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**Date** October 14, 2016

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Canadian Transportation Agency  
15 Eddy St  
Gatineau, Québec  
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Attention: Consultations

**Re: Agency Consultation Regarding the Methodology for Determining the Capital Structure of Canadian National Railway Company (CN) and Canadian Pacific Railway Company (CP) for the Determination of the Cost of Capital of the two Railway Companies (the “Consultation”)**

We are solicitors for Teck Resources Limited and its affiliates Teck Coal Limited and Teck Metals Limited (collectively, “Teck”) in respect of the Consultation.

We are pleased to make these submissions, which we understand will be posted publicly on the Agency Consultation website on October 21, 2016. We further understand that those who have participated in the submissions phase will be allowed until November 18, 2016, to provide their views and comments on responses by other participants, if they so choose.

We have appended the report of Dr. Lawrence I. Gould, Ph.D., Professor of Finance and Senior Scholar at the Asper Business School, University of Manitoba, with whose credentials the Agency is familiar. We have also appended Teck’s submissions and letters from the Western Grain Elevator Association and the Canadian Canola Growers Association whose members also support these submissions.

As the Staff Consultation Document states, the Agency is required to calculate separate cost of capital rates for three purposes each with differing time periods:

1. determination of the maximum revenue entitlement for CN and CP in the transportation of western grain;
2. determination of the interswitching rates; and,
3. other specified regulatory purposes.

The parties supporting these submissions are interested in the outcome of the Consultation in that each of the foregoing purposes directly or indirectly affects one or more of them or their members (in the case of the associations) to a greater or lesser degree. This Consultation, along with other consultations and processes involving the Agency's costing methodology, has a significant impact on each of them. It is with that impact in mind that we make these submissions.

Our submissions pertain primarily to process issues, with a view to enhancing the outcomes of the Consultation. We trust that those outcomes will assure participants in the Consultation and indeed all users of the processes employing the Agency's costing methodology of the accuracy and reliability of the various cost components arising from the use of the methodology. Necessarily, some substantive issues also arise. Accordingly, we hereby submit as follows:

1. In our view, all participants should have the opportunity to comment on the design and results of any new lead-lag studies. In connection therewith, the Agency should make available all of the information in relation to the 1992 lead-lag studies in order to (a) inform participants in this first phase what kinds of studies and what methodological designs were deployed previously and (b) assess them. Further, participants should be informed as to who might design such studies and how they might be used in future.
2. Dr. Gould states that

“the practice of netting cash balances to reduce long-term debt increases the measured proportion of equity in the capital structure. The cost of equity capital is higher than the cost of debt capital and this cost differential is magnified by the effect of corporate taxes.”

He explains this effect in Section IV and states that the practice should be discontinued. As we understand it, CP has justified its practice as a result of the 1985 Cost of Capital Decision of the Canadian Transport Commission. If that justification is not correct, the Agency should order a reconciliation and direct CP to repay the difference. It seems to us that CP should have ended the practice of netting out cash balances in order to comply with the Agency's 2002 VRCPI Decision to require CP to use a balance sheet approach.

Whatever the case, the Agency or CP should either justify CP's actions or require a reconciliation. Further, and perhaps more importantly, to the extent that the VRCPI, or sub-indices that make up the VRCPI, as more particularly described in Decision No. 131-R-2016, have been affected by this practice, each of the indices, the VRCPI and the Agency's costing methodology generally should be corrected to account for what we understand to be an erroneous practice.

3. We are particularly troubled by the possibility, if not the likelihood, that the Agency has perhaps unquestioningly accepted CP's capital structure as submitted to the Agency, with the exceptions noted in Dr. Gould's report. Since there is no information relating to the manner in which CP uses the so-called balance sheet method, which itself is undefined, and given the unwarranted practice described in item 2 above, which artificially inflates

the equity requirement and the weighted average cost of capital, we are at a loss to explain the basis on which the Agency determined the cost of capital. We believe it would be helpful to all parties for the Agency to explain how it did so since, as Dr. Gould points out, this information could not have been obtained from the Agency's annual cost of capital determination.

4. Since so little is known about the capital structure methodology employed by CN and CP for their submissions to the Agency, we similarly do not know either (a) what adjustments might have been made by the Agency in the process or (b) in the final determinations by the Agency of the capital structure of both railway companies. As Dr. Gould concludes,

“it is not possible to determine whether CN and CP are complying with correct principles of capital structure methodology.”

We ask that the Agency provide sufficient disclosure to assist us in this endeavour.

5. Lastly, we are strongly of the view that the Agency should be disclosing all financial data and information relating to CN's and CP's costs that are not strictly prohibited by the *Canada Transportation Act*. That disclosure should extend to the information described above and all methodologies and calculus and financial tools (such as the capital structure ratios used to determine the WACC of each railway company) deployed by the Agency in its determinations, neither of which should be confidential as we understand the Agency's statutory obligations.

Yours truly,

A handwritten signature in blue ink, consisting of several overlapping loops and lines, positioned above the name François Tougas\*.

François Tougas\*

FET/sgill

Encls.

\*Law Corporation

**BEFORE THE CANADIAN TRANSPORTATION AGENCY**

**IN THE MATTER OF THE CONSULTATION REGARDING THE METHODOLOGY FOR  
DETERMINING THE CAPITAL STRUCTURE OF CANADIAN NATIONAL RAILWAY  
COMPANY (CN) AND CANADIAN PACIFIC RAILWAY COMPANY (CP) FOR THE  
DETERMINATION OF THE COST OF CAPITAL OF THE TWO RAILWAY COMPANIES**

**CAPITAL STRUCTURE ISSUES UNDER REGULATION**

**REPORT**

**Prepared by:**

**LAWRENCE I. GOULD**

*Lawrence I. Gould*

**October 14, 2016**

## I. INTRODUCTION

The Canadian Transportation Agency (Agency) has initiated a consultative review of its methodology for determining the capital structure of Canadian National Railway Company (CN) and Canadian Pacific Railway Company (CP) for the determination of the cost of capital of the two railway companies (the “Consultation”). I was asked by McMillan LLP to provide my independent judgment and opinion to the Agency on the issues pertaining to the Agency’s capital structure 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

The Canada Transportation Act sets out national transportation policy for Canada at section 5. Regulation is used to achieve economic outcomes when they cannot be achieved satisfactorily by competition and market forces. The Agency makes annual cost of capital rate determinations for federally regulated railway companies in 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 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; establishment of a competitive line rate; development of rates for running rights; establishment of a joint tariff; 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.

The Agency's staff produced a consultation document that outlines certain issues about the Agency's capital structure methodology that should be considered.<sup>1</sup> The purpose of this report is to provide my opinion on the Agency's existing capital structure methodology and to comment on the issues raised in the Consultation Document.

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<sup>1</sup> Canadian Transportation Agency, Consultation on Methodology for Determining the Capital Structure of Canadian National Railway Company (CN) and Canadian Pacific Railway Company (CP) for the Determination of the Cost of Capital of the two Railway Companies, September 7, 2016 ("Consultation Document").



