



January 15, 2021

Sent By E-mail

British Columbia Utilities Commission
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**Attention: Marija Tresoglavic, Acting Commission
Secretary**

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Project No. 1598984 1000385944

Dear Ms. Tresoglavic:

**Kinder Morgan (Jet Fuel) Inc. (“PKMJF”) 2019 Tariff Filing – Vancouver Airport Fuel
Facilities Corporation (“VAFFC”) – Public Redacted Intervener Evidence**

We are counsel for VAFFC in this matter and write on its behalf. Further to our December 16, 2020 letter,¹ we have enclosed redacted versions of (a) the evidence of VAFFC (the “**VAFFC Evidence**”), and (b) the evidence of InterGroup Consultants, prepared at the request of VAFFC (the “**InterGroup Evidence**”). In the enclosed versions of the VAFFC Evidence and the InterGroup Evidence, respectively, VAFFC has redacted references to any of PKMJF’s confidential materials and information submitted in these proceedings.

If you have any questions, please contact the writer.

Yours very truly,

For: Matthew D. Keen
Partner

MDK/roe

Enclosure

¹ Exhibit C2-36.

CAN_DMS: \137414485\1

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BRITISH COLUMBIA UTILITIES COMMISSION

KINDER MORGAN CANADA (JET FUEL) INC.

2019 TARIFF FILING APPLICATION

PROJECT NO. 1598984

EVIDENCE OF THE VANCOUVER AIRPORT FUEL FACILITIES CORPORATION

December 16, 2020

**Vancouver Airport Fuel Facilities Corporation (“VAFFC”)
KINDER MORGAN CANADA (JET FUEL) INC. (“PKMJF”)
2019 TARIFF FILING APPLICATION**

EVIDENCE

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Vancouver Airport Fuel Facilities Corporation (“VAFFC”)

**KINDER MORGAN CANADA (JET FUEL) INC. (“PKMJF”)
2019 TARIFF FILING APPLICATION**

EVIDENCE

I. Introduction

1. This is the intervener evidence of VAFFC, in relation to PKMJF’s application to the British Columbia Utilities Commission (the “**BCUC**” or “**Commission**”) for orders approving final tolls on PKMJF’s jet fuel line (the “**Jet Fuel Line**”) for the period from January 1, 2019 to December 31, 2021 (the “**Tolling Period**” and, overall, the “**Application**”).¹
2. Over the past three decades VAFFC’s member airlines have shipped most of the volumes on the Jet Fuel Line and are the end-users of all of the jet fuel shipped on the line. The costs of shipping on the Jet Fuel Line are ultimately borne by airline customers.
3. PKMJF’s Application seeks a revenue requirement nearing \$12 million at the end of the test period, after taking into account a new proposed abandonment cost collection mechanism. During the 2009-2018 period those totals ranged from \$5-7 million, and they were less than \$4 million during 2006-2008. No new technologies or service offerings drive these increases.
4. Much of the Application relies on extrapolations and allocations, with unusually little in the way of tangible costs. PKMJF has not been forthcoming, and the record shows many inconsistencies, including relative to the financial picture [REDACTED]. In the case of operating expenses, for example, there are direct contradictions.
5. The Application also proposes extraordinary mechanisms to shift risk from the carrier to shippers. The accelerated depreciation sought by PKMJF is deeply flawed in its construction, and the abandonment fund PKMJF proposes is novel to the BCUC, of a type rejected by the National Energy Board, and inappropriate to these circumstances. Overall, the Application represents a flawed attempt to retain the remarkable profits achieved under the past 10-year negotiated settlement, which went well above the cost of providing service.
6. The Commission should reject the exotic proposals in the Application and instead set rates for the Tolling Period using familiar approaches and those costs revealed through information requests that appear reliable. This includes forecast-based tolls, a standard return on rate base, a depreciation schedule and collection of abandonment appropriate to the assets, and adjusting balances to recognize that PKMJF should have set funds aside from its profits during the period of the negotiated settlement – or otherwise applied to the BCUC.
7. This evidence provides VAFFC’s overall view of the Application, background concerning VAFFC’s composition and activities, the toll history for PKMJF, and VAFFC’s construction of the Vancouver Airport Fuel Delivery Project (the “**VAFD Project**”).

¹ Exhibit B-14 at para. 1.

8. To support its intervention, VAFFC has retained Patricia Lee, Patrick Bowman, and Melissa Davies, through InterGroup Consultants Ltd. (“**InterGroup**”), to provide their expert opinion. VAFFC adopts InterGroup’s expert opinion (the “**InterGroup Report**”), which is being filed concurrently with VAFFC’s evidence. This evidence also provides a synopsis of their conclusions.
9. VAFFC’s evidence is structured as follows:
 - a. In **Section II**, VAFFC describes its corporate structure and the role that VAFFC plays in relation to the Jet Fuel Line operated by PKMJF and the supply of fuel at the Vancouver International Airport (“**YVR**”).
 - b. In **Section III**, VAFFC describes the context of the present application, including the history of tolls on the Jet Fuel Line and the development of VAFFC’s VAFD Project.
 - c. In **Section IV**, VAFFC sets out its views on the implications of PKMJF’s longstanding regulation as a common carrier in BC (as opposed to a public utility), and the impact this has on the costs which PKMJF is entitled to in its Application. VAFFC also references and adopts Mr. Bowman’s views, set out in the InterGroup Report, on the regulatory principles applicable to public utilities and common carriers, and how these regulatory principles should apply to PKMJF and the Jet Fuel Line in the present case.
 - d. In **Section V**, VAFFC provides an assessment of the cost of service basis for PKMJF’s Application. VAFFC also references and adopts Ms. Davies’ views, set out in the InterGroup Report, on the cost of service analysis provided by PKMJF in its Application.
 - e. In **Section VI**, VAFFC addresses the accelerated depreciation PKMJF seeks in the Application. VAFFC also references and adopts the views of Ms. Lee and Mr. Bowman, set out in the InterGroup Report, on the depreciation methodology that has been applied to the Jet Fuel Line over the years, and effect this has on the accelerated depreciation PKMJF seeks in the Application.
 - f. In **Section VII** VAFFC addresses the abandonment costs PKMJF seeks in the Application, and ELM’s Pipeline Abandonment Cost Estimate (the “**ELM Report**”),² which has been provided by PKMJF in support. VAFFC also references and adopts Ms. Lee’s views, set out in the InterGroup Report, on the principles that have been applied to abandonment funds for pipelines such as the Jet Fuel Line, the ELM Report, and a recommended adjustment to ELM’s abandonment cost estimate.
 - g. In **Section VIII**, VAFFC provides a summary of its recommendations to the Commission.

² Exhibit B-10.

II. About VAFFC

10. VAFFC is a not-for-profit consortium of commercial airlines representing 34 of the domestic and international carriers serving YVR.
11. VAFFC owns and operates the fuel facility system servicing YVR's main domestic and international terminals and thereby provides fuel delivery service to all airlines using those terminals. Non-member airlines receive fuel delivery service from VAFFC on a fee-for-service basis. Each member airline purchases fuel for its own use and arranges delivery to the VAFFC fuel facilities at YVR, either through the Jet Fuel Line or via tanker trucks. VAFFC manages the storage and handling of each airline's fuel and ensures its delivery to the airlines' respective aircraft.
12. VAFFC's fuel facilities at YVR include an eight-tank storage facility and tanker truck offloading rack system, an airside tanker truck loading compound, an extensive underground pipeline hydrant system to transfer fuel from VAFFC's tanks to airside fueling aprons, and a maintenance and administration facility. The VAFFC fuel storage tanks receive fuel from two separate upstream delivery modes: (1) the Jet Fuel Line owned and operated by PKMJF; and (2) daily tanker truck deliveries from the Cherry Point Refinery, located in Washington State.³
13. Prior to the onset of the COVID-19 pandemic, the Jet Fuel Line was able to supply up to about 80% of YVR's fuel needs, with the remainder supplied by tanker trucks.⁴ This ratio fluctuates on a daily and seasonal basis depending on actual demand for fuel at YVR (i.e., the percentage of fuel delivered by tanker trucks increases during periods of peak demand). The existing fuel delivery system needed to be supplemented by approximately 70 fuel tanker truck deliveries per day (2,000 per month) before the COVID-19 pandemic, which were required to meet the airport's peak fuel demand.
14. Over the past 30 days, in light of the effects of the pandemic on air travel and hence aircraft fuel demand, YVR has averaged about 20 daily fuel tanker truck deliveries. Nominations on PKMJF's system are approximately 20% of pre-pandemic levels. VAFFC and its members expect that air travel and fuel demand at YVR will ultimately return to pre-pandemic levels, but the pace and timing of that return is uncertain. VAFFC has continued to proceed with the construction of the VAFD pipeline throughout 2020. It now expects the project to be operational in 2023.

III. Context of the Present Application

15. Below, VAFFC describes in turn: (a) the history of tolls on the Jet Fuel Line, (b) the development of the VAFD Project, and (c) the current status of the VAFD Project and VAFFC's plans for after the VAFD Project enters operation.

(a) The history of tolls on the Jet Fuel Line

16. The historical context of PKMJF's present Application is important to understanding VAFFC's concerns with the tolls sought by PKMJF for the Tolling Period. PKMJF confirmed that its

³ Prior to the onset of the COVID-19 pandemic, VAFFC also received tanker truck deliveries from Alberta.

⁴ During the peak fuel demand season (generally in the summer), additional tanker trucks are required to meet total fuel demand, reducing the percentage of YVR's fuel needs which are satisfied by the Jet Fuel Line below 80%.

Application seeks a 62% increase over the 2018 toll when the abandonment surcharge is taken into account.⁵ And compared to the 2008 toll – the last time the Commission reviewed and approved the revenue requirement for the Jet Fuel Line in a contested application – PKMJF’s applied-for 2019 tolls represent an increase of 229%.⁶ For comparison, general inflation in BC during the same time period was about 17%.⁷

17. This subsection briefly describes the history of tolls from the construction of the Jet Fuel Line to the present, and is key context for VAFFC’s response to PKMJF’s Application in subsequent sections of this evidence. Three phases are described in greater detail below:

- a. prior to 2007, the tolls on the Jet Fuel Line were largely set by negotiation between the shippers and PKMJF, with Commission adjudication occasionally necessary when shippers and PKMJF could not agree on tolls;
- b. from 2007-2009, there was a contentious period in which PKMJF sought to effectively double tolls via accelerated depreciation on the basis that VAFFC intended to bypass it, which was ultimately rejected by the Commission; and
- c. from 2009-2018, a negotiated settlement between the shippers and PKMJF regarding tolls on the Jet Fuel Line, that significantly increased tolls.

