in the consultation paper.

CN's initial proposal for Agency consideration would include five categories of interchanges:

Category A: Locations that interchange at least 40,000 cars or more per year (currently, this would only include CN's locations in the Vancouver and Edmonton areas, and would address the challenges and costs associated with interchange locations with huge interchange volume)

Category B: Locations that interchange at least 10,000 but less than 40,000 cars per year

Category C: Locations that interchange at least 5,000 less than 10,000 cars per year

Category D: Locations that interchange at least 2,000 but less than 5,000 cars per year

Category E: Locations that interchange less than 2,000 cars per year

This categorization would allow category A interchanges to have some of the lowest rates due to their high volumes, and could be adjusted to have a component of the rate increase when specific investments reflect the higher-than-average capacity capital demands due to such highly intensive traffic levels. Category E interchanges would have some of the highest rates due to the absence of economies of scale.

Most shortline locations would fall in Categories D and E, thus affording shortlines – as well as Class 1's with smaller volume interchanges – higher rates in locations where economies of scale are lacking. This would address many of the issues faced by short lines raised on the discussion paper without creating a disparate two-tier system that would discriminate between short lines and Class 1's. It would also avoid additional administrative burdens on short lines as the requisite data to determine rates for the various traffic-level categories, including low-intensity locations, could be based off of Class 1 information.

This approach would also still allow for two rates per interchange category for all traffic within the 30 km distance: one for single cars, and one for car-blocks (60 or more cars).

Given the simplicity of this model, CN's proposal would require the adoption of a 5 by 2 matrix of interchange categories and car-block sizes, which would impose only a small additional burden on Agency staff, compared to the current matrix of 4 zones and 2 car-block sizes. Agency staff currently estimates the costs of serving individual interswitching customers. Using weighted averages, they then aggregate their

customer estimates by zone, by interchange and by railway, before aggregating all results to the current 4 zones and 2 block size results.

The new proposal would require that aggregation be done differently. The additional burden would be the sampling of smaller yard operations that are currently ignored because they would not carry much weight in the final result.

Having rates that are appropriate for smaller operations would ensure compliance with statutory requirements that rates be not below costs for these locations, and have the added benefit of addressing shortlines' concerns where economies of scales and other efficiencies are lacking

Finally, under CN's proposal, the administrative burden on shippers should continue to be minimal, as interswitching is a transaction between railways and not between railways and shippers.

(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?

Other than differentiating the rates by the suggestions CN has included in this response letter, CN does not see the need for differentiation by province or region. It should be noted that these geographical distinctions are not determinative in terms of the cost of interswitching.

(c) Should there be different rates for different commodities? If yes, how should the commodities be broken down?

It is CN's position that there is insufficient justification for differentiating by commodity since the cost for interswitching is not related to commodity. However certain shipments that require extra handling incur additional cost, and should have premiums added to the standard interswitching rates to adequately compensate for these handling requirements. Such shipments include:

- a) Dimensional loads: each shipment is different, railways should be permitted to negotiate premiums on a case-by-case basis
- b) Dangerous commodities require special handling and different switching rules
- c) Long products (steel beams and rods, pipes, logs, etc.) also require special placement in trains (e.g. never behind a tank car nor locomotive)

In addition to premiums for dimensional loads, CN would like the Agency to clarify that intermodal traffic has rates applied per platform – the closest equivalent of a

railcar – and not per car, which can vary from one to five conjoined platforms (also known as articulated well cars), which carry up to fifteen containers. An articulated well car takes up track capacity that could otherwise be used by other cars, and therefore discriminates relative to traffic moving in other non-articulated multi-unit rail cars.

Issue 3: Interswitching zones up to 30 km

Q3: Are the CTA's current distance based interswitching zones sufficient?

Since distance is not the main driver of costs, under the model proposed above, CN believes only one distance zone is required.

Q4: Should the CTA introduce more factors, such as customer characteristics, train size, or grades of track characteristics to create a broader range of rates?

Where there is an absence in strong correlation between costs and the proposed factors, it is difficult to understand what would justify a more complex set of rates. As outlined above, CN urges the Agency to collapse all four zones into a single rate differentiated only by:

- a) yearly interchange traffic volume at the interchange location;
- b) car-block size; and
- c) commodity in the case where the shipment requires extra handling (a % premium over regular rates).