### **III. CAPITAL STRUCTURE**

The classic capital structure problem for a regulated company is the decision concerning the relative amounts of debt, preferred stock, and common equity that should be included in the company's capital structure. The implicit assumption in such a determination is that these are the only sources of funds. However, given the increased importance of current liabilities, deferred income taxes, and the investment tax credit, it is artificial to omit these other sources of capital from consideration of the problem. Section A categorizes the various sources of capital and describes the alternative procedures that could be used to determine the earnings requirement for both an entire firm and a division of a firm when the presence of these other sources of funds is recognized.

Sections B is devoted to the clarification of issues in the determination of how other sources of funds than ordinary debt, preferred stock, and common equity should be classified and their cost rates should be determined. The problem areas of deferred income taxes and the investment tax credit are examined. Section C then discusses certain problem areas specific to the Consultation Document: the methodology for determining working capital and the application of net cash balance to reduce long-term debt.

#### **A. General Principles**

It is obvious that a regulated company must acquire land, plant, and equipment in order to provide services to its customers. In addition, the operations of its business also require current assets such as cash, accounts receivable, and materials and supplies. The rate base is essentially the property that is deemed used and useful in providing service. Any capital in the rate base must be provided by someone, and customers should be charged the appropriate cost of each

type of capital. It is useful to categorize this capital into the following three sources: capital which arises from the ordinary business operations of the firm; capital which arises due to tax policies; and capital which is provided by investors.

An example of capital which arises through the operations of the firm is trade credit. If a company makes average purchases of \$100,000 a day on terms of net 30, on average it will owe  $30 \times \$100,000 = \$3$  million to its suppliers. If its sales and, consequently, its purchases double, accounts payable will also double to \$6 million, and the company obtains an additional \$3 million in spontaneously generated capital. The financing cost is included in the price the company pays its suppliers, but given the price, this capital has a zero cost and should be used as fully as possible.

Capital also arises through actions taken by the company and its regulatory agency with respect to government tax policy. The accumulated deferred income taxes and the unamortized investment tax credit represent sources of capital as long as they are outstanding. This subject is covered in detail in Section B. We will see that to the extent capital is obtained from tax sources, it is obtained at a zero cost to the company.

The amount of operating and tax-source capital is determined by the particular circumstances of the firm, and a company with prudent management should use these sources up to the constraints imposed by suppliers and the regulatory agency. The balance of the capital required for the firm must be provided by investors, and this may take various forms: common equity, preferred stock, debt, or some combination such as convertible preferred stock. The varying costs and risks to the firm of these different forms create the need to decide on the appropriate mix of investor-supplied capital, which is covered in detail in Section IV.

This section examines the effects of alternative treatments of these sources of capital in determining a company's earnings requirement. First, consider an example in which a single entity is regulated with Table 1, which presents the balance sheet for Hypothetical Company. If all of the assets are used and useful they may properly be included in the rate base and we must allow the firm to earn the required return for each of its sources of capital. In this example we assume that cost of equity capital is 14%, the embedded cost of preferred stock is 8%, the embedded interest rate on debt is 7%, and, as indicated previously, current liabilities and accumulated deferred taxes are zero-cost sources of funds. Multiplying each source of capital by its fraction of the total capital, and summing, results in a WACC of 8.53%. The earnings requirement of \$9.90 is determined by multiplying the \$116 rate base by the 8.53% WACC. The interpretation of this is straightforward. If the firm earns \$9.90 it will be able to pay the bondholders \$3.50 ( $\$50 \times .07$ ), the preferred shareholders \$.80 ( $\$10 \times .08$ ), and still have \$5.60 for the common shareholders. A return of \$5.60 on a common equity of \$40 provides the common shareholders with their required return of 14%. The purpose of the WACC calculation is to arrive at allowable earnings that will provide investors with their required returns.

Table 2 presents an alternative treatment, which will be referred to as the net method, where current liabilities are subtracted from current assets to arrive at working capital, and deferred taxes are deducted from the rate base. We again multiply the cost of each source of capital by its fraction of total capital and sum to arrive at a WACC of 9.90%. Multiplying this WACC by the \$100 net rate base again results in an earnings requirement of \$9.90. Since we arrived at an identical earnings requirement, it obviously must be sufficient to pay each of the sources of capital its required return.

In the simple case an important principle is illustrated: The WACC is not independent from the definition of the rate base. We may either net current liabilities and accumulated deferred taxes from the rate base and calculate the WACC using investor-supplied capital (net method) or include all assets in the rate base and calculate the WACC with all sources of capital including current liabilities and accumulated deferred taxes (gross method). Of course, it would be incorrect to net sources of capital from the rate base and also include the same sources of capital in the calculation of the WACC.

Table 3 provides a slightly more complicated balance sheet that will enable us to calculate the WACC for separate divisions of the firm. This Table considers the same data that were used in Table 1, but assumes we can allocate the net plant and current assets of Hypothetical Company between two divisions (Division A and Division B) on the basis of specific use. Similarly, some sources of capital may be allocated to specific divisions. For example, certain current liabilities, such as accounts payable and advance billings, may result directly from the operations of a particular division. In the same manner, we may also allocate capital from tax sources to the particular division's operations from which the tax credits were generated.

Other sources of capital, however, may not be specific to any particular division. Absent any business risk differences between divisions which would affect their debt capacity, there is no basis for allocating investor-supplied capital represented by common equity, preferred stock and debt to any particular division. In addition, certain current liabilities, such as dividends payable and interest accrued, represent liabilities which are general in nature and cannot be specifically attributed to either division.

A comparison of Table 1 with Table 3 shows their only difference to be the allocation of \$104 net plant and \$12 current assets between Division A and Division B on the basis of specific

use. The sources of funds have also been allocated when they are specific to a division, as is the case for the \$10 accumulated deferred income taxes. The \$6 current liabilities consist of \$3 specific to Division A, \$1 specific to Division B, and \$2 which is general. The \$2 general current liabilities and the \$100 investor-supplied capital cannot be attributed to a particular division.

Table 3 shows the WACC for the entire firm is 8.53% using the gross method and a rate base of \$116. This results in the same \$9.90 earnings requirement as Table 1. Table 4 provides the calculation of the WACC using the net method. However, since the general current liabilities are not specific to divisional assets they have not be netted from the asset base, and remain with the investor-supplied capital to form the capital structure. Using this method, the WACC is 9.71%. When this WACC is applied to the net rate base of \$102, it results in the same earnings requirement that we obtained in Tables 1, 2, and 3.

At this point, however, we are interested in calculating the earnings requirement for a particular division. Table 5 shows the calculation for each of the two divisions contained in Table 4. The rate base has been determined for each division by taking the net plant and working capital minus the accumulated deferred taxes specific to that division from Table 4. The capital structure of each division using the net method is determined by prorating the capital structure of Table 4 according to the relative size of divisional assets to firm assets.

The percentage weights and costs of each of the sources of capital must be the same for each of the divisions in Table 5 as we obtained for the entire company in Table 4. Therefore, using the net method we obtain the same WACC for each division, and the earnings requirement between divisions varies with the amount of assets allocated to the rate base. In Table 5 we

obtain an earnings requirement of \$5.92 for Division A and \$3.98 for Division B, which equals the \$9.90 earnings requirement for the entire company which we obtained in Table 4.