(i) Tolls prior to 2007: Negotiated tolls with limited Commission intervention

18. The Jet Fuel Line was built in the late 1960s in order to connect the new YVR terminal with the four refineries then operating in the Lower Mainland. The Commission assumed responsibility for the economic regulation of the Jet Fuel Line in 1987.⁸ Tolls on the Jet Fuel Line were regulated on a complaint basis, and tariffs were negotiated between PKMJF⁹ and its shippers and filed with the Commission for approval.¹⁰ The Commission did not actively regulate tolls, but rather relied upon shippers to complain if necessary. Until 1993, the Commission did not receive any complaints.¹¹

19. In 1993, PKMJF, which was then named “Trans Mountain Enterprises of British Columbia Limited”, sought a 26.1% increase in tolls, based largely on capital additions that approximately doubled the rate base.¹² As a result, Canadian Airlines International Ltd. and VAFFC complained. Following a written hearing, the Commission approved only a 9.4% toll

⁵ Exhibit B-11, PKMJF Response to BCUC IR 9.3.2, Table 9.3.2 at pdf p. 52.

⁶ InterGroup Report at p. B-9, pdf p. 53.

⁷ InterGroup Report at p. B-3, pdf p. 47.

⁸ BCUC [Reasons for Decision accompanying Order P-2-94 \(March 25, 1994\)](#) at pdf p. 5.

⁹ Since at least 1968, there has only been one corporate entity with ownership of the Jet Fuel Line. That entity was incorporated on December 13, 1967, and has BC incorporation number BC0077166. Today, that corporation’s name is PKM Canada (Jet Fuel) Inc. (or “PKMJF”), pursuant to a change of name on December 17, 2019. Prior to that, its name was:

- Kinder Morgan Canada (Jet Fuel) Inc., from September 5, 2018;
- Trans Mountain (Jet Fuel) Inc., from May 22, 2007;
- Terasen Pipelines (Jet Fuel) Inc., from March 20, 2003; and,
- Prior to March 20, 2003, Trans Mountain Enterprises of British Columbia Limited.

¹⁰ BCUC Order P-2-94 at pdf p. 5.

¹¹ BCUC Order P-2-94 at pdf p. 5.

¹² BCUC Order P-2-94 at pdf p. 3.

increase, disallowing the addition of certain capital costs to rate base (specifically, cost overruns related to a clay treatment project).¹³ The Commission also accepted a method by which future toll adjustments would be triggered if the company's return on equity (ROE) varied by more than 2% from an approved rate.¹⁴ Over the next four years, the toll was adjusted up and down in keeping with the ROE variance mechanism.

20. In 1998, the Commission approved a negotiated Incentive Agreement for tolls from 1998 to 2002.¹⁵ The agreement was based on a 1998 revenue requirement with increases for inflation, other agreed adjustments, a 50/50 sharing of annual earnings above a threshold and, newly, *shippers* taking the risk on throughput forecasts.¹⁶

21. Following 2002, negotiations over a renewed settlement toll broke down. Tolls were therefore negotiated year by year, with the result that they remained unchanged from 2003 to 2005. In 2006, PKMJF, then called "Terasen Pipelines (Jet Fuel) Inc.", applied to the Commission for an increased interim toll for 2006. The Commission denied an interim toll increase for 2006, as PKMJF had not provided enough information to justify it,¹⁷ and PKMJF ultimately reached agreement with shippers over the permanent tolls for 2006.¹⁸ During this period PKMJF bore volume risk, as is common.

(ii) 2007: PKMJF applied to double the Jet Fuel Line toll based on accelerated depreciation and abandonment costs

22. In 2007, PKMJF, then named Trans Mountain (Jet Fuel) Inc., brought an application to approximately double the toll on the Jet Fuel Line, from \$3.146/m³ to \$6.222/m³.¹⁹ PKMJF claimed that VAFFC had decided to bypass the Jet Fuel Line, and that as a result, the economic life of the Jet Fuel line was only five years.²⁰ On that basis, PKMJF applied to fully depreciate the pipeline within that five-year period, and also sought to have the costs of abandonment, which the company estimated to be \$3.025 million, included in its tolls over that period (i.e., negative salvage).²¹

23. The Commission denied PKMJF's request for accelerated depreciation and abandonment costs. First, the Commission found that VAFFC had not yet made a firm and final decision to go ahead with the VAFD Project (referred to as "the bargaining option"). While VAFFC had taken an opportunity to buy land in Richmond that could be used for the bargaining option, the Commission accepted that VAFFC had done so only to keep its options open.²² Even if the

¹³ BCUC Order P-2-94 at pdf p. 4.

¹⁴ BCUC Order P-2-94 at pdf pp. 8–10.

¹⁵ BCUC [Order P-3-98](#).

¹⁶ BCUC Order P-3-98 at pdf p. 2; see also BCUC [Order P-1-06](#), Appendix A at pdf p. 3.

¹⁷ BCUC Order P-1-06, Appendix A at pdf pp. 5-6.

¹⁸ BCUC [Order P-2-06](#).

¹⁹ BCUC [Order P-3-08, Appendix A, Reasons for Decision \(February 13, 2008\)](#) (the "BCUC 2008 Decision") at pdf p. 4; Exhibit B-1, 2007 Application, [Letter dated June 5, 2007 filing Trans Mountain's Application with supported filings, for the approval of new Tolls and Accelerated Depreciation](#) (the "PKMJF 2007 Application") at pdf p. 22.

²⁰ PKMJF 2007 Application at pdf p. 25.

²¹ PKMJF 2007 Application at pdf pp. 22-24.

²² BCUC 2008 Decision at pdf p. 11.

barging option was built, the Commission also accepted that it was not clear that VAFFC would cease to use the Jet Fuel Line.²³

24. The Commission also found that, even if the VAFD Project were built, the Chevron Refinery (now Parkland) would continue to take the same amount of service on the Jet Fuel Line.²⁴ Jet fuel was a necessary by-product of the light crude oil stream Chevron refined, and Chevron stated that, even if the tolls doubled, shipping its fuel on the Jet Fuel Line would be both more economic and less risky than shipping by barge or truck.
25. In addition, the Commission found that PKMJF's request to have shippers contribute to an abandonment trust fund was premature, due to uncertainty about future amendments to the Income Tax Act that would allow a tax deduction for contributions to a qualifying abandonment trust.²⁵
26. Finally, the Commission took issue with the expert depreciation study that PKMJF filed in support of its application. The Commission found that Gannett Fleming, the depreciation expert retained by PKMJF, "did not form a view as to the economic life of the Jet Fuel System". Rather, Gannett Fleming was instructed to *assume* a five-year life span and to develop depreciation rates accordingly. As a result, the Commission did not accept Gannett Fleming's testimony.²⁶
27. Yet, despite its denial of PKMJF's application for accelerated depreciation and abandonment costs, in a subsequent reconsideration decision the Commission explicitly left the door open for PKMJF to apply again if conditions changed. In Order P-7-08, the Commission stated:

[...] [T]he Commission is of the view that the issue of pre-collection of abandonment costs by pipeline companies is worthy of debate, and where it has been shown that there is some certainty in the eventual abandonment or failure of the economic operation of a pipeline, then an application for accelerated depreciation might well succeed.

In the fullness of time, if TMJ is persuaded that the fuel supply options for the Vancouver airport have sufficiently matured and that shippers on the pipeline have made even tentative decisions to abandon service on the pipeline, then a further application to the Commission would be justified.²⁷

²³ BCUC 2008 Decision at pdf p. 13.

²⁴ BCUC 2008 Decision at pdf p. 14.

²⁵ BCUC 2008 Decision at pdf p. 15.

²⁶ BCUC 2008 Decision at pdf pp. 15-16.

²⁷ BCUC [Order P-7-08, Appendix A, Reasons for Decision \(August 19, 2008\)](#) at pdf p. 6.

(iii) 2009–2018: Negotiations and a ten-year settlement toll

28. Following the denial of the PKMJF 2007 Application, PKMJF and the shippers on the Jet Fuel Line again sought a negotiated settlement for tolls. Tolls for 2008 were set in accordance with the Commission’s ruling on the PKMJF 2007 Application,²⁸ and shippers agreed to an interim toll increase for 2009.²⁹
29. At the end of 2009, shippers accepted a new ten-year settlement establishing tolls from 2009 through 2018. On this basis, PKMJF filed Tariff No. 39, which the Commission approved.³⁰
30. Under this new tariff, rates were guaranteed to generate certain annual revenues, rather than being specified in terms of dollars per unit shipped. This placed all the throughput forecasting risk on the shippers – a risk that had previously been born by PKMJF.³¹ The new tolls also represented a significant increase from those approved by the BCUC on a cost of service basis in the immediately prior years. An updated depreciation schedule was included.

(b) The Development of the VAFD Project

31. VAFFC aggressively permitted the VAFD Project between 2009 and 2013, spanning federal and provincial environmental assessments and related court actions. Matters were largely permitted by 2014.

(i) PKMJF chose not to re-apply for accelerated depreciation and abandonment costs, even after it became clear that the VAFD Project was going ahead

32. As noted above, when the Commission ruled that the PKMJF 2007 Application for accelerated depreciation and abandonment costs was premature, it explicitly invited PKMJF to re-apply if circumstances changed, as follows:

In the fullness of time, if TMJ [i.e. PKMJF] is persuaded that the fuel supply options for the Vancouver airport have sufficiently matured and that shippers on the pipeline have made even tentative decisions to abandon service on the pipeline, then a further application to the Commission would be justified.³²

33. In January 2009, as toll negotiations with PKMJF were continuing, VAFFC submitted its Project Description (“PD”) for the VAFD Project to the BC Environmental Assessment Office (“EAO”). The PD reflected VAFFC stakeholder consultation efforts since 2007, including the City of Richmond, the Vancouver Airport Authority, and the Greater Vancouver Regional

²⁸ BCUC Order P-5-08.

²⁹ BCUC [Order P-9-08](#).

³⁰ BCUC [Order P-5-09](#). A copy of Tariff No. 39 can be found in Exhibit B-11, Appendix BCUC-KMJF 7.2 at pdf pp. 103-107.

³¹ See, e.g., BCUC [Reasons for Decision accompanying Order P-2-94 \(March 25, 1994\)](#) at pdf p. 10, in which the Commission denied a request by Trans Mountain to use actual rather than forecast throughputs for the 1993 toll, on the principle that to do so would be to “remove the forecasting risk from being a responsibility of the Applicant.”

³² BCUC [Order F-7-08, Appendix A, Reasons for Decision \(August 19, 2008\)](#) at pdf p. 6. See also paragraph 27, above.