Q5: Should the CTA collapse the four zones and have one interswitching zone for all customers within the regulated interswitching limits?

Yes

Q6: Should the CTA reinstitute the use of weighted linear regression to produce rates that increase proportionately by zone?

Since there is only one interswitching zone under CN's proposed alternative, there is no need for regression.

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

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 Agency's cost of capital allowance is inadequate in locations where infrastructure is heavily used, there is significant reliance on interswitching and costs for upgrades are significant. In such locations, regulated interswitching creates a natural disincentive in infrastructure investment and government funding becomes necessary to fill the gap created by this disincentive. The most obvious such example are the federal grants required to fund infrastructure in relation to interswitching-intensive areas in Vancouver.

Railway companies have many competing infrastructure projects where returns on investment are much higher than those where interswitching is prevalent and railway companies must rely on cost of capital as evaluated by the Agency.

For example, CN annual returns on invested capital over the last three years is approximately 16%, whereas the Agency's allowed cost of capital for CN is only 5%.

If the Agency cost of equity and WACC models lead to a cost of capital that is much less than what railways can achieve by investing in other projects, then the natural result is that capital will not be allocated to the interswitching-related projects with the lower returns. This is not as a result of judgement on the merits of any particular theoretical cost of capital model, but a reflection of the reality where many projects compete for a limited available capital to invest, and where investors expect a certain level of return.

Hence, the importance of achieving commercial returns on interswitching expansion projects so that they can effectively compete for capital. Ultimately, this reflects the intention of section 112 of the CTA, whereby the rates set by the Agency are legislated to be commercially fair and reasonable to all parties. Where rates are markedly below market rates, unintended consequences, such as a decline in capital investment in interswitching-intensive locations, is the result.

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?

The Capital Asset Pricing Model (CAPM) is a backwards looking model to determine the cost of the common equity portion of the cost of capital. In investment decisions, capital projects are evaluated with forward looking prospects. Railway companies in Canada must continually be cognizant of their investors' best interests and

expectations, which are based on forward looking prospects that are usually much higher than the average backward looking results, based in part on the results of projects that did not live up to financial expectations.

To account for that risk, the hurdle rate for projects needs to be higher than the average of results achieved through past projects. To be of interests to railway companies and their investors, interswitching investments need to achieve returns similar to what the railway companies are able to achieve on other investments.

CN does not take issue with CAPM but rather with the determination of its key variables, namely the beta, which should be a pure market-observable rate with no alteration. In addition, CN is concerned with the calculation of the weighted average cost of capital (WACC), which disproportionately inflates debt levels relative to consolidated actual results, leading to a lower rate that is not commercially fair and reasonable

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

In the United States, the Surface Transportation Board (STB) uses an average of CAPM and Multi-Stage Discounted Cash-Flow (MSDCF). Since 2000, the average cost of capital for all North American Class 1's has hovered at approximately 10.5%, which is a far more reasonable result than the Agency's method.

The MSDCF has been considered and rejected by the Agency in its CoC Decision No. 425-R-2011.

Regardless of this observation, rather than debate the adequacy of theoretical models, CN would prefer a market-based solution premised on observable market data points that are not adjusted.

Issue 5: Contribution to fixed costs

Issue 6: Productivity factors

The deadline for written submissions on issues 5 and 6 has been extended to January 20, 2020. CN will therefore submit its comments on these issues at a later date.

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 premise of the block rate is to account for efficiencies in moving a block of cars over single cars. On that basis, CN believes the block rate should not assume additional switching requirements at the interchange, origin or destination, which should be subject to additional fees for such services (separate from the interswitching rate), or be considered at the rate appropriate for smaller block sizes.

The current block size minimum of 60 cars is insufficient to represent the economies of scale for dealing with the wide range of car block sizes being interchanged, but could be maintained if interchanges are separated by category based on interchange volume as proposed above. This would be consistent with block rates since large interchanges tend to be driven by larger car blocks and smaller interchanges generally handle smaller car blocks.