Table 6 provides the divisional calculations from Table 3 using the gross method. It can be seen that this method results in an earnings requirement of \$5.92 for Division A and \$3.98 for Division B, which is identical to the earnings requirements obtained using the net method. However, the gross method will usually result in a different WACC for each division and for the entire company, since the divisions differ with respect to operating and tax-source capital. This illustrates another important principle: if a division is regulated using the net method, the WACC for the entire firm may be used, but if regulation is through the gross method, using the WACC for the entire firm will not usually result in the correct earnings requirement.

We may conclude, therefore, that in regulating a particular division of a firm it is both correct and desirable to deduct specific sources of operating or tax capital from the rate base, and then use the WACC derived from investor-supplied capital and nonspecific sources of capital. Furthermore, if a source of capital is deducted from the rate base, it must not be included in the calculation of the WACC and, conversely, if a source of capital is not deducted from the rate base, it must be included in the WACC calculation.

## **B. General Problem Areas**

There are certain problem areas that require a fuller explanation in order to use the general principles provided above: deferred income taxes and the investment tax credit.

## 1. Deferred Income Taxes

The curious history of the treatment of the corporate income tax for regulated companies makes it advisable that we first establish as a reference base the treatment of the personal income tax.

When an individual takes a job at, say, \$50,000 per year, he understands that he will pay the personal income tax on that \$50,000. The tax is on his income. It is very rare to have an individual take a job with the agreed compensation net of taxes, that is, with the employer paying him the additional amount that would make the \$50,000 his income net of taxes. Furthermore, if the tax law with regard to what he is to include as income or deductible expenses is changed, he would quite properly believe that his tax had gone up or down depending on which way the change in the tax law went.

This simple view of the world does not hold for a regulated company. If a regulated company is allowed to earn 15% return on its common equity and the corporate income tax is at a 50% rate, the company does not earn 7.5% after taxes. The 15% is net of the corporate income tax, and the rates charged to customers are set so that the company earns 30% before taxes and 15% net of taxes.

Let us go along with this principle of setting the allowed rate of return on common equity net of taxes. It means that as taxes go up the prices charged to customers go up to cover the higher taxes, and it would seem to mean that as taxes go down the rates charged to customers go down to reflect the reduction in taxes.

It has not always worked that way. When corporations were allowed to adopt accelerated depreciation for tax purposes, the taxes they had to pay were correspondingly reduced. The total amount taken in depreciation over the life of an asset was not changed, so that it could be argued

that the tax over the life of the asset also was not changed. Nonetheless, the tax paid in the early years was reduced by accelerated depreciation, and, in fact, the higher taxes payable in the future depended on a number of considerations in a complex way so that typically a corporation would only pay the higher taxes in the very, very distant future if ever.

What happened was that the reduction in taxes due to the use of accelerated depreciation for tax purposes was called flow-through accounting, and this practice was called “bad accounting.” The alternative practice, called normalization, involved reporting as an income tax what it would have been if the accelerated depreciation had not been allowed for tax purposes. The tax charged against income but not paid to the government until that date in the very distant future when the tax actually payable to the government would exceed the tax charged against income was held by the company as Accumulated Deferred Taxes.

Under GAAP, tax normalization is a proper and correct accounting method. In other words, a corporation should report to shareholders and regulators as its income tax for a year not the tax actually computed on its tax return, but the tax that would have been computed if the law had been different. That is what tax normalization is designed to achieve. The alleged justification is that in this way the proper matching of expense and revenue is accomplished.

For the customers of a regulated company, normalization means that the rates paid by customers are not reduced by the reduction in taxes paid. Under the principle that customers should pay rates that cover the prescribed return on common equity net of taxes, the practice of normalization forces on the customers periodic loans to the regulated company equal to the increases in the Accumulated Deferred Taxes. The balance in this account at any point in time is the outstanding amount of the loan. Of course, no interest is paid on these loans, and there is



little evidence that these loans will ever be repaid. That is, customers never do recover the higher charges paid while the accumulated deferred taxes builds up. It just keeps on growing.

An argument advanced for tax normalization in the case of capital intensive companies is that they need this additional source of funds in order to finance their large investment programs. It is argued that customer rates would have to be practically as high, or perhaps even as high, without tax normalization as they are with tax normalization. The investment community, it is maintained, insists that a certain fraction of the financing of a regulated company be through internal funds. If tax normalization were not adopted to raise the internal generation of funds, interest rates on debt and required rates of return on common equity would be substantially higher to compensate investors for the additional risk and to provide more internal funds. Since we do not have hard evidence on just how much required rates of return would go up in the absence of tax normalization, it is difficult to determine to what extent the above reasoning is correct.

A further argument in favor of tax normalization is that the customer is compensated for the higher rates in the present by lower rates in the future. In fact, tax normalization with no return allowed on the accumulated deferred taxes provides customers as a group with the weighted average cost of capital on the accumulated deferred taxes – that money they have loaned to the company. But if customers wanted to invest in a regulated company, they could buy its securities. Tax normalization represents compulsory loans. Furthermore, investor-owned regulated companies are supposed to be financed by investors and not by compulsory loans from customers.

This would suggest that the Agency should require the use of the flow-through method unless they are convinced that capital requirements are so large that conscription of customer

capital represents the only viable alternative. However, if the present policy of normalization is continued, the accumulated deferred income taxes should be considered a loan from customers and no return should be allowed on that amount in the WACC calculation.

## **2. Investment Tax Credits**

The investment tax credit was added to accelerated depreciation as a device for reducing the effective tax paid by a corporation. The investment tax credit provides that the income tax for a year is reduced by some fraction of the cost of plant facilities purchased during the year. This is a simple reduction in taxes and not a change in when they are paid. Nonetheless, here also reducing the reported tax for the year by the reduction in the tax paid was called flow-through and designated as “bad accounting practice.” The preferred accounting practice is normalization. The excess of the reported tax (what the tax would have been in the absence of the investment tax credit) over the tax paid is held by the company as an Unamortized Investment Tax Credit and the tax reduction is recognized over the life of the asset.

Allowing a regulated company to earn a return from its customers on the interest-free loan from its customers would be like being charged interest on the money you lend to as well as on the money you borrow from the bank. The principle in regulation is that the company should earn a return on capital provided by investors sufficient to attract capital. Investors other than the company’s customers do not provide the funds represented by the unamortized investment tax credit. Hence, any return on these funds represents an excess return on the common equity over and above the return required.

In determining the WACC the unamortized investment tax credit should be included in the calculation as a zero-cost source of funds.

## C. **Problem Areas Specific to the Consultation Document**

### 1. **Working Capital Allowances**

In Section A it was shown that the WACC could not be determined independently from determination of the rate base. If operating or tax sources of capital are subtracted from the rate base, the net method for calculating the WACC is appropriate. Conversely, if a source of capital is not deducted from the rate base, it must be included in the calculation of the WACC at the appropriate cost. The allowance for working capital, however, requires further explanation.