District, among others. VAFFC launched its dedicated project website in February 2009.³³ It continued and expanded upon these efforts over the following years, engaging in consultation with numerous individuals and organizations. By 2012, VAFFC had held seven public open houses in the City of Richmond, in addition to two open houses hosted by the BC EAO as part of the environmental review process.³⁴

34. In February 2011, VAFFC filed its application for an Environmental Assessment Certificate (“EAC”) with the BC EAO. This application was a major undertaking, spanning 25 chapters and thousands of pages, and represented the culmination of a number of years of stakeholder consultation, study, and planning. It addressed environmental, social, and economic effects, including potential effects on heritage, human health, Aboriginal and treaty rights, accident and spill risks and prevention, fire and emergency preparedness, and navigation.³⁵ VAFFC retained over a dozen expert consultants to provide studies in support of the application.³⁶
35. In the EAC Application, VAFFC clearly stated the need for the VAFD Project, and the disadvantages of relying on the Jet Fuel Line:

If Vancouver Airport Authority’s high-range passenger forecast is realized (see Section 2.3.3.2), the limitations of the existing pipeline system are expected to become critical as early as 2013 (Figure 2.3.2). Fuel shortages would restrict the overall competitiveness of YVR, with a corresponding loss of economic benefit to the region.³⁷

36. By 2009 or 2010 VAFFC’s public and “more than tentative” steps to proceed with the VAFD Project should have been clear to PKMJF. The circumstances under which the Commission denied PKMJF’s 2007 request for accelerated depreciation and abandonment costs had definitively changed.
37. The VAFD Project received its conditional EAC on December 11, 2013, and the EAO determined that the VAFD Project had been substantially started on September 18, 2018. PKMJF sought accelerated depreciation and abandonment costs on June 7, 2019.³⁸

(c) Status of VAFD Project and VAFFC plans for after the VAFD Project enters operation

38. VAFFC is continuing construction on the VAFD Project. There have been some delays, due to the COVID-19 pandemic and work sequencing changes, with the result that the project is now not anticipated to be fully operational until approximately early 2023.
39. Once the VAFD Project becomes operational, VAFFC does not expect its members to cease all shipments of jet fuel on the Jet Fuel Line. Rather, VAFFC expects members will ship on the Jet Fuel Line opportunistically, when it makes economic sense to do so, taking into account different jet fuel source prices and overall transportation cost options.

³³ VAFFC, [Vancouver Airport Fuel Delivery Project, Public Consultation Summary Report 2012](#) (“VAFFC 2012 Consultation Report”) at pdf pp. 4-6 and 18.

³⁴ VAFFC 2012 Consultation Report at pdf p. 18.

³⁵ All application materials can be found on the [BC Environmental Assessment Office’s project page for the VAFD project](#). The Executive Summary can be found [here](#).

³⁶ VAFD [Environmental Assessment Certificate Application, Chp 2](#), Tbl 2.2.2 at pp. 2-5 to 2-7, pdf pp. 6-8.

³⁷ VAFD [Environmental Assessment Certificate Application, Chp 2](#), at p. 2-10, pdf p. 11.

³⁸ Exhibit B-8.

IV. Regulatory Principles

40. In Appendix “A” of the InterGroup Report, Mr. Bowman describes the difference between how public utilities and common carriers are typically regulated. Mr. Bowman is an expert in utility regulation. As explained by Mr. Bowman, in return for a franchise right (and duty) to provide service, the public utility receives the protections necessary to attract capital, typically including a reasonable opportunity to recover the cost of investments made on a prudent basis over the life of the investment, and earn a fair return on the invested capital.³⁹
41. In contrast, a common carrier does not generally receive the grant of any special authority or protection against competition.⁴⁰ Pricing for a common carrier can be established by negotiation with its customers, or resolved by a regulator with reference to a reasonable price. But in determining what constitutes a fair or just price for the common carrier’s services, a regulator must assess the common carrier’s value of service or cost to provide service against the costs of a well-managed operation.⁴¹
42. The Application is clear that PKMJF is regulated by the BCUC as a common carrier.⁴² Through information request responses, however, PKMJF claims that the statutory protections accorded to public utilities in BC must be extended to it, including a guaranteed return on the appraised value of property.⁴³ VAFFC opposes this claim. It does not fit either BC’s statutory framework, the facts applicable to the Jet Fuel Line, or the history of regulation of the Jet Fuel Line.
43. PKMJF also seeks a new dedicated abandonment fund, to be implemented in what PKMJF claims as the last year of service for the Jet Fuel Line. The request is unprecedented. The abandonment funds administered by the CER are intended to be collected over decades. As described later, PKMJF also seeks an unprecedented “true-up proposal” under which shippers will be either refunded any surplus amounts collected by PKMJF or billed for any shortfall. However, *none* of the CER-administered funds provide pipelines the ability to true-up any fund shortfall by invoicing the last shippers remaining. When faced with that proposition, the NEB rejected it wholesale.⁴⁴ The BCUC should do likewise.
44. PKMJF is a common carrier and not a public utility. It neither enjoys the exclusive right to provide jet fuel transportation service, nor carries the corresponding burden of extending service to new parties.
45. As a result, PKMJF’s proposed compensation significantly exceeds the risk associated with its Application and operations. PKMJF seeks to *increase* its compensation for providing service while massively *reducing* the risk PKMJF faces from its business, by transferring that

³⁹ InterGroup Report at pp. A-6 to A-7, pdf pp. 16-17.

⁴⁰ PKMJF agrees that it holds no franchise or exclusivity arrangement for either the Jet Fuel System’s collection or delivery areas: Exhibit B-13, VAFFC IR 1.8 at pdf p. 7.

⁴¹ InterGroup Report at p. A-10, pdf p. 20.

⁴² Exhibit B-14 at para. 5.

⁴³ Exhibit B-11, BCUC IRs 2.1 and 2.2 at pdf pp. 4-6; Exhibit B-37, BCUC IR 7.8 at pdf p. 47.

⁴⁴ [NEB Reasons for Decision RH-2-2008](#) at p. 32: “Pipeline companies are ultimately responsible for the full costs of constructing, operating and abandoning their pipelines, and the Board will hold the regulated company responsible for these costs”.

risk to shippers. The BCUC should accept the level of return PKMJF seeks but reject the exotic components of its Application that seek to transfer significant business risks.

46. The Jet Fuel Line does not meet shippers' needs, and VAFFC has accordingly proceeded with the construction of the VAFD Project, as it is entitled to do. PKMJF negotiated large revenue requirement increases for the period from 2009-2018.⁴⁵ It did not protect market share. It did not apply to change its tolls after VAFFC filed its PD with the EAO, filed its full EAC Application, or received environmental assessment approvals. The Commission's decision here should not protect PKMJF from the consequences of those business decisions. PKMJF is not a public utility.

V. Cost of Service Analysis

47. Appendix "B" of InterGroup's analysis closely reviews PKMJF's proposed revenue requirement. It identifies serious concerns with multiple components, and breaks down how the "costs" that PKMJF asserts have risen an average of █████ per year over the negotiated settlement period to neatly match current toll levels.⁴⁶ Specifically:

- Over the 2009-2018 negotiated settlement period, PKMJF's net return was on average █████ of total revenue (or █████) per year;⁴⁷
- PKMJF claims that its operating expenses more than █████ over the negotiated settlement period, █████ the rate of inflation;⁴⁸
- Compared to 2008 tolls (the last time PKMJF's expenses were reviewed and approved by the BCUC), PKMJF's current application requests an increase of 229% to tolls, when the abandonment surcharge is included;⁴⁹
- Setting aside abandonment issues, PKMJF's forecast operating expenses for 2019 (and the rest of the test period) are much higher than in previous years, and many cost categories lack justification – the gap between 2018 and 2019 alone is █████;⁵⁰ and
- Specific categories of costs, such as integrity spending, are inconsistent with PKMJF's stated intention of discontinuing service soon.⁵¹

48. Overall, PKMJF's 2019 revenue requirement (excluding depreciation and abandonment) should be reduced by over \$1.7 million, out of a total requested amount of approximately \$5 million.⁵² This reduction would still leave PKMJF earning a reasonable return and capable of providing safe transportation service.⁵³

⁴⁵ InterGroup Report at pp. A-16 to A-17, pdf pp. 26-27.

⁴⁶ InterGroup Report at pp. B-9 to B-10, pdf pp. 53-54.

⁴⁷ InterGroup Report at p. B-6, pdf p. 50.

⁴⁸ InterGroup Report at pp. B-6 to B-7, pdf pp. 50-51.

⁴⁹ InterGroup Report at p. B-9, pdf p. 53.

⁵⁰ InterGroup Report at pp. B-9 to B-10, pdf pp. 53-54.

⁵¹ InterGroup Report at p. B-32, pdf p. 76.

⁵² InterGroup Report at p. B-3, pdf p. 47.

⁵³ InterGroup Report at p. 2, pdf p. 3

VI. Depreciation Methodology

49. In addition to the issues identified with PKMJF's cost of service analysis in the preceding section, there are various issues, discussed in greater detail below, regarding the accelerated depreciation which PKMJF seeks in its Application.
50. In Appendix "C" of the InterGroup Report, Ms. Lee reviews the history of PKMJF's applied-for depreciation rates since the PKMJF 2007 Application and, drawing on her long history as a depreciation professional, provides her opinion regarding PKMJF's applied-for accelerated depreciation⁵⁴ in light of, among other things, the 2010 depreciation study filed by PKMJF with the negotiated settlement tolls for 2009-2018.⁵⁵
51. Ms. Lee concludes that:
- a. PKMJF's assertion that it is calculated its depreciation expenses each year for 2010-2018 in accordance with the group method of depreciation⁵⁶ is incorrect, with the result that PKMJF's earnings were artificially increased.⁵⁷
 - b. In its present Application, PKMJF has misconstrued the effect of the depreciation rates established by PKMJF's 2010 depreciation study. The 2010 depreciation study established rates that should have allowed PKMJF to recover its net investment in the Jet Fuel Line (*including* any capital additions during the 2009-2018 negotiated settlement period) by the end of 2022.⁵⁸
 - c. PKMJF's proposed adjustments to the depreciation rates are inappropriate. As above, following adjustments to depreciation balances to account for its misapplication of those rates during the negotiated settlement period, by 2022 PKMJF would receive sufficient toll revenue under the existing depreciation treatment to recover its capital investment.⁵⁹
 - d. There is insufficient information for Ms. Lee to make conclusive recommendations about the pipeline's economic life, although Ms. Lee observes that there is good reason to expect use beyond 2022.⁶⁰ Mr. Bowman explains why, as a common carrier, the 25-year physical life of the Jet Fuel Line is the appropriate depreciation period.⁶¹

VII. Abandonment Fund and Assessment of ELM Report

52. PKMJF also seeks to recover costs relating to the abandonment of the Jet Fuel Line from shippers, in addition to PKMJF's request for accelerated depreciation, discussed in the preceding section.

⁵⁴ Exhibit B-14 at paras. 36-40.

⁵⁵ Exhibit A2-1. See also Exhibit B-11, Appendix BCUC-KMJF 7.2 at pdf p. 102 for a copy of the 2010 depreciation study included with PKMJF's application for the negotiated tolls.

⁵⁶ Exhibit B-13, VAFFC IR 4.10 at pdf p. 26.

⁵⁷ InterGroup Report at pp. C-8 to C-9, pdf pp. 92-93.

⁵⁸ InterGroup Report at pp. C-12 to C-13, pdf pp. 96-97.

⁵⁹ InterGroup Report at pp. C-13 to C-14, pdf pp. 97-98.

⁶⁰ InterGroup Report at p. C-14, pdf p. 98.

⁶¹ InterGroup Report at p. A-32, pdf p. 42.