If the current structure of one-size-fits-all interchanges is maintained, then CN proposes that 5 different rates for five car-block sizes be introduced. CN would propose the following blocks:

- 1 to 10 cars
- 11 to 30 cars
- 31 to 60 cars
- 61 to 100 cars
- 101 cars or more

The efficiencies of moving cars in a block are more appropriately represented by the block sizes proposed above than by the current two sizes of "1 to 59" and "60 or more"

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

Please see response to question 14.

Issue 8: Collecting interswitching service units

In Appendix A to Determination No. R-2018-254, the Agency provided the following description of the current process of collecting interswitching service units, which is helpful in understanding CN's position in relation to issue 8.

1.0 Interswitching Service Units

Every year, Agency staff visit interchange locations across Canada to meet with CN and CP yard supervisors to review interswitching operations at each location. For each interchange location, all of the steps required to provide interswitching services for the major interswitching shippers in each zone and to estimate the service units involved in each step are verified. The Agency visits interchanges of different sizes, volumes and characteristics to capture the unique operations of interchanges across Canada.

The service unit estimates for single-car rates and block train rates are described in further detail in sections 1.1 and 1.2 respectively.

1.1 Single-car service units

There are two different types of interswitching operations for single-car movements (interswitching 59 cars or less):

- Yard switching; and,*
- Road switching.*

Under yard switching, a yard crew will pick up the interchange cars at the interchange and will bring them back to the yard for classification (sorting) and marshalling (placing cars in order for delivery). Cars are then delivered to the customer. On the return trip, the cars return to the yard where they are classified and marshalled again before returning to the interchange.

Road switching occurs in locations where switching in a yard is not possible, or in situations where only minimal classification or marshalling is required. Road switching involves either a line-haul train or a road crew picking up cars at the interchange. The cars may or may not be classified or marshalled at the interchange before being delivered to the customer. On the return trip, the cars are brought back to the interchange with little or no classification or marshalling.

Service unit estimates for road switching include:

- *Gross ton-miles, which drive costs, such as track maintenance;*
- *Car-miles, which drive costs, such as car inspection;*
- *Train-miles, which drive costs, such as signals maintenance;*
- *Carloads, which drive costs, such as marketing and sales.*
- *Fuel consumed;*
- *Crew wages; and*
- *Diesel unit miles, which drive costs such as those for locomotive maintenance and investment.*

Yard switching is more complex in terms of classification and marshalling. In most major yards, there would be a dedicated yard assignment with crews classifying or marshalling hundreds of cars. Since tracking specific cars and mileage at the yard is not possible in all circumstances, mileage at the yard is simplified as yard switching minutes.

Yard switching minutes captures the amount of time that it takes to service a customer, including the process of classification and marshalling. The associated unit cost for this service unit captures all of the expenses incurred for yard switching, including crew wages, locomotive fuel expenses, locomotive maintenance expenses, and track and roadway maintenance.

1.2 Block train service units

Service unit estimates for block trains for the development of rates includes:

- *Gross ton-miles;*
- *Car-miles;*
- *Train-miles;*
- *Carloads;*
- *Fuel consumed;*
- *Crew wages; and*
- *Diesel unit miles.*

Block movements involve a “hook and haul” operation where blocks of cars are hooked on at the interchange and delivered directly to the customer. On the return trip, cars are hooked and delivered directly to the customer. However, additional handling either at the interchange or at the shipper siding may be required. If, for example, the siding or the interchange is not long enough to handle the block, the railway must perform one or multiple cuts to the block in order to complete the movement. Where additional handling is identified during site visits, the costs are reflected in the final interswitching rate.

To calculate the extra kilometre rate for block trains, the movement for the average service units (average cars on a train, average number and type of locomotives used) of all of zone 4 block customers is assessed over one kilometre. To estimate the costs of moving one extra kilometre, the average train speed (obtained from CN's and CP's annual reports) is used. Unlike the extra kilometre rate for single-cars, where the costs of actual movements are captured, there are currently no movements in the extra kilometre zone for block trains so an estimation of costs is required.

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?

CN is incredibly proud of its operations and operating employees. These individuals are, in the vast number of cases, experts in their field who take great pride in the work they manage daily. CN is not averse to the Agency continuing to collaborate with operating personnel to better understand interswitching practices, improvements in efficiencies, and challenges.