The Agency has requested comments on whether to update the working capital allowances for CN and CP to reflect their current requirements:<sup>2</sup>

- Is there a need for a working capital allowance adjustment in today's railway operating environment?
- If yes, what methodology would be appropriate for determining the amount of the required working capital allowance?
- How would the methodology proposed distinguish investor-supplied cash versus supplier-financed cash, with specific reference to the interrelationship between cash, inventory and accounts payable?
- How often should the working capital allowances be updated?

However, the Consultation Document notes that the Agency is concerned about the potential costs to the railway companies of conducting extensive and repeated lead-lag studies. Therefore, the Agency would like to adopt a methodology that would allow working capital allowances to reflect current operations without imposing an undue burden on the railway

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<sup>2</sup> Consultation Document, page 6.

companies. In order to understand this issue, it is instructive to review the history of how working capital allowances have been determined.

### **The Canadian Transport Commission (1985)**

The issue of different working capital methodologies was examined extensively in 1984-85 by the Canadian Transport Commission.<sup>3</sup> At the time the working capital allocation was \$70 million, which had been determined for the year 1947.

Both CN and CP argued that the operations of both railways had increased so that \$70 million was no longer the appropriate working capital allowance:

“CN and CP have attempted to demonstrate that the present allowance is far below required levels, but implicit in their argument is the assumption, without supporting evidence, that their inventories are financed by their investors exclusively. The Provinces, the Pools and VIA disagree with the railways’ claimed level of current working assets but have agreed that if in fact CN and CP’s shareholders are required to invest in current working assets, then an allowance would be appropriate. The Committee agrees with the principle that the cost of investor-supplied current working assets should be included in cost determinations, but the onus is on each railway to justify the amount. The Committee strongly believes that it must be demonstrated that investor-supplied current working assets are indeed required by CN and CP’s various rail operations.”<sup>4</sup>

Two alternative methods were proposed for determining the working capital allowance: a lead-lag study and a balance sheet approach. The Committee agreed to consider the results of a lead-lag study if CN or CP decided to use this method. However, with regard to the alternative balance sheet approach proposed by CP, the Committee stated:

“The Committee is concerned that an undue burden not be placed on the railways and cannot therefore accept or reject CP’s approach since it was not tested at this hearing. The results were simply not available, nor were there sufficient details of the methodology available to review. In view of this fact, the Committee has decided not to impose the lead/lag methodology on either railway before the results of CP’s balance sheet approach can be reviewed.

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<sup>3</sup> Canadian Transport Commission, Decision on the Cost of Capital Methodology, July 31, 1985.

<sup>4</sup> Canadian Transport Commission, Decision on the Cost of Capital Methodology, July, 31, 1985, pp. 41-42.

It should be noted however that, in using the balance sheet approach, the railways must specifically address the Committee's concern regarding quantification of the amount of investor-supplied current working assets. In other words, the Pools' criticism of this approach, i.e. that it does not address the interrelationship between inventory, and cash and accounts payable, must be specifically addressed.

Therefore, the Committee has decided that it will consider the results of either alternative, along with the input of interested parties who will be given an opportunity to comment, prior to the Committee reaching a decision on the appropriate value for cash balances.”<sup>5</sup>

The past allowance of \$70 million was reduced to zero until the appropriate working capital allowance could be determined.<sup>6</sup>

### **The Canadian Transportation Agency (1997)**

The issues of cost of capital methodologies were re-examined again in 1997.<sup>7</sup> Since there had been substantive changes in the railway industry, the Agency considered the need to review the 1985 Decision. The review had the purpose of examining matters affecting associated risk factors, technical relationships and cost of capital methodology for future determinations.

In 1991 the Agency had revised the requirements for working capital allowance submissions. The lead-lag approach was used to determine the working capital allowance for CN and CP for the base year 1992. It was decided that the determination would be subjected to a quadrennial review which would have occurred in 1996. However, because of the repeal of the WGTA and the elimination of the Quadrennial Costing Review, the Agency decided:

“The Agency has determined that the process which involves using the 1992 base year study and indexing on an annual basis shall be maintained. The Agency may, however, re-evaluate this approach on an ‘as required’ basis.”<sup>8</sup>

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<sup>5</sup> Canadian Transport Commission, Decision on the Cost of Capital Methodology, July 31, 1985 page 43.

<sup>6</sup> Canadian Transport Commission, Decision on the Cost of Capital Methodology, July 31, 1985 pp. 43-44.

<sup>7</sup> Canadian Transportation Agency, Decision No. 125-R-1997, Issues Pertaining to the Canadian Transportation Agency's Cost of Capital Methodology for Regulated Railways, March 6, 1997.

<sup>8</sup> Canadian Transportation Agency, Decision No. 125-R-1997, Issues Pertaining to the Canadian Transportation Agency's Cost of Capital Methodology for Regulated Railways, March 6, 1997, page 11.

## **Conclusions on the Working Capital Allowance**

The current working capital allowances for CN and CP are based on a lead-lag study for the base year 1992. The Consultation Document did not provide any information about the design or results of the 1992 lead-lag studies. However, significant changes in the operations of the railways, changes in the capital markets and technological changes in payment methods make it very likely that working capital allowances have changed over the last 25 years.

A lead-lag study should be done for both CN and CP in order to determine the current working capital allowance. A new lead-lag study would provide an accurate current amount as well as the measure of the change that has taken place since the previous lead-lag study. It also would provide a benchmark to evaluate the accuracy of any different methodologies proposed by the railways or other interested parties.

It should not be necessary to conduct lead-lag studies on an annual basis. Changes in the working capital allowance could be indexed for short-term changes in operations until the next lead-lag study, initially set three years later. At that time the resulting change in the working capital allowances could be evaluated to determine the optimal time periods for repetitions of the lead-lag studies.

## **2. Application of the Net Cash Balance to Reduce Long-Term Debt**

The Agency has requested comments on whether net cash balances should be applied to reduce long-term debt. This practice arose when CP was allowed to file its information using a “Cash Flow Method” for the purpose of determining its capital structure:

“As part of the Cash Flow Method, CP was allowed to apply its cash balance against its long-term debt (i.e. to reduce the long-term debt by the amount of the cash balance thereby decreasing the proportion of the capital structure assigned to debt financing), a CP practice since 1973. The reason for the method, which is normally contrary to general accepted accounting principles, was the CP at the time was a subsidiary of a large conglomerate, and had no stand-alone balance sheet for regulatory purposes. As a subsidiary which engaged in cash transfers between it and the parent company, CP’s net cash balance was considered as “imputed debt” to the parent company.”<sup>9</sup>

However, after the reorganization of Canadian Pacific Limited, CP was a separate corporate entity. Therefore in 2002 the Agency decided that CP would be required to calculate its net rail investment and its corresponding capital structure by following the balance sheet method.<sup>10</sup>

Nevertheless, CP has continued the practice of netting cash balances against long-term debt when filing its capital structure.

“Despite the 2002 Decision, CP has continued the practice of netting cash balances against long-term debt when filing its capital structure, citing the 1985 Decision as its authority to do so. The amounts involved were originally immaterial. However, in the last three years the cash balance amounts have grown significantly and are now considered to be material.