53. The Application proposes a collection mechanism for these abandonment costs.⁶² PKMJF filed the ELM Report to support its abandonment cost estimate.⁶³ In Appendix “D” of the InterGroup Report, Ms. Lee provides her views on the principles applicable to the collection of abandonment costs by common carriers, and how those principles apply to PKMJF in the current case. Ms. Lee assesses the ELM Report and provides a recommended adjustment to ELM’s abandonment cost estimate, should the BCUC choose to rely on it.
54. Her primary conclusion is that allowing PKMJF to recover its abandonment costs now, only one year before PKMJF claims the Jet Fuel Line will be abandoned, is:
- not consistent with Bonbright principles of fairness and avoiding undue discrimination and the corollary principle of intergenerational equity. It is patently unfair to begin collecting abandonment funds now that should have rightly began some years ago when the risk of bypass was clearly known.*⁶⁴
55. As mentioned, Ms. Lee explains that there are inconsistencies and inaccuracies within the ELM Report, which result in a significant inflation of the abandonment cost estimate provided by ELM. In particular, Ms. Lee explains:
- a. The ELM Report does not have the level of detail or certainty that Ms. Lee would expect, given that PKMJF asserts the Jet Fuel Line will be abandoned at the end of 2021.⁶⁵
 - b. The ELM Report inappropriately assumes 100% removal of the Jet Fuel Line in Richmond, while the appropriate ratio is 20% removal and 80% abandonment in place.⁶⁶
 - c. As acknowledged by PKMJF,⁶⁷ the post-abandonment monitoring costs used by ELM are too high.⁶⁸
56. As a result of these inconsistencies and inaccuracies, Ms. Lee recommends that PKMJF’s abandonment proposal be rejected. If the concept is nevertheless retained, she recommends that ELM’s abandonment cost estimate should be significantly reduced, even before any engineering scrutiny is applied.⁶⁹
57. VAFFC notes that the Application also contains an unprecedented “true-up proposal” under which shippers will be either refunded any surplus amounts collected by PKMJF or billed for any shortfall, based on the difference between the estimated abandonment costs collected and the actual cost incurred by PKMJF for abandonment.⁷⁰

⁶² Exhibit B-14 at paras. 51-52 and 54.

⁶³ Exhibit B-10.

⁶⁴ InterGroup Report at p. D-10, pdf p. 109.

⁶⁵ InterGroup Report at pp. D-11 to D-12, pdf pp. 110-111.

⁶⁶ InterGroup Report at p. D-14, pdf p. 113.

⁶⁷ Exhibit B-38, VAFFC IRs 4.4 and 4.5 at pdf pp. 23-25.

⁶⁸ InterGroup Report at p. D-14, pdf p. 113.

⁶⁹ InterGroup Report at p. D-15, pdf p. 114.

⁷⁰ Exhibit B-14 at para. 53.

58. The concept entails a massive transfer of risk from the pipeline to shippers, without a commensurate adjustment of the compensation to the shareholders and tolls to shippers.
59. Were PKMJF to succeed, and its premises be accepted by the Commission, the financial risk associated with the potential environmental liabilities of the pipeline, attributable to the lifetime of operational decisions that PKMJF has made since 1968, would exclusively vest in the very last generation of shippers – even though during virtually all of that time PKMJF’s shareholders have been compensated as though they bore those risks. The proposition is unfair and should be rejected out of hand.
60. The National Energy Board (as it then was) rejected the concept when pipeline abandonment trusts were first implemented a decade ago.⁷¹ Carriers are entitled to forecast and collect funds in anticipation of abandonment costs, but the obligation to do so in a timely and accurate way lies with the carrier.⁷² The carrier is compensated for the risk associated with the cost of abandonment, among other risks, via the return it earns on invested capital. This is a risk that PKMJF has been compensated for throughout its operating life – and certainly during the negotiated settlement period.

VIII. Summary of Recommendations

61. In addition to the analysis contained in the individual appendices, the InterGroup Report provides an introduction and summary of InterGroup’s conclusions, and then provides a detailed list of the conclusions and recommendations presented in each of the four substantive appendices.
62. VAFFC adopts the InterGroup recommendations, a brief listing of which is provided below:
- a. Write down net book value by \$0.529 million as of December 31, 2018, as an adjustment to the 2019 opening balances from shareholder retained earnings, as a result of a failure to depreciate assets accurately.⁷³
 - b. Correct 2019 opening balances to record an abandonment reserve of between \$2.556 million and \$3.671 million, as an adjustment to the shareholder retained earnings.⁷⁴
 - c. Reject accelerated depreciation and, recognizing that PKMJF is a common carrier and the reasons for the uncertainty of its economic life, establish a depreciation period based on the anticipated remaining physical life of the assets.⁷⁵

⁷¹ [NEB Reasons for Decision RH-2-2008](#) at p. 32: “Pipeline companies are ultimately responsible for the full costs of constructing, operating and abandoning their pipelines, and the Board will hold the regulated company responsible for these costs”.

⁷² [NEB Reasons for Decision RH-2-2008](#) at p. 34: “Companies are accountable for their own performance and are expected to identify and manage risk throughout a facility’s lifecycle”.

⁷³ InterGroup Report at p. 6, para. 4.

⁷⁴ InterGroup Report at p. 7, para. 5.

⁷⁵ InterGroup Report at p. 7, para. 6.

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- d. Concerning abandonment costs:⁷⁶
- i. Reject the PKMJF proposal. Tolls for 2019 and going forward should be set to reflect abandonment funding for the remainder of reasonably estimated abandonment costs above the amount in recommendation b), over the appropriate collection period.
 - ii. Reject using the ELM report to calculate total abandonment costs.
 - iii. If the ELM report is nonetheless relied on, reduce the total estimated abandonment cost calculated by at least \$3.528 million
- e. Reduce revenue requirement by \$1.717 million per year. This would still reflect well over double the composite rate of inflation during the past dozen years.⁷⁷
- f. Set the 2020 and 2021 revenue requirements equal to the 2019 revenue requirement.⁷⁸
- g. Establish tolls on a standard, per-barrel basis, dividing the revenue requirement by the forecast that PKMJF identified for each year in the test period (2018 actual volumes for each year), ending the pro-rata / true-up feature of the negotiated settlement.⁷⁹
- h. Recalculate depreciation over the 2009-2018 period to rectify the error made in the application of the group depreciation method.⁸⁰

63. This concludes VAFFC's evidence at this time.

⁷⁶ InterGroup Report at p. 7, para. 7.

⁷⁷ InterGroup Report at p. 7, para. 8.

⁷⁸ InterGroup Report at p. 8, para. 9.

⁷⁹ InterGroup Report at p. 8, para. 10.

⁸⁰ InterGroup Report at p. 8, para. 11.

In the Matter of
Pembina Kinder Morgan Jet Fuel (PKMJF)
2019 Tariff Filing Application

Project No: 1598984

Submitted to:

The British Columbia Utilities Commission (BCUC)

On behalf of

Vancouver Airport Fuel Facilities Corporation (VAFFC)

Prepared by:

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December 16, 2020

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ANNEX A: Trans Mountain (Jet Fuel) Inc. 2009 Final Tariff Filing Letter dated December 30, 2008 and Trans Mountain (Jet Fuel) Inc. Application for Tolls Effective January 1, 2009 Toll Calculations and Supporting Material

1.0 INTRODUCTION

This testimony has been prepared for the Vancouver Airport Fuel Facilities Corporation ("VAFFC") by a team from InterGroup Consultants Ltd. (InterGroup).

The InterGroup Recommendations are summarized in this consolidated document, and reviewed in further detail in four appendices. Each of the appendices have been prepared by a lead author – Patrick Bowman, Melissa Davies, or Patricia Lee, working in conjunction and in consultation among the three-person InterGroup team. Resumes for each are attached (Appendix E).

InterGroup was asked to review and assess PKM Canada (Jet Fuel) Inc.'s ("PKMJF") proposed revenue requirement for the 2019 Tariff Application and resulting proposed tariffs for 2019, 2020 and 2021. The review includes the materials contained in the PKMJF Application, the interrogatories, as well as past filings including the 2009-2018 negotiated settlement and the 2007 and 2009⁴ PKMJF applications.

At a high level, the InterGroup evidence identifies the extraordinary level of cost increase and overstated entitlements claimed by the PKMJF Application, and recommends significant downward revision.

To be very clear, if fully adopted, the InterGroup recommendations would permit PKMJF to safely operate the asset, consistent with direct cost levels incurred in past periods, earn a fair return, recover a reasonable allocation of administration and overhead costs, and allow for amortization of the assets (including abandonment costs) over a period consistent with the physical life of the assets.

The InterGroup proposals do not require a determination as to the economic life of the asset. This is beneficial, as (a) the information on economic life in this proceeding is entirely internally inconsistent, and (b) under a common carrier framework, a shortened economic life (particularly one driven by laxity on the part of the owner) would not be sufficient justification for escalating charges imposed on market participants, and thus appropriate toll levels do not generally hinge on artificially truncated economic life.

2.0 SUMMARY OF INTERGROUP ASSESSMENT

The current hearing, in its simplest presentation, is focused on setting tolls for PKMJF for the 2019 to 2021 period, pursuant to section 65(3.1)(a) of the *Utilities Commission Act*. At this basic level, the proceeding has an appearance and process similar to any regulated rates proceeding for a multi-year tariff.

However, there is an unusually large range of issues that must be understood, which are relevant to the immediate question at hand, and which serve to materially complicate the proceeding. This range of issues is atypically, if not uniquely, expansive for a regulatory review. Among the critical issues:

- 1) **Common Carrier Principles are not Codified:** As a Common Carrier (Part 4 of the *Utilities Commission Act*), PKMJF is under a framework with almost no specific legislative standards for tolls. The legislation is simply silent on matters such as the reasonableness of rates and the

⁴ The 2009 application is not otherwise known to have an exhibit number from prior proceedings. For completeness, a copy of the materials relied upon are provided in Annex A to this filing.

obligations of fair treatment to the shareholders. As a result, the proceeding occurs with major questions tied to the applicable regulatory (economic and legal) first principles.

- 2) **Common Carriers and Public Utilities Differ:** The status as a Common Carrier in BC is distinct and entirely separate from the far more prescriptive and well-established framework for setting rates and tolls for regulated public utilities. These rights and obligations, arising from public utility status, are not reflective of the PKMJF reality, and cannot be rotely or reflexively applied to PKMJF.
- 3) **PKMJF Claims regarding Economic Life are Internally Inconsistent and not Supported by Facts:** PKMJF asserts a mixture of claims regarding the future of the assets that are highly speculative and internally contradictory, as well as being contradicted by the evidence in this proceeding. For example:

- a. *Will the pipeline be forced into a shortened economic life?* The PKMJF filing is predicted on a claim that imminent retirement is undisputable, and the assets are therefore of extremely limited value and must be fully depreciated forthwith. However, the following inconsistencies are noted:
 - i. Such a claim is contradicted by the evidence that the pipeline recently changed ownership, a situation inconsistent with claims of limited to no residual value.
 - ii. [REDACTED] ⁵, [REDACTED] ⁶.
 - iii. In addition, the evidence is that there is no opportunity for the pipeline owner to cease service or decommission the pipeline without explicit approvals of the BCUC and the BCOGC, neither of which have been provided, or indeed to the best of our knowledge, sought.⁷

⁵ Exhibit B-48, Appendix A, pdf p. 32, Q. 145 [REDACTED] and Q. 148 [REDACTED].