However, CN has significant concerns in relation to the Agency's reliance on operating employee anecdotal evidence in terms of statistics to determine interswitching service units (both block and road switching service units and single car yard interswitching service units). It is not a reasonable practice for the regulator to prefer anecdotal information from individuals, when actual, accurate documented statistics are available.

CN requires regular reporting in its electronic systems for both the crew times and train sizes, making it relatively easy to supply precise figures to the Agency for the purpose of calculate interswitching service units.

Operating personnel are a good source of detailed knowledge of how each customer is served and by which assignment. They are also generally knowledgeable about the amount of time it takes to travel and to serve shippers (that time is often independent of the number of cars handled). However, it is extremely unlikely if not impossible for an operating employee to accurately estimate the average number of cars on a train that had more than 300 starts in a year. In addition, operating employees often view productivity and efficiency as a measure of job performance and have a natural (but unintentional) tendency to underestimate timing averages and overestimate car counts on a train.

While CN continues to support the Agency's current practice of interviewing operating personnel, especially on site, to understand the interswitching operations, the interswitching service units are best determined using operating statistics from CN systems, which are accurate rather than preferring anecdotal information from operating employees.

The average number of minutes per car for yard and road assignments can easily be determined from CN systems if we take the view that interswitched traffic is no different from all other traffic worked at the same yard, and therefore we should consider the assignment average and not the customer average. The average number of minutes for all customers, whether interswitched or not, would then simply be the total number of minutes of an assignment divided by the total number of cars handled. This is the view that CN adopts for its own internal costing systems that do not discriminate between interswitched traffic and other traffic.

The current Agency methodology estimates the costs to serve each individual interchange customer, with the view of determining each customer specific number of minutes per car, which can be lower or higher than an assignment average. However, these customer specific costs are then averaged over all customers and all yards. It is highly unlikely that all interswitching customers are systematically higher or lower than the assignment averages – i.e. interswitched customers require systematically more, or less, time than other customers on the same run, for all runs and in all yards – and therefore the aggregate customer result is most likely no different from the assignment averages.

CN questions the necessity of determining each individual customer's costs if in the end the results are averaged over all customers and all yards. The advantages of using one single assignment average for all customers are:

1. it greatly simplifies the process of determining the service units;
2. it allows to include in the evaluation more interswitching locations rather than rely on sampling a few;
3. operating statistics are readily available for assignments averages; and
4. it captures and distributes equitably unproductive time (paperwork at the beginning and end of shift, debriefing, lunch and other breaks, locomotive and belt-pack breakdowns, waiting for signal clearance, etc.) rather than allocate these unproductive times to the customer where they happened to occur.

CN questions the necessity of determining discrete customer times rather than using average assignment times, particularly when the final rates in Agency calculations are obtained by averaging all customer times across all yards, and use system average

unit costs. CN believes using average assignment times would render a simpler, more streamlined means of calculation, which mirrors the use of averages elsewhere in the calculations, and which is the means deemed most useful by CN when assessing its traffic for internal purposes. The Agency alternative to use situationally-specific information, namely the specific customer, traffic levels, by location and commodity for each discrete movement risks being inefficient and unnecessary since results are averaged over the entire CN system.

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 parties most affected by regulated interswitching rates are the railway companies who are subject to them. To promote transparency of its methodology, the Agency should allow railway companies to receive working spreadsheets that detail the Agency's calculations to each railway company, without disclosing confidential information of one railway to another. This should allow experts to replicate the calculations and understand the manner in which the interswitching rate is derived.

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?

CN's view is that shippers generally wish to receive only one invoice per car (or shipment), and that providing separate bills, for example one from the linehaul carrier and another from the interswitching carrier would be undesirable.

Within CN, shippers already have the option of receiving an invoice that details the rate including the interswitching, meaning that only one charge is shown on the bill, or receiving a rate excluding the interswitching, in which case they receive an itemized bill with separate charges for the linehaul and the interswitching.

In both cases, shippers receive only one bill.

Please feel free to contact me should you require further information.

Yours truly,

A handwritten signature in blue ink, appearing to read "Rachel Heft". The signature is written in a cursive style with a long horizontal flourish at the end.

Rachel Heft
Counsel