The Agency has allowed CP to apply its cash balance against its long-term debt, despite the 2002 Agency Decision that required it to calculate its net rail investment and its corresponding capital structure by following the balance sheet approach. Consistent with this long standing approach, the Agency determined it appropriate to recognize the cash balance for 2015 in establishing CP’s capital structure used in determining CP’s 2016-2017 cost of capital rate.

However, the Agency considers that CP’s approach raises concerns given that CP’s corporate structure, which once justified the use of this approach, is no longer in place.”<sup>11</sup>

As shown in Section A, it is not correct to reduce long-term debt by the amount of the cash balances. This practice should be discontinued. Netting cash balances to reduce long-term debt

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<sup>9</sup> Canadian Transportation Agency, Consultation on Methodology for Determining CN’s and CP’s Capital Structure Under the Maximum Revenue Entitlement Program, September 7, 2016, page 2.

<sup>10</sup> Canadian Transportation Agency, 2002/2003 Crop Year Cost of Capital Rate for the Canadian Pacific Railway Company for the Transportation of Western Grain, LET-R-98-2002, page 2.

<sup>11</sup> Canadian Transportation Agency, Decision No. 131-R-2016, page 8.

increases the measured proportion of equity in the capital structure. The cost of equity capital is higher than the cost of debt capital and this cost differential is magnified by the effect of corporate taxes. This effect will be further explained in Section IV.



#### IV. THEORY OF OPTIMAL CAPITAL STRUCTURE

As we saw earlier, current liabilities, accumulated deferred income taxes and unamortized investment tax credits are zero-cost sources of capital to the firm, but there is an upper limit on the amounts obtainable from these sources that is fixed by the circumstances of the company. The remainder of the funds requirement is met by some combination of debt, preferred stock, and common equity, and the relative amount of each that should be included in the capital structure used to arrive at the WACC is the problem we consider now.

This problem is different and more difficult than the measurement of the cost of equity capital for which there is in principle only one number and problems arise only as a consequence of measurement error. The capital structure problem involves an exercise of judgment in balancing the interests of the company and its customers. To elaborate, the higher the debt ratio the lower the WACC and, more important, the lower the revenue requirements imposed on customers. This takes place, in part, because the WACC is reduced and, in larger part, because the income tax component of the revenue requirement is reduced as the debt ratio is raised. On the other hand, as the debt ratio is raised, certainly beyond some level, the risk position of the company is increased.

The consequences of the capital structure decision for a regulated company differ from those for an unregulated company so as to make it incumbent on a regulatory agency to make a correct and balanced decision on the matter and not simply accept the company's capital structure decision. For an unregulated company, revenues and earnings before interest and taxes are determined in the marketplace regardless of the company's capital structure decision. Hence, a rise in an unregulated company's debt ratio raises the company's risk and profitability, and the

company makes a capital structure decision that balances the desirable increase in the expected rate of return against the undesirable increase in the uncertainty or risk of its actual rate of return. Also, beyond some level a rise in the debt ratio increases the probability of insolvency. The management and the stockholders both enjoy the benefits and suffer the possible disadvantages of a high debt ratio.

However, for a regulated company increasing the debt ratio is a heads-you-win-tails-I-lose proposition. The customers enjoy the benefits in reduced revenue requirements of a high debt ratio, while the management and stockholders suffer the increased risk. The consequence is that the management of a regulated company will want the lowest possible debt ratio that it can persuade the regulatory agency to accept, and a regulator that simply accepts the debt ratio advocated by a company subject to its regulation is derelict in its responsibilities to customers.

To provide some indication of the relative magnitude involved in the capital structure decision, the revenue requirements imposed on customers were calculated under three alternative capital structures and the following assumptions: (1) a corporate income tax rate of 30%; (2) an interest rate on debt of 10%; and (3) a cost of equity capital of 14%. It is also true that in principle the interest rate on debt and the cost of equity capital both increase with the debt ratio, but the range over which the debt ratio is varied in the illustration below is very narrow, and the increase in the interest rate and the cost of equity capital in this range would be so small that a single rate can be used with a negligible error.

The three alternative capital structures are present below:

	<u>Capital Structure</u>		
	<u>A</u>	<u>B</u>	<u>C</u>
Current Liabilities	\$ 7,000	\$ 7,000	\$ 7,000
Deferred Taxes	13,000	13,000	13,000
Debt	35,000	40,000	45,000
Equity	<u>45,000</u>	<u>40,000</u>	<u>35,000</u>
Total	<u>\$100,000</u>	<u>\$100,000</u>	<u>\$100,000</u>

The revenue requirements under these capital structures and the above tax rate and capital cost rates are:

	<u>A</u>	<u>B</u>	<u>C</u>
EBIT	\$12,500	\$12,000	\$11,500
Interest Expense	3,500	4,000	4,500
Earnings before Taxes	9,000	8,000	7,000
Income Taxes	2,700	2,400	2,100
Income to Common	6,300	5,600	4,900

To understand these figures, we work up from the bottom as follows: In Case A the \$45,000 common equity gets a 14% return and income to common equity of \$6,300. With a 30% tax rate the income taxes are \$2,700. Add to these two items the \$3,500 interest expense on \$35,000 in debt with a 10% interest rate, and we have earnings before interest and taxes, which are the revenue requirements imposed on customers, of \$12,500.

The three capital structures in the above illustrative case may be compared on the basis of the WACC and on the basis of the revenue requirements imposed on customers. The WACC in each case is the sum of the income to common equity and interest on debt divided by the capital employed, while the revenue requirement is the EBIT. The two figures in each case are:

<u>Case</u>	<u>A</u>	<u>B</u>	<u>C</u>
WACC	9.8%	9.6%	9.4%
Revenue Requirements	\$12,500	\$12,000	\$11,500

It can be seen that the WACC falls from 9.8% to 9.4% between cases A and C, a percentage change of only 4.1%. However, the revenue requirements fall from \$12,500 to \$11,500, a percentage change of 8.0%. This is not a trivial benefit to customers, particularly when it is noted that the capital change that provides the benefit is quite small.

Finally, the effects illustrated here also can result from netting cash balances to reduce the dollar value of long-term debt, even if the dollar value of equity remains unchanged. This occurs because the measured proportion of equity increases, leading to an increase in the WACC determination.

## V. AGENCY DETERMINATIONS ON CAPITAL STRUCTURE FOR CN AND CP

The Consultation Document asks interested parties to comment on the Agency's methodology for determining CN and CP's capital structures. In particular, Agency Staff ask

“Does the proposed Balance Sheet Approach list of items adequately include all appropriate elements that the Agency should take into consideration in determining the prescribed railway companies' capital structure, and if not, what components should be included or excluded, based on what elements of GAAP? Please provide clear justification for any elements or components that you think should be added or excluded.”<sup>12</sup>

The previous sections have explained the underlying principles and addressed specific questions posed about capital structure methodology. In concluding, it may be useful to review what information about the Agency's capital structure determinations has been made available to interested parties for comment.