⁶ Exhibit B-48, Appendix B, pdf p. 17 [REDACTED]

Exhibit B-48, Appendix A, pdf pp. 1619 [REDACTED] and 1620 [REDACTED].

⁷ Exhibit B-14, para. 47, pdf p. 26; Exhibit B-37. PKMJF Response to BCUC(IR3) 4.4, pdf p. 28 and PKMJF Response to BCUC (IR3) 7.16, pdf p. 50.

- iv. The most recent sworn evidence of a key pipeline shipper (the Burnaby refinery, in 2007⁸) is that the refinery physically cannot shut down production of jet fuel without closing the refinery, and that other shipping methods are practically unavailable (dock space was limited and barging costs uneconomical). In short, without a pipeline, jet fuel could effectively become a waste product to the refinery (updated information from the refinery owner would be useful to further understand this aspect of pipeline's future usage). With a committed shipper who has limited options, it is not apparent that an application to cease Common Carrier service would be readily permitted in any near future time frame by BCUC or BCOGC.
- v. PKMJF asserts that the pipeline will be inherently uneconomic following 2022 when volumes drop, by indicating a \$1.878/bbl (inclusive of unsupported cost claims such as a "business risk fee"⁹) would be required and which PKMJF concludes is unviable. However, PKMJF is actually proposing a \$1.574/bbl toll in 2021 (along with collection of any accrued deficiencies from 2019 or 2020) which is purported to be just and reasonable¹⁰. It is difficult to sustain both of these conclusions, particularly when no efforts have yet been made to optimize or minimize the 2022 toll concept. Indeed, if PKMJF's claims are to be believed, there would be no reason for customers to be using the pipeline today (i.e., at tolls above \$1.50/bbl) compared to trucking options.

Also note that PKMJF has previously, on multiple occasions, asserted that the pipeline will imminently retire (such as 5 years after the 2007 application) and these previous claims were clearly in error given that the pipeline continues to operate. In this manner, as well as in its methodology for collecting proposed revenue requirement and in forecasting its revenue requirement, PKMJF shows a pattern of attempting to eliminate any financial risk from its toll collection, instead assigning it all to shippers.

- b. ***Will the pipeline cease shipments and begin reclamation by 2022?*** PKMJF asserts that the pipeline will immediately cease operation as of 2022 and reclamation activities will begin. However, in terms of management of capital assets, this date is extremely soon and as noted in particular in the attached evidence of Patricia Lee, the PKMJF actions in terms of such matters as abandonment studies (which are at an exceedingly unadvanced stage) do not accord with such imminent reclamation.
- 4) **Common Carrier Entitlements are Limited:** If the pipeline ceases shipments and is reclaimed prior to the life of the physical assets, what is the PKMJF entitlement to cost recovery? Without citing any justification relevant to its particular status, PKMJF asserts a principle that it must have depreciated all assets to zero by the date of any retirement, regardless as to how premature this

⁸ Exhibit C1-4; Evidence of Robert Innis, TransMountain (Jet Fuel) Tolls and Accelerated Depreciation Hearing October 5, 2007.

⁹ Exhibit B-11, PKMJF Response to BCUC IR 2.2

¹⁰ Exhibit B-38, PKMJF responses to VAFFC (IR2) 12.3, pdf page 66.

retirement may be. In addition, PKMJF considers that a fully funded reclamation reserve must be in place by that date (in the form of a trust). PKMJF fails to address in any way why it considers it has an entitlement to recovery of all asset costs for assets that, to the best of available information, likely have many years of physical life remaining in them (cited as 25 years in the purchase agreements). Likewise, PKMJF fails to address whether it has, and has met, obligations to identify and manage the recovery of such amounts over time. The failure of the pipeline to be used to full capacity is a function of market interest, which reflects clear mismanagement and failure to properly plan on the part of PKMJF. The pipeline owners have long been aware that the market they effectively controlled (shipping to YVR) was outgrowing the pipeline capacity, and PKMJF failed to take any notable actions (much less any successful actions) to meet this growing market demand. Instead, PKMJF made its own operations increasingly uneconomic, through toll increases, while customers were left to pursue alternative supply options in order to ensure fuel needs were met. Unsurprisingly, these new transport options benefit from economies of scale, and as such are being developed in a manner which more fully solves the YVR supply problem rather than simply the increment presently unserved by PKMJF. It is this mismanagement which leaves the PKMJF assets open to claims of being stranded, with claims of somewhere between partial and no shipments in the near future (depending on which future scenario is to be believed).

Based on a review of the available information, the combined InterGroup evidence reflects the opinions of the respective authors. Collectively, the following initial findings are made in preparing the evidence:

- 1) Despite claims to the contrary (e.g., a 2012 closure), PKMJF has not behaved since 2007 in any manner consistent with imminent retirement. This includes [REDACTED], failure to take actions consistent with imminent retirement such as operating cost controls, and failure to address notable issues or prepare a plan for retirement that reflects the realities of a regulated Common Carrier.
- 2) The PKMJF behavior in the most recent time periods exhibits this same pattern of failing to behave consistent with imminent retirement.
- 3) For this reason, a retirement in 2022 is considered highly unlikely.
- 4) A significantly reduced shipping volume sometime after 2022 is likely, but it is not possible at this time to conclude one way or the other whether the PKMJF pipeline could have a long further life, operating on shipments complementary to the VAFFC project.

In terms of the proposed test year Revenue Requirement, PKMJF has alleged it faces high levels of cost growth for 2019 (and extended to 2020 and 2021) as compared even to recent years under the 10 year (2009-2018) negotiated settlement with shippers. [REDACTED]

[REDACTED] Compared to the last contested Revenue Requirement, PKMJF's total costs are claimed to have increased by a stunning [REDACTED] per year on average¹¹, without any notable change to the services provided or the scale or scope of the common carriage services. PKMJF booked extraordinary financial returns during

¹¹ From [REDACTED] million in 2008 to \$6.830 million in 2019, over 11 years, representing all costs excluding returns on rate base.

the 10-year negotiated settlement period, which is indicative tolls were too high or accounting entries too limited (such as ignoring abandonment cost accruals). The 2019 cost forecasts manage to escalate reported costs so as to justify sustaining these exceptionally high levels of tolls (and add an additional amount for reclamation) despite weak justification for the alleged cost pressures. Fair tolls today should not recover depreciation and abandonment costs that should have been booked during the past 10 years, nor be based on insufficiently substantiated forecasts.

3.0 SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

The combined InterGroup evidence contains the following sections:

- 1) Common Carrier regulatory principles, application to the Negotiated Settlement period of 2009-2018, and related implications for 2019-2021 test year revenue requirements (P. Bowman – Appendix A)
- 2) A Review of PKMJF's Proposed 2019 Revenue Requirement (with a focus on Operating costs) by Melissa Davies (M. Davies – Appendix B)
- 3) A review of Depreciation focused on the Test Year (P. Lee – Appendix C)
- 4) A review of the Abandonment study cost proposal (P. Lee – Appendix D)

The conclusions arising from the noted sections include the following (further detail is provided in the respective appendices):

1. PKMJF is a common carrier, developed as a commercial enterprise with the risks of long-term value held by the investor. PKMJF operated, and continues to operate, without franchise protections or other conjoined public/private interests consistent with a Public Utility. (Appendix A).
2. The assets that make up the jet fuel pipeline are a valuable operation that continues to have commercial value, as evidenced in part by the recent sale to Pembina, and the decision by Pembina to ascribe material amounts in value towards the pipeline (with a 25-year asset life¹²) in its initial assessment. (Appendix A, C and D)
3. PKMJF (and the respective shareholders, at present and previously) operated the pipeline in a manner that failed to protect the inherent value of the assets, and not only permitted bypass, but acted in a manner that encouraged bypass and the resulting adverse impacts on the long-term value of the PKMJF assets. (Appendix A)
4. In the 2009-2018 Negotiated Settlement, PKMJF secured from shippers an agreement to depreciate pipeline assets over the period 2009 to a terminal date in 2022; however, PKMJF has failed to properly account for the noted terminal date and as such carries excess net book value of approximately \$0.529 million on its assets as of December 31, 2018. This value should be written down as an adjustment to the 2019 opening balances, as an adjustment to shareholder retained earnings, for the purposes of calculating Test Year Revenue Requirements. (Appendix A and C)

¹² Exhibit B-39, response to Parkland IR2 - 12.2, pdf page 18

5. PKMJF knew or ought to have known (according to the PKMJF scenarios) sufficient information about abandonment costs to include accruals to some form of abandonment liability or reserve starting in 2009 (as part of the negotiated settlement). Failing to record such accruals led to excessive net income being recorded during this period, and harm to customers from failing to record an appropriate funded Abandonment provision. For regulatory purposes, this should be corrected in 2019 opening balances to record an abandonment reserve of between \$2.556 million and \$3.671 million, as an adjustment to the shareholder retained earnings. (Appendix A and D)
6. Notwithstanding that PKMJF secured a one-time negotiated agreement with customers in 2009 that included accelerated depreciation, the concept of accelerated depreciation is not appropriate for a Common Carrier in any contested toll-setting, and in particular as proposed in the current instance by PKMFJ, whose shortened life is due to failure on PKMJF's part to preserve the market advantage provided by the existing assets. Depreciation costs for the test years should be benchmarked off the reduced net book value arising from the adjustment noted in #4 above, calculated over a reasonable expected physical life potential of the assets (in particular, 25 years [REDACTED]). (Appendix A and C)
7. Abandonment costs are reasonable and appropriate items for collection from customers. However, significant concerns arise about the quality of the PKMJF abandonment study report, and its underlying assumptions and data inputs, given the scale of toll impact that arises. Were the abandonment allocations a small percentage adder to tolls over many years, a poorly-detailed and speculative information base, as was use for PKMJF's abandonment study, may be sufficient to start accruing for abandonment. In this case however, the study is the basis for a proposed impact to tolls in excess of 50%, and the study simply does not meet the necessary threshold or quality to impact shippers to this degree. In addition, the PKMJF estimates from the abandonment study are excessive, and should at minimum be reduced by \$3.528 million. Further, the abandonment costs to be recovered from customers starting in the test years should be reduced by the amounts appropriately accrued prior to 2018, as noted in #5 above. The amount of abandonment costs to be collected in the Test Years should be the total estimated cost, less the amount appropriately accrued as of 2018, divided by a reasonable estimate of the remaining potential physical life of the assets (in particular, 25 years [REDACTED]). (Appendix A and D)
8. The Revenue Requirement for Operating costs (including Integrity costs) in 2019-2021 are excessive and should be reduced by \$1.204 million. In addition, income taxes appear to be benchmarked for 2019 at an excessively high level, given the level of equity returns and the 2019 actuals, and should be reduced (actuals are lower than forecast by \$0.513 million). Even with these material reductions, the recommendations remain extremely accommodating to PKMJF, permitting a level of cost growth since 2008 exceeding [REDACTED] over 11 years (compounded growth of [REDACTED] per year)¹³, which is well over double the level inflation. Comparatively, BC CPI was 17% or 1.44% per