The most recent Agency information about the railways' capital structure was in the 2015 cost of capital rate determinations.<sup>13</sup> However, these Decisions only reference the capital structures previously approved in the 2016/2017 crop year cost of capital determinations and provide no additional information. Table 7 shows the approved WACC for CN and CP. Note that the capital structure weights for the different sources of capital are not provided for either railway.

Using CP as an example we can see from Table 7 that the approved WACC is 7.46%. CP's 2016/2017 crop year cost of capital rate determination is very transparent on the methodology for arriving at the cost of equity capital. Interested parties are informed on the methodology and data sources for the calculations. However, this is not the situation with regard to capital structure:

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<sup>12</sup> Consultation Document, page 4.

<sup>13</sup> Canadian Transportation Agency, 2015 Cost of Capital Rate for the Canadian National Railway Company, LET-R-40-2016, and Canadian Transportation Agency, 2015 Cost of Capital Rate for the Canadian Pacific Railway Company, LET-R-41-2016.

“The resulting deemed capital structure is presented in Appendix B. The Agency shall not release the management projections of CP’s earnings and the pro forma (or projected) capital structure. This information is commercially sensitive, the public disclosure of which may cause specific direct harm to CP. Therefore Appendix B to the Agency Decision that will be distributed to the public has been amended accordingly to avoid disclosing these projections.”<sup>14</sup>

The Decision states that the capital structure was accepted as submitted by CP, with the exception of adjustments to long-term debt to correct misclassified items.<sup>15</sup> No information is provided about how CP uses the balance sheet method. As discussed in Section III, the Consultation Document disclosed that CP has been netting its cash balances against long-term debt, with the effect of raising the equity percentage and the WACC. However, this information could not have been obtained from the Agency’s annual cost of capital determinations.

In summary, we do not know details about the capital structure methodology that CN and CP use for their submissions, we do not know the details of what adjustments were made by the Agency and we do not know the final determinations of CN and CP’s capital structure by the Agency. As a result, it is not possible to determine whether CN and CP are complying with correct principles of capital structure methodology.

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<sup>14</sup> Canadian Transportation Agency, 2016/2017 Crop Year Cost of Capital Rate for the Canadian Pacific Railway Company for the Transportation of Western Grain, LET-R-14-2016, page 2.

<sup>15</sup> Canadian Transportation Agency, 2016/2017 Crop Year Cost of Capital Rate for the Canadian Pacific Railway Company for the Transportation of Western Grain, LET-R-14-2016, Appendix A, page 1.

**GROSS METHOD CALCULATION OF WEIGHTED AVERAGE COST OF CAPITAL  
AND EARNINGS REQUIREMENT FOR A HYPOTHETICAL COMPANY**

Balance Sheet

Net Plant	\$104	Common Equity	\$40
		Preferred Stock	10
		Debt	50
Current Assets	12	Current Liabilities	6
	—	Accm. Def. Taxes	<u>10</u>
Rate Base	<u>\$116</u>	Capital	<u>\$116</u>

Cost of Capital Calculation

<u>Capital Source</u>	<u>Fraction of Capital</u>	<u>Cost</u>	<u>Factor</u>
Common Equity	34.48%	14%	4.83%
Preferred Stock	8.62	8	.69
Debt	43.10	7	3.02
Current Liabilities	8.62	0	0.0
Accm. Def. Taxes	5.17	0	<u>0.0</u>
WACC			<u>8.53%</u>

$$\begin{aligned} \text{Earnings Requirement} &= \text{Rate Base} \times \text{WACC} \\ &= \$116 \times .0853 = \underline{\underline{\$9.90}} \end{aligned}$$

**NET METHOD CALCULATION OF WEIGHTED AVERAGE COST OF CAPITAL  
AND EARNINGS REQUIREMENT FOR A HYPOTHETICAL COMPANY**

Balance Sheet

Net Plant	\$104	Common Equity	\$40
		Preferred Stock	10
		Debt	50
Working Capital	6		
Less: Accm. Def. Taxes	<u>10</u>		
Rate Base	<u>\$100</u>	Capital	<u>\$100</u>

Cost of Capital Calculation

<u>Capital Source</u>	<u>Fraction of Capital</u>	<u>Cost</u>	<u>Factor</u>
Common Equity	40.00%	14%	5.60%
Preferred Stock	10.00	8	.80
Debt	50.00	7	<u>3.50</u>
WACC			<u>9.90%</u>

$$\begin{aligned} \text{Earnings Requirement} &= \text{Rate Base} \times \text{WACC} \\ &= \$100 \times .0990 = \underline{\underline{\$9.90}} \end{aligned}$$



**GROSS METHOD CALCULATION OF WEIGHTED AVERAGE COST OF CAPITAL  
AND EARNINGS REQUIREMENT FOR A HYPOTHETICAL COMPANY WITH TWO  
DIVISIONS**

Balance Sheet

Net Plant			Common Equity	\$40
Division A	\$60		Preferred Stock	10
Division B	<u>40</u>	\$104	Debt	50
Current Assets:			Current Liabilities:	
Division A	\$10		Division A	\$3
Division B	<u>2</u>	12	Division B	1
			General	<u>2</u> 6
			Accm. Def. Taxes:	
			Division A	\$6
			Division B	<u>4</u> <u>\$ 10</u>
Rate Base		<u>\$116</u>	Capital	<u>\$116</u>

Cost of Capital Calculation

<u>Capital Source</u>	<u>Fraction of Capital</u>	<u>Cost</u>	<u>Factor</u>
Common Equity	34.48%	14%	4.83%
Preferred Stock	8.62	8	.69
Debt	43.10	7	3.02
Current Liabilities	8.62	0	0.0
Accm. Def. Taxes	5.17	0	0.0
WACC			<u>8.53%</u>

$$\text{Earnings Requirement} = \text{Rate Base} \times \text{WACC}$$

$$= \$116 \times .0853 = \underline{\underline{\$9.90}}$$

**NET METHOD CALCULATION OF WEIGHTED AVERAGE COST OF CAPITAL  
AND EARNINGS REQUIREMENT FOR A HYPOTHETICAL COMPANY WITH TWO  
DIVISIONS**

Balance Sheet

Net Plant			Common Equity	\$40
Division A	\$60		Preferred Stock	10
Division B	<u>44</u>	\$104	Debt	50
Working Capital:			Current Liabilities:	
Division A	\$7		General	2
Division B	<u>1</u>	8		
Less: Accm. Def. Taxes:				
Division A	\$6			
Division B	<u>4</u>	<u>10</u>		
Rate Base		<u>\$102</u>	Capital	<u>\$102</u>

Cost of Capital Calculation

<u>Capital Source</u>	<u>Fraction of Capital</u>	<u>Cost</u>	<u>Factor</u>
Common Equity	39.22%	14%	5.49%
Preferred Stock	9.80	8	.78
Debt	49.02	7	3.43
Current Liabilities	1.96	0	<u>0.0</u>
WACC			<u>9.71%</u>

$$\begin{aligned} \text{Earnings Requirement} &= \text{Rate Base} \times \text{WACC} \\ &= \$102 \times .0971 = \underline{\underline{\$9.90}} \end{aligned}$$

**NET METHOD CALCULATION OF WEIGHTED AVERAGE COST OF CAPITAL  
AND EARNINGS REQUIREMENT FOR A HYPOTHETICAL COMPANY ON A  
DIVISIONAL BASIS**

Division A:

Balance Sheet

Net Plant	\$ 60		Common Equity	\$23.92
			Preferred Stock	5.98
			Debt	29.90
Working Capital	7		Current Liabilities:	
			General	1.20
Less: Accm. Def. Taxes	<u>6</u>			<u>        </u>
Rate Base	<u>\$ 61</u>		Capital	<u>\$ 61</u>

Cost of Capital Calculation

<u>Capital Source</u>	<u>Fraction of Capital</u>	<u>Cost</u>	<u>Factor</u>
Common Equity	39.22%	14%	5.49%
Preferred Stock	9.80	8	.78
Debt	49.02	7	3.43
Current Liabilities	1.96	0	<u>0.0</u>
WACC			<u>9.71%</u>

$$\begin{aligned} \text{Earnings Requirement} &= \text{Rate Base} \times \text{WACC} \\ &= \$61 \times .0971 = \underline{\underline{\$5.92}} \end{aligned}$$

.... (Continued)

**NET METHOD CALCULATION OF WEIGHTED AVERAGE COST OF CAPITAL  
AND EARNINGS REQUIREMENT FOR A HYPOTHETICAL COMPANY ON A  
DIVISIONAL BASIS (Continued)**

<u>Division B:</u>		<u>Balance Sheet</u>	
Net Plant	\$ 44	Common Equity	\$16.08
		Preferred Stock	4.02
		Debt	20.10
Working Capital	1	Current Liabilities:	
		General	.80
Less: Accm. Def. Taxes	<u>4</u>		<u>          </u>
Rate Base	<u>\$ 41</u>	Capital	<u>\$ 41</u>

Cost of Capital Calculation

<u>Capital Source</u>	<u>Fraction of Capital</u>	<u>Cost</u>	<u>Factor</u>
Common Equity	39.22%	14%	5.49%
Preferred Stock	9.80	8	.78
Debt	49.02	7	3.43
Current Liabilities	1.96	0	<u>0.0</u>
WACC			<u>9.71%</u>

$$\begin{aligned} \text{Earnings Requirement} &= \text{Rate Base} \times \text{WACC} \\ &= \$41 \times .0971 = \underline{\underline{\$3.98}} \end{aligned}$$

**GROSS METHOD CALCULATION OF WEIGHTED AVERAGE COST OF CAPITAL  
AND EARNINGS REQUIREMENT FOR A HYPOTHETICAL COMPANY ON A  
DIVISIONAL BASIS**

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<u>Division A:</u>		<u>Balance Sheet</u>	
Net Plant	\$ 60	Common Equity	\$23.92
		Preferred Stock	5.98
		Debt	29.90
Current Assets	10	Current Liabilities:	
		General	\$1.20
		Division	<u>3.00</u> 4.20
	<hr/>	Acc. Def. Taxes	<u>6.00</u>
Rate Base	<u>\$ 70</u>	Capital	<u>\$ 70</u>

Cost of Capital Calculation

<u>Capital Source</u>	<u>Fraction of Capital</u>	<u>Cost</u>	<u>Factor</u>
Common Equity	34.17%	14%	4.78%
Preferred Stock	8.54	8	.68
Debt	42.72	7	2.99
Current Liabilities	5.99	0	0.0
Accm. Def. Taxes	8.57	0	<u>0.0</u>
WACC			<u>8.46%</u>

$$\begin{aligned} \text{Earnings Requirement} &= \text{Rate Base} \times \text{WACC} \\ &= \$70 \times .0846 = \underline{\underline{\$5.92}} \end{aligned}$$

.... (Continued)

**GROSS METHOD CALCULATION OF WEIGHTED AVERAGE COST OF CAPITAL  
AND EARNINGS REQUIREMENT FOR A HYPOTHETICAL COMPANY ON A  
DIVISIONAL BASIS (Continued)**

<u>Division B:</u>		<u>Balance Sheet</u>	
Net Plant	\$ 44	Common Equity	\$16.08
		Preferred Stock	4.02
		Debt	20.10
Current Assets	2	Current Liabilities:	
		General	\$ .80
		Division	<u>1.00</u> 1.80
		Accm. Def. Taxes	<u>4.00</u>
Rate Base	<u>\$ 46</u>	Capital	<u>\$ 46</u>

Cost of Capital Calculation

<u>Capital Source</u>	<u>Fraction of Capital</u>	<u>Cost</u>	<u>Factor</u>
Common Equity	34.95%	14%	4.89%
Preferred Stock	8.74	8	.70
Debt	43.69	7	3.06
Current Liabilities	3.92	0	0.0
Accm. Def. Taxes	8.70	0	<u>0.0</u>
WACC			<u>8.65%</u>
Earnings Requirement = Rate Base x WACC			
	= \$46	x .0865	= <u>\$3.98</u>

**CN**  
**AND ASSOCIATED COST RATES**  
**AS AT DECEMBER 31, 2015**  
**AS APPROVED BY THE CANADIAN TRANSPORTATION AGENCY**

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	WEIGHTED RATE
Long-Term Debt	2.37%
Future Income Taxes and Investment Tax Credits	0.00%
Common Equity	<u>3.05%</u>
Approved Cost of Capital Rate for the 2016/2017 Crop Year	<u>5.42%</u>

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Source: Canadian Transportation Agency, 2016/2017 Crop Year Cost of Capital Rate for the Canadian National Railway Company for the Transportation of Western Grain, LET-R-13-2016, Appendix B.

.... (Continued)

**CP**  
**AND ASSOCIATED COST RATES**  
**AS AT DECEMBER 31, 2015**  
**AS APPROVED BY THE CANADIAN TRANSPORTATION AGENCY**

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	WEIGHTED RATE
Long-Term Debt	1.19%
Future Income Taxes and Investment Tax Credits	0.00%
Common Equity	<u>6.27%</u>
Approved Cost of Capital Rate for the 2016/2017 Crop Year	<u>7.46%</u>

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Source: Canadian Transportation Agency, 2016/2017 Crop Year Cost of Capital Rate for the Canadian Pacific Railway Company for the Transportation of Western Grain, LET-R-14-2016, Appendix B.



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**Marcia Smith**  
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**Teck**

October 7, 2016

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

Attention: consultations@otc-cta.gc.ca

**Re: Consultation Regarding the Methodology for Determining the Capital Structure of Canadian National Railway Company (CN) and Canadian Pacific Railway Company (CP) for the Determination of the Cost of Capital of the two Railway Companies**

As the Agency advances its consultation, Teck is pleased to provide the following submission for your consideration.

Our interest in continuing to participate in the Agency's efforts to correctly determine railway costs is longstanding. As Canada's single largest rail shipper, Teck is very concerned with and affected by rate increases and service level decreases that have no clear or transparent rationale.