¹³ Compared to actual expenditures in 2008 of [REDACTED] (not including depreciation or level of return)

year for this period.¹⁴ This level of permitted cost growth is significant given the pipeline operations should have been able to find efficiencies over the period so as to drive cost growth below inflation, and notwithstanding that in the test years operating costs should be heavily constrained by PKMJF if the assertion that the pipeline faces imminent retirement is to be believed. (Appendix C)

9. No escalator of any type should be used to calculate tolls in 2020 and 2021, as proposed by PKMJF. The proper approach would have been a fully tested revenue requirement for each test year, with supporting justification. However, at this late date, and with the limited information provided by PKMJF regarding 2020 and 2021, such a review is not possible. Instead, it should be recognized that only a portion of PKMJF's costs are affected by inflation, and others ought be offset by appropriate productivity factors. Depreciation, for example, does not increase each year, and Rate Base would decline over time along with associated returns. For this reason, the only practical approach to balance some potentially increasing categories with others that decrease is to approve a flat revenue requirement, maintaining the same 2019 revenue requirement across 2020 and 2021. (Appendix A and B)
10. The approach to tolling for the years being litigated (starting 2019) should be a standard and well-accepted one; that is, to prospectively determine a revenue requirement, and to divide the revenue requirement into reasonably forecast volumes that would be shipped¹⁵. This will develop a clear toll per unit shipped. The fact that volumes are now known to have declined materially due to COVID is not a risk or impact that shippers on the pipeline should bear – like basically any other purchased commodity or service, the entrepreneur who sells the service should be at risk for variances in the volumes consumed or demanded by the market. PKMJF should be expected to work with its shippers to develop sound prospective forecasts of volumes, and to set tolls accordingly, to permit customers to plan their operations based on fixed unit costing for the shipping service. (Appendix A)
11. PKMJF's practices with respect to depreciation incorrectly terminate depreciation on certain assets once "fully depreciated" even though these assets remain in service. This is inconsistent with the group method of depreciation, which PKMJF claims it uses. The effect of PKMJF's approach is to reduce depreciation expense in a given year and increase net income. This approach was followed for at least the 2009-2018 negotiated settlement period, leading to an understated accumulated depreciation as of opening 2019. PKMJF should be directed to recalculate depreciation for the 2009-2018 period to correct this erroneous procedure. No dollar value estimate can be made of the impact with the available data. (Appendix D)

¹⁴ As per BC Statistics Consumer Price Index (CPI), Annual Averages, (All Items Index where 2002 equals 100, 2019 = 131.4 and 2008 = 112.3, calculated as $[(131.4/112.3)^{1/10-1}] = 1.44\%$), available online: https://www2.gov.bc.ca/assets/gov/data/statistics/economy/cpi/cpi_annual_averages.pdf

¹⁵ In this case, the best available forecast of volumes to be shipped is provided in Exhibit B-13, PKMJF Response to VAFFC IR1, 6.1, pdf p. 34. In particular, PKMJF that it "expects the 2018 volumes and allocation between the shippers to continue until the VAFD project is in-service", The 2018 volumes are provided in the Table 6.1 in that response. For the purposes of setting tolls for the Test Years, the respective 2019, 2020 and 2021 Revenue Requirements should be divided by this 2018 Throughout Volume to derive tolls, which are then applied to the actual volumes shipped by the respective shippers.

**APPENDIX A – Regulatory Principles and Implications for
2019-2021 Test Year Revenue Requirements -
Pre-Filed Testimony Regarding
PKM Canada (Jet Fuel) Inc.’s (“PKMJF”) proposed Revenue
Requirement for the 2019 Tariff Application**

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1.0 INTRODUCTION

This portion of the InterGroup Consultants Ltd. testimony has been prepared for the Vancouver Airport Fuel Facilities Corporation ("VAFFC") by Patrick Bowman, in conjunction with the InterGroup team also comprising Ms. Davies and Ms. Lee. The qualifications of Mr. Bowman are provided in Appendix E.

For this Pre-filed Testimony, InterGroup was asked to review and assess PKM Canada (Jet Fuel) Inc.'s ("PKMJF") proposed revenue requirement for the 2019 Tariff Application and resulting proposed tariff for 2019, 2020 and 2021 (the "Test Years").

This Appendix is primarily focused around the PKMJF balance sheet, and the capital asset proposals (particularly depreciation and abandonment cost recoveries). The section is rooted in regulatory first principles that, in practice, are rarely at issue in rate proceedings, and how these principles inform both the opening balances for the Test Years (e.g., rate base) and the revenue requirements for the Test Years.

The section contains the following main sections:

- The overall regulatory principles considered relevant to Common Carrier status
- The specific historical background on PKMJF to inform applicable regulatory principles
- The experience arising from the 2009-2018 negotiated settlement, and how these regulatory principles should inform the 2019 opening balances for the purposes of setting tolls
- Specific implications for the current Application.

To understand the root of PKMJF's failings in preparing its proposals for capital recovery, it is critical to be clear about the entitlements PKMJF possesses as a Common Carrier, and how these differ from those that would apply were it a Public Utility.

As a technical detail, the concept of a "Common Carrier" (versus a Public Utility) is a status that can variously be applied to i) a set of assets or business operation, or ii) a Corporate owner of such assets. This submission requires effectively no distinction as to which of these two is specified, as it appears the assets and operations that comprise the Jet Fuel Line ("JFL") are largely synonymous with the Corporate owner of the JFL at any given time (i.e., the owner of the JFL and the JFL assets are coterminous and interchangeable for the purposes of regulatory discussion²). Further, it is understood that the Corporate owner of the assets and operations has not changed, except in name, since its original development in the 1960s. For this reason, in the discussion that follows "PKMJF" is used to describe the Corporation that owns the asset regardless as to the fact that at the specific time frame being discussed, it is possible that the Corporate owner went by a different name³.

² The only exception is that in actual years, PKMJF indicates [REDACTED]. This appears to be a function of little to no relevance to providing a liquids shipping operation entirely within Canada, so would likely be best viewed as a cost and risk that is of no direct link to the common carrier service.

³ Quotations used occasionally refer to the Corporate entity relevant at the time period in question, such as Terasen.

1.1 SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

It is clear from PKMJF's filings that PKMJF errs in its conclusions regarding its entitlements to recoveries from toll-payers. Such entitlements might be arguable in a scenario where PKMJF was a Public Utility. However, PKMJF is not a Public Utility, it is a Common Carrier. The distinction is critical, and of substantial import to the tolls that are merited in 2019-2021.

PKMJF also achieved exceptional returns from the 2009-2018 negotiated settlement, to a level that could only arise by PKMJF having mis-recorded the expenses and accruals that ought have been booked.

Based on this review, the following specific conclusions and recommendations arise:

- 1) For the 2019-2021 Test Years, PKMJF should retain volume risk, rather than shippers.
- 2) For 2019, an Opening Abandonment Reserve balance of between \$2.556 million and \$3.671 million should be recorded, arising from as a downward revision to the shareholder retained earnings, to reflect prudent actions that should have been taken by PKMJF consistent with the negotiated settlement framework and known information about VAFFC plans during 2009-2018.
- 3) Revise accumulated depreciation as of opening 2019 balances upwards by approximately \$0.529 million, as an adjustment to the shareholder retained earnings, to reflect proper application of life span depreciation over the negotiated settlement period.
- 4) No escalator of any type should be used to calculate tolls in 2020 and 2021, as proposed by PKMJF.
- 5) Neither accelerated depreciation nor accelerated collection of abandonment costs should be permitted. Instead, tolls should include depreciation on the reasonable outstanding net book value of assets, and collection of appropriate abandonment costs – but only over a life that is consistent with the true remaining physical capabilities of the assets (e.g., 25 years).

2.0 COMMON CARRIER CONCEPTS AND STATUS

The current proceeding is predicated on a concept advanced by PKMJF regarding PKMJF's entitlement to recoveries of capital costs and future abandonment costs from current shippers.

A critical component of the assessment of PKMJF's entitlement, if any, to these recoveries is rooted in the classification of PKMJF as a Common Carrier, as opposed to a Public Utility. In economic terms, these two classifications reflect different concepts of industrial organization. PKMJF acknowledges the pipeline in question is a common carrier⁴.

Indeed, it has already been clearly established that the JFL is a Common Carrier. In 2008, PKMJF agreed that the facilities were a Common Carrier at common law⁵, the BCUC declared that PKMJF was a Common Carrier under the previous *Pipeline Act*⁶, and the current application was brought under Section 65 of the *Utilities Commission Act*, which regulates Common Carriers⁷.

Despite PKMJF's status as a Common Carrier, many of its proposals are fundamentally rooted in concepts that apply to Public Utilities, but not necessarily to Common Carriers. The status of a Common Carrier reflects an Industrial Organization that lies somewhere between an industry without price and service regulation, and the heavily regulated status of a Public Utility. This fundamental misunderstanding or error by PKMJF leads to incorrect conclusions regarding its entitlements to recovery of costs.

Unlike either Common Carriers or Public Utilities, businesses which are not subject to broad price or service regulation form a competitive market, or private callings. This market is one where the entrant identifies what they believe to be an attractive investment opportunity, build their asset, and go on to operate the asset (and protect its value) in the hopes that over time the asset will provide both a return on, and a return of, investment. However, the private operator has no explicit or implicit guarantees of either a return on or a return of investment, and has no protections from competition. The business has a near full independent ability to set prices they will charge to any given customer, the services and quality level they will provide, and the areas they will serve⁸.

The concepts of Common Carrier and Public Utility are separate and distinct from this private competitive market. They are terms largely within the formal area of Economics known as Industrial Organization, which studies the impacts of market structure, policy, and regulation, on strategic behavior and producer and consumer outcomes. The first principles related to the field are today more rarely debated in respect of established industries, such as electricity, pipelines, rail, and trucking, as compared to new contexts such as electronic communications and internet. For example, descriptions of the first principles for the concepts

⁴ See, for example, Exhibit B-17, pdf p. 9, PKMJF response to IR 1.6

⁵ See Appendix A to BCUC Order P-3-08, page 3

⁶ See Appendix A to BCUC Order P-3-08, page 3

⁷ Ex. B-14, pdf p. 6.

⁸ Exceptions are extremely limited, for example, anti-trust.

are presented in a paper by Mark A. Jamison, the Director of the Public Utility Research Center of the University of Florida, reviewing whether Google should be regulated as a Public Utility⁹, as follows:

Public utilities are considered to be natural monopolies, receive a public franchise or certificate of public convenience and necessity, and are considered to be affected with the public interest; that is to say, utilities have special legal obligations and their performance has an extraordinary impact on social and economic functioning. Regulation of utilities by independent regulatory agencies encourages investment since utilities have long-lived assets that are vulnerable to opportunistic political actions (Glaeser 1927; Jamison 2011; Phillips 1993). *[The possibility of political opportunism is not an element of the definition of public utility, but it is a reason for regulating utilities using an independent regulatory agency (Jamison 2011). Since utilities have long-lived assets that are not fungible once investments have been made, political actors have an incentive to expropriate the investments for political gain. This is ultimately destructive for the utilities and their customers, but the importance of short-term political gain often trumps long-term needs. Regulatory laws that define property rights and processes for cost recovery constrain political opportunism (Spiller 2005).]* REFERENCES BELOW¹⁰.

In contrast, Professor Jamison goes on to describe the Common Carrier theory as follows:

A common carrier, such as a railroad or a telecommunications carrier, offers its service to the public, and the service consists of moving someone's goods or content from one place to another. Common carriers have special obligations because customers give over control of their property to the carriers, customers are dependent on the carriers to faithfully perform their service, and there are long-held traditions that the carriers should provide service on a non-discriminatory basis. Common carrier obligations are effected through economic regulation due to a belief that enforcement through contract law would be inefficient (Cherry 2003b, 2007-8).

⁹ Mark A. Jamison, Should Google be Regulated as a Public Utility?, 9 J.L. Econ. & Pol'y 223 (2013). Also available:

"https://bear.warrington.ufl.edu/centers/purc/docs/papers/1205_Jamison_Should_Google_Search.pdf"

¹⁰ References cited by Professor Jamison are as follows: 1) Cherry, Barbara A. 2003b. "Utilizing 'Essentiality of Access' Analysis to Mitigate Risky, Costly and Untimely Government Interventions in Converging Telecommunications Technologies and Markets." *CommLaw Conspectus*, 11: 251-275. 2) Cherry, Barbara A. 2007-8. "Maintaining Critical Rules to Enable Sustainable Communications Infrastructures." *Georgia State University Law Review*, 24: 947-975. 3) Glaeser, Martin G. 1927. *Outlines of Public Utility Economics*. New York, NY: The Macmillan Company. 4) Jamison, Mark A. 2011. "Liberalization and Regulation of Telecoms, Electricity, and Gas in the United States." In *International Handbook of Network Industries: The Liberalization of Infrastructure*, eds. Matthias Finger and Rolf W. Künneke, 366-383. United Kingdom: Edward Elgar. 5) Phillips, Charles F. Jr. 1993. *The Regulation of Public Utilities*. Arlington, VA: Public Utilities Reports, Inc. 6) Spiller, Pablo T. 2005. "Institutional Changes in Emerging Markets: Implications for the Telecommunications Sector." In *Handbook of Telecommunications Economics: Volume 2*, eds. Sumit Kumar Majumdar, Ingo Vogelsang, and Martin E. Cave, 621-655. Amsterdam: North-Holland.

Interestingly, and of relevance to today's case, Professor Jamison concludes that Google is not a Public Utility, because it is not a natural monopoly due to commercially viable alternatives (though it may be a fleeting monopoly), it is not essential to social and economic functions the way that electricity is, and it has no public franchise, all of which are similar to PKMJF – "Entrepreneurs built the company without government sanction, and if the company does not keep up with changing technologies and markets, the company loses business to substitutes and the loss has little impact on consumers or the economy"¹¹.

In short, the conceptual basis for a Public Utility and Common Carrier in economic terms are combinations of characteristics that are notable and distinct from competitive industries, and from each other, as discussed in the following sections (first, the narrower concept of the Public Utility, followed by the more expansive concept of the Common Carrier).

2.1 The Public Utility

While the concept of a Public Utility is generally understood in common parlance, it has a specific and perhaps narrower meaning in economic terms. It is important to recognize the specific distinct characteristics that can comprise the determination that a set of assets, or a business operation, or a company is a Public Utility. While the formal declaration of a corporation (or its assets) as a Public Utility is normally an exercise in law or policy, economically, the Public Utility concept comprises the following general characteristics. These characteristics are important to enumerate in order to compare with the situation with PKMJF:

1. The Public Utility provides an essential service, which is desirable for policy makers to attract to their jurisdiction.
2. The service typically represents a broad natural monopoly in complete terms, or at least in practical terms – for this reason, the premise is that the utility service will be in place indefinitely or on a permanent basis.
3. The service represents a capital-intensive operation that is not easily relocated (if at all) - for this reason, the operator seeks protections for making the investment, which is subject to potential devaluation by future policy decisions.
4. In order to attract the investment of a Public Utility operator, a governmental authority grants special authority (such as a franchise) that protects the operator from most or all types of competition (such as a competitor cherry-picking a few of the most profitable customers).
5. The Public Utility is also often granted power to effect, or at least request, condemnation of or expropriation of public property for the purposes of the public good (e.g., Rights-of-way).
6. The Public Utility operator receives protections necessary to attract capital - the governmental authority legislates an explicit entitlement to a fair financial rate of return on invested capital, on an arms-length basis from politicians. This typically includes not only a fair return on invested

¹¹ Jamison (2013), p. 2-3.

capital in the year of service, but also a reasonable expectation of recovering the cost of investments made on a prudent basis over the life of the investment¹².

7. In order to protect the public interest in terms of service demands, policy makers require that the operator provide reliable service to all customers who request service (the “obligation to serve”), including expansions of the system as necessary – this is a quid pro quo for the franchised monopoly protection (if only one party is legally allowed to provide service, they must provide all service reasonably required);
8. In order to maintain practical ability to control the Public Utility, policymakers impose various standards that can include specifications, for example, for Corporate record keeping, location of head offices, reporting, limits on encumbering the system through mortgages or debt, and quality of service standards.

In short, a potential private investor or operator of utility assets is a Public Utility when they undertake to develop a system that has a conjoined public/private interest, with the explicit agreement of the local/governmental authorities, wielding powers beyond that normally made available to a commercial enterprise, and receiving explicit protections against most forms of competition provided by the local/governmental authorities (through various levels of government).

2.2 The Common Carrier

Unlike the previous section, a Common Carrier structure of business investment, as is pertinent to the current case, is a hybrid of the competitive model of industrial organization and a Public Utility. Common Carriers still reflect the concept of public callings, but do not normally entail a grant of any privilege or right against competition, and do not normally come with an affirmative duty to extend facilities to serve all requests. The primary characteristic of the Common Carrier concept is the requirement to make available the commercial activity in service without discrimination on access or price. Common Carrier models have been applied to all sorts of industries over the course of history, including pipelines, airlines, taxis, and rail, but also at times to enterprises not solely involved in transport-related fields, such as hotels and grain storage.

As noted in the Alberta Law Review¹³:

Common carrier obligations arose originally at common law. Black’s Law Dictionary defines the obligation as:

A commercial enterprise that holds itself out to the public as offering to transport freight or passengers for a fee. A common carrier is generally required by law to transport freight or passengers, without refusal, if the

¹² For example, a franchise agreement or utility legislation will often include explicit provisions for a buy-out price if the utility assets are taken from the utility, or the franchise is cancelled or not renewed.

¹³ Brett, J. David and Berge, Nadine E., 2006. “Oil and Gas Transportation: Is a Contract a Viable Alternative to Traditional Regulation?” Alberta Law Review 44:1, p. 93-113.

approved fare or charge is paid. [Black's Law Dictionary, 8th ed., s.v. "carrier."]

...

The principles of common carriage have been applied to pipelines through statute at both the federal and provincial levels. For parties seeking transportation of oil and gas, a declaration of common carrier (or enforcement of that statutory obligation) has frequently been the method of choice for access.

The Alberta Law Review article goes on to review the various regimes that govern common carrier pipelines in Canada, referencing the previous federal *National Energy Board Act* and the *Alberta Oil and Gas Conservation Act*. Although the legislation is not directly applicable to BC, the basic principles of a Common Carrier regime can be readily seen in the *Alberta Oil and Gas Conservation Act*, which indicates that an existing pipeline can be declared a Common Carrier, with the main impacts being that the pipeline owner is required to provide non-discriminatory access to anyone who requests service¹⁴, at a price typically to be negotiated¹⁵.

In short, a Common Carrier in relevant parlance is a facility (or facility owner) that provides common carriage, or service potential that is not taken up by fixed contracted volumes¹⁶. This common carriage potential is prescribed by governmental authority to be made available to any potential user under non-discriminatory terms.

¹⁴ For example, the Alberta Oil and Gas Conservation Act provides as follows for the main concepts of a Common Carrier:

"48(1) On application the Regulator may from time to time declare each proprietor of a pipeline in any designated part of Alberta or the proprietor of any designated pipeline to be a common carrier as and from a date fixed by the order for that purpose, and on the making of the approved declaration the proprietor is a common carrier of oil, gas or synthetic crude oil or any or all of them in accordance with the declaration. (2) No proprietor of a pipeline who is a common carrier shall directly or indirectly make or cause to be made or suffer or allow to be made any discrimination of any kind as between any of the persons for whom any oil, gas or synthetic crude oil is gathered, transported, handled or delivered by means of the pipeline. (3) No common carrier shall discriminate in favour of the common carrier's own oil, gas or synthetic crude oil or oil, gas or synthetic crude oil in which the common carrier is directly or indirectly interested either in whole or in part.

...

55(1) If the Regulator has declared the proprietor of a pipeline to be a common carrier and agreement cannot be reached between the proprietor and a person desiring to have the person's oil or synthetic crude oil carried in the pipeline as to the tariff to be charged for the carriage, either party may, pursuant to the Public Utilities Act, apply to the Alberta Utilities Commission."

¹⁵ In rare cases the price cannot be negotiated and reference is made to the Alberta Utilities Commission for rate making determinations, based typically on cost-of-service principles.

¹⁶ See, for example, the Canada Energy Regulator description of responsibilities in respect of Regulation of pipeline traffic, tolls and tariffs: <https://www.cer-rec.gc.ca/bts/whwr/rspnsblt/trffctlltrff-eng.html> which notes "A common carrier must accept all products offered to it for transportation. When there is not enough capacity for the volumes offered (and unless the Commission has approved an alternative methodology), the pipeline company prorates its available capacity to accommodate all shippers."

Common Carrier is a much more entrepreneurial concept of service than Public Utility, in that the investor is making independent decisions to commit their own capital and take their risks, in the hopes of receiving a profit. It is typically a post-hoc (i.e. post-original investment) designation regarding how a commercial/entrepreneurial operation should make available their service, and to ensure pricing is not discriminatory. Unlike the Public Utility, a Common Carrier operation would not normally be developed from the outset with an explicit and conjoined public/private interest, nor a positive decision to provide protection from competition. Indeed Common Carriers are rarely protected from competition that can improve the overall societal position.

The concept of a Common Carrier is older than Public Utility, as noted by Dr. Cherry¹⁷:

Unique obligations have been imposed on common carriers since the Middle Ages and are based on the English common law of "public callings." These obligations evolved in medieval England to address numerous situations of economic coercion, exploitation and the illegal wielding of bargaining power. These obligations are: to charge reasonable prices ('just price'); to serve without discrimination; and to exercise their calling with adequate care, skill and honesty. [footnotes omitted]

2.3 Pricing Concepts

Pricing concepts differ between Common Carriers and Public Utilities.