At issue is that, as a captive rail shipper in a market that is not normally functioning with significant barriers to accessing competitive alternatives, the remedies available under the *Canada Transportation Act* are often the only means available to Teck to accomplish what the market will not. It is for this reason that Teck takes an active interest in the health of the limited remedies available to us, as well as in the workings of the Agency, particularly the methodologies employed by the Agency in determining CN and CP's costs on which the effectiveness of so many remedies rely. We urge the Agency to take meaningful action to ensure these methodological processes are transparent, and restrain unjustifiable increased rate levels and service level decreases.

As outlined in the enclosed report by Dr. Lawrence I. Gould, Ph.D., Professor of Finance and Senior Scholar at the Asper Business School, University of Manitoba, there are several serious deficiencies in the methodological processes and possibly the methodologies currently employed by the Agency. We trust that this consultation will consider and address the issues raised by Dr. Gould. While it is not possible at this juncture to make an accurate assessment of the magnitude of the effects of possible changes that could be wrought to the relevant methodologies, we are confident that greater transparency in the processes undertaken to address the issues underlying this consultation will assist in that regard. To that end, explanations by the Agency and by CN and CP, and ongoing efforts to address shortcomings, together with the responses contemplated during the period proposed in this particular consultation, will lead to greater confidence in the outcomes.

Nevertheless, because of the outsized contributions made by Teck and no doubt other captive shippers to the railway companies' fixed costs, we urge the Agency to make every effort to disclose all financial information relating to those railway companies that is not strictly confidential, so that we and they can have confidence that railway company claims and Agency determinations of cost are both accurate and justified.

In particular, to achieve meaningful outcomes, this capital structure discussion would benefit from considerably more definition and granular disclosures as to what items the UCA accounts appended to the consultation document include. Our view pertains not only to catch-all accounts such as those including the word "Miscellaneous" but also those that might include services well outside the net rail investment, including information technology, consultant services, and failed assets. In addition to inspiring confidence in there being a sound methodology in place, this would facilitate greater accuracy and predictability in future Agency determinations.

More broadly, we are hopeful that the consultation will result in at least greater integrity of process, if not lower cost determinations. We emphasize that Teck is very dependent on regulated interswitching and final offer arbitration, both of which rely on the Agency's cost determinations, which are dependent for their accuracy and justification on the matters raised in the consultation. That is true not only of this consultation but of past and upcoming efforts to enhance the Agency's costing methodology generally. We particularly look forward to participating in the costing methodology review previously contemplated by the Agency.

As this consultation advances, we look forward to reviewing and commenting on, as necessary and desirable, others' submissions. We understand that the timeline for reaching a determination on the issues raised in the consultation is focused on the end-of-year VRCPI determination. We believe the process would be greatly enhanced by a hearing, or at least in-person presentations, and ask the Agency to give consideration to our request in that regard.

Thank you for your consideration.

Sincerely,



Marcia Smith  
Senior Vice President, Sustainability and External Affairs  
Teck Resources Limited

# WESTERN GRAIN ELEVATOR ASSOCIATION

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E-Mail: [wgea@mts.net](mailto:wgea@mts.net)

October 14, 2016

Canadian Transportation Agency  
15 Eddy Street  
Gatineau, QC  
J8X 4B3

[consultations@otc.gc.ca](mailto:consultations@otc.gc.ca)

Dear Sir/Madam,

**Re: Capital Structure and Cost of Capital Methodology**

The Western Grain Elevator Association (WGEA) is an association of six major grain businesses operating in Canada, which collectively handle in excess of 90% of western Canada's bulk grain exports. Its members account for approximately 20% of railway revenues and pay annual total rail freight of over 1.5 billion dollars. Our members are listed at the bottom of our letterhead.

We are interested in the Agency consultation regarding the methodology for determining the capital structure of the Canadian National Railway Company (CN) and Canadian Pacific Railway Company (CP) for setting their Cost of Capital. This is a matter of importance for the entire grain sector, since the cost of capital rates are used for determining not only the Maximum Revenue Entitlement (MRE) in the transportation of western grain, but also for the determination of interswitching rates. With the change in the interswitching limit in western Canada from 30 km to 160 km, interswitching of grain traffic is becoming a growing solution to address both service and rate issues, and is being used in both active and passive ways. Both the MRE and extended interswitching are important mechanisms to protect grain shippers from certain monopolistic behaviour of the Class 1 rail carriers, and must remain in place in a permanent way.

The WGEA understands and supports the views brought forward by Dr. Lawrence Gould in his October 6, 2016 report, and agrees with the points included in this package of submissions by McMillan LLP, Teck Resources, and the Canadian Canola Growers Association. While we do not object to the Agency's undertaking of a review of the railway capital structure and cost of capital methodology, we do not have enough information to respond to the question as to whether or not the current methodology is appropriate. Shippers require information on the capital structure methodology currently used by CN and CP and adjustments/final determinations by the Agency in order to undertake a proper assessment. As described in the McMillan letter, there is some concern that the capital structure used by CP has been accepted by the Agency on a de facto basis. In addition, we agree with the issue as described, pertaining to the determination of inflation for the cost of capital.

Thank you in advance for considering our views on this important matter.

Yours truly,

A handwritten signature in blue ink, appearing to read "Wade Sobkowich". The signature is fluid and cursive, with a large initial "W" and a long, sweeping underline.

Wade Sobkowich  
Executive Director

October 14, 2016

Canadian Transportation Agency  
15 Eddy Street  
Gatineau, QC  
J8X 4B3

Attention: Consultations

**Re: Agency Consultation Regarding the Methodology for Determining the Capital Structure of Canadian National Railway Company (CN) and Canadian Pacific Railway Company (CP) for the Determination of the Cost of Capital of the two Railway Companies**

The Canadian Canola Growers Association (CCGA) appreciates the opportunity to provide comment regarding the above noted Agency consultation. CCGA represents 43,000 canola producers from Ontario to British Columbia. Canola is heavily reliant on railway transport with over 90% of annual production, in the form of seed, oil and meal being exported.

This consultation is of importance to the grain sector. Although grain producers are typically not the legal shippers of the product, they do pay the freight as this cost is reflected in the pricing structures of the grain marketplace. In particular, potential adjustments to the cost of capital methodology will impact (to an unknown degree) the calculation of the annual volume-related composite price index (VRCPI) which forms a central component of the Maximum Revenue Entitlement (MRE) determination. Additionally, potential adjustments to the cost of capital methodology will impact (to an unknown degree) the calculation of regulated interswitching rates. Interswitching is an important competitive tool used by grain shippers.

Although we take great interest in Agency proceedings, CCGA would not typically provide comment regarding detailed financial methodological issues, but this instance differs as it represents potential for foundational change to the railway regulatory environment. There may be, at face value, valid technical rationale for Agency staff to undertake such modernization initiatives. That said, CCGA recommends the Agency carefully consider the manner in which it approaches and structures these efforts and the ability for affected parties to provide useful comment in the absence of important information. Given the importance of this consultation and the potential impact to all railway shippers, the documentation provided was lacking.

CCGA supports the five substantive issues identified in the submission prepared by McMillan, the supplemental views of Teck Resources and the Western Grain Elevator Association and the more detailed work prepared by Dr. Gould.

Sincerely,



Rick White  
Chief Executive Officer