A key aspect of comparing Public Utilities and common carriage is the concept of a prudent investment standard which applied so as to protect Public Utilities, but would not have the same strict relevance to Common Carriers.

Public Utilities' capital investments reflect a combination of the concepts of public interest infrastructure, and entrepreneurship. The public utility has a requirement to invest to keep up with loads and load growth, and has no assured option to sell the assets for almost any value beyond scrap, except to the extent the buyer is accepted as the new franchised service provider for the area. Hence, to ensure the utility makes appropriate investments in the public interest (as opposed to underinvesting), the concept of a prudent investment standard is normally applied to reduce utility investor risk. The prudent investment principle is well-known – a Public Utility should normally be able to recover costs of investments it has made, so long as the investment was prudent at the time¹⁸. Along with significant jurisprudence on the matter, the economic rationale is sound. Knowing the utility will be able to recover its costs, it can have the comfort in acting in a prudent long-term manner in the interests of the customers and the overall jurisdiction. The

¹⁷ Barbara A. Cherry, Utilizing "Essentiality of Access" Analyses to Mitigate Risky, Costly and Untimely Government Interventions in Converging Telecommunications Technologies and Markets, 11 *CommLaw Conspectus* 251 (2003). Pp.257. Available at: <https://scholarship.law.edu/commlaw/vol11/iss2/5>

¹⁸ Significant case law deals with interpretation and principles related to this concept, such as the presumption of prudence, and the role of a regulator in second guessing management, and the timing for the assessment of prudence (e.g., whether to apply hindsight), but there is little disagreement that a public utility making an investment in assets in the public interest ought be provided the opportunity to recover the costs of those assets over the long-term.

Public Utility also provides an essential service without competitors, so it has a near-universal ability to recover capital costs with the blessing of the regulator without undermining customer demand. Even if a capital investment was prudent at the time, but proved to be economically inferior, the utility could still practically charge necessary prices to recover the cost, and customers would be captive and required to purchase the supply. In this manner, the prudent investment principle is both appropriate and practical for a Public Utility.

In the hypothetical extreme of a fully unregulated competitive market, a similar investment by a private firm that appeared prudent at the time, but proved to be uncompetitive or “out-of-the-money” in retrospect would not be so protected. The investor could be quickly sidelined and either (a) be undercut by a new investor building a lower-cost supply option using better technology, or (b) have to drop their prices for their own service offering such that they may never recover the original capital cost. The investor/entrepreneur who took the risk, despite their decisions being prudent at the time, could never recover their original investment just by raising prices, as it would drive them quickly out of the market.

For a Common Carrier, there is a hybrid outcome between the Public Utility and the competitive market. The investor in the Common Carrier has many of the characteristics of the entrepreneur – they make the decision to invest without legal (franchise) or natural monopoly barrier to a competitor. They make this initial investment on the premise they will recover their costs, but it is ultimately their own risks they are taking. Governmental orders would require that they offer their service to all who desire to use the service on a non-discriminatory basis, but at a price that is representative of a reasonable market value (as presumably evidenced by negotiation or a regulatory decision). As such, unlike a private entrepreneur, the Common Carrier cannot discriminate in service availability or price as between customers. Pricing for the Common Carrier could be established by negotiation with their customers, or resolved via a regulator with reference to a just or fair price. However, the freedom to set this price is not unlimited. The price must be reasonably linked to some value of service or cost to provide service for a set of well-managed long-term assets. An investment or action that does not lead to being a low and reasonable cost form of supply at each particular time will weaken the Common Carrier’s value proposition to customers, and hence the enterprise’s market position and its value. The benchmark fair or just price, then, would need to reflect a well-managed operation, consistent with a solid market position and the physical and long-term potential of the assets in the ground (broadly, this could be consistent with a fully allocated cost-of-service type of standard).

Unlike Public Utilities, however, there is neither a desirable, nor a workable, means to ensure recovery of the Common Carrier’s investment over the long-term. The outcome is not practical, since any charge above the value provided will lead to erosion of market – customers will simply forgo the service (e.g., where it is non-essential) or pursue other alternatives or service from competitors (including potential new entrants), or develop the service themselves (such as the stakeholders of VAFFC are now doing). The outcome of assured capital cost recovery is also not desirable, since forcing the market to support above-cost supply of services that could be provided at a lower cost is a clear inefficiency and net loss to society¹⁹.

¹⁹ This is the reason governments encourage competition and “creative destruction” in as many industries as possible, except where needed to avoid clear market failures, such as encouraging innovation through

Note that the position of the Common Carrier owner is therefore inferior to a Public Utility in terms of capital protection. Why would the entrepreneur desire this model? In most instances, from this perspective, they would not prefer it. However, the only alternative to avoid this status would be to convince a governmental entity of the desirability of granting an exclusive franchise (e.g., a rule that no other party can transport jet fuel to the airport area). In the case of a Public Utility-type service, the governmental entity would likely so grant, in order to ensure provision of a necessary service at a high quality to meet current and potential demand, with orderly and planned investment. In the case of Common Carrier, where the public interest is lower, and the potential for alternatives or competitors exist (whether through alternative firms or technologies or modes of transport) which can lower overall prices and improve competitiveness, there would be no interest on the part of Governmental authorities to grant such exclusivity. Society simply does not have the same public interest in the financial viability and preservation of a specific Common Carrier as it does for a Public Utility.

2.4 Summary Comparison between a Public Utility and a Common Carrier

The fundamental comparison, then, between the Public Utility concept and the Common Carrier concept covers multiple characteristics:

Topic	Public Utility	Common Carrier
Initiation	Conjoined interest of public authority and private investor	Initiative of private investor
Public interest	Highly desirable service, including those sought by public authority	Independent business interest of project developer, offering a public calling. Public interest is not as high as a Public Utility function.
Expectation of service protection	Franchised or exclusive right to provide service in a given area	None, except through potential natural monopoly. In the case of the JFL, there is little physical monopoly characteristic over either short-term (trucking) or long-term (bypass). Economic "natural" monopoly only exists to the extent the pipeline offers competitive rates based on economies of scale.

patents, products with the potential for poor outcomes on consumer protection like drugs, and natural monopolies like regulated utilities.

Topic	Public Utility	Common Carrier
Requirement to meet volume demanded	Utility must supply, and expand, to meet all reasonable demands as part of "obligation to serve"	Typically none, except offering surplus capacity on non-discriminatory basis. In the case of the JFL, intentional underservicing was not only possible, but pursued.
Entitlement to fair return	Within standard of the prudent investment principle, utility is legally entitled to a fair return on any investment (both annual revenue requirement and long-term recovery of rate base). In other words, a strong protection and expectation for both a return on, and a return of, capital.	When transporting common carriage volumes, prices to reflect fair annual costs for the service provided (shipping) without reference to unique circumstances of specific buyers or sellers (e.g., looming alleged obsolescence).

3.0 SPECIFIC SITUATION OF PKMJF - HISTORY

The analysis turns to an assessment of the PKMJF situation in respect of the above regulatory and economic concepts. Key to the ultimate assessment about entitlements are facts about the PKMJF situation:

- PKMJF is recognized as a Common Carrier, including by declaration of the BCUC, and is not a Public Utility.
- The PKMJF pipeline holds no franchise or exclusive right to service YVR.
- Neither PKMJF, nor its predecessors, had an obligation to serve all loads that arose at YVR. In fact, PKMJF elected to not find a solution to serve known and ongoing load growth.
- The JFL is at best a weak monopoly service provider to YVR. This is evidenced by not only material jet fuel bypassing the pipe through delivery by truck, but also a permanent system bypassing the Jet Fuel pipeline by the development of the VAFD project.
- PKMJF acted in a manner that did not attempt to preserve its market position. In practice, the PKMJF approach to customer negotiations and pricing undermined its market position.

The above framework is informed by the history of the PKMJF facilities, as outlined in the concurrent evidence of VAFFC.

The following distillation of the historical record focuses on the events as relevant to the regulatory and economic concepts of a Common Carrier set out above.

The regulatory history of the JFL appears best understood from the perspective of 3 general periods of time:

- Initial development of the pipeline and light-handed regulation of rates, covering approximately 1969-2007.
- Contentious proposals by the pipeline to address claimed imminent bypass from 2007-2009.
- The 10-year settlement covering the period 2009 to 2018.

Concurrent with this regulatory history is the activities of VAFFC, in conjunction with planning for YVR's needs, to ensure secure long-term fuel supply at a reasonable cost. These activities included identification of long-term supply issues as early as 2000 or before, clearly indicated willingness to continue economic purchases over the JFL when available for the long-term, while also facing contentious sustained rate increase proposals (and ultimately acquiescence) which set an inevitable path to bypass.

3.1 First Period – Initial Years and Light-Handed Regulation

The period prior to approximately 2006 covers the initial development of the pipeline (concurrent with the development of the YVR terminal in 1969²⁰) and the periods during which the pipeline served as effectively the main fixed supply of the volumes required at YVR. Tolling reflected periods of light-handed regulation

²⁰ PKMJF June 4, 2007 application, pdf p. 13.

under the *Pipeline Act*, with negotiated settlements or concurrence of shippers regarding tolls for many years (e.g., 2004 and 2005 as per BCUC Order P-2-05). While the model evolved (e.g., adoption of NEB rate base / rate of return methodologies in 1990; BCUC directives on setting tolls as of 1994, etc.)²¹ the regulatory model remained one of largely complaints-based regulation with negotiated tolls²². As noted by the BCUC²³, toll decisions since 1997 were decided based on Section 44 of the *Pipeline Act*, which applies to Common Carriers. This period appears to include tolling up to approximately Tariff No 31, approved by the BCUC in P-2-06 on November 22, 2006. A further history of the tolling regulation of the JFL is provided in Exhibit B-13, Appendix VAFFC-KMJF 2.1(e).

The regulatory record over this period does not appear to capture the extent of the issues that would have become apparent to PKMJF with regard to its unusual approach to the management of its pipeline investment, in regard to the long-term life of the JFL. What is clear is that starting in about 2000²⁴, information was made available to PKMJF that the pipeline was becoming insufficient for YVR supply, and additional supply would be needed. However, it is not apparent that the owners of the JFL were clear with regulators with regard to the long-term sufficiency of the line to serve YVR needs. The first time PKMJF responded to the system risk before the BCUC was its 2007 accelerated depreciation application – but recall that this risk was apparent to external third parties like YVR as early as 2001. Rates continued to be economic during this period, in the sense that they both reflected the inherent costs of the system, and that cost-driven bypass was not identified as an inevitable outcome by any party.

3.2 Second Period: Contentious Regulatory Proposals for Toll Increases

The second period of relevant regulation appears to most notably start with the filing of the PKMJF application for Jet Fuel tolls on June 4, 2007 for tolls starting January 1, 2008. This application first publicly highlighted the awareness on the part of the owner of the JFL that the facilities it owned and operated would be inadequate for YVR's future needs, notwithstanding a much longer remaining potential physical life of the assets. The JFL filing attached materials that had been produced by YVR that showed that the fuel supply issues were known as early as 2000, and that 3 shortlisted options to solve the issues included increasing the capacity of the existing JFL, construction of a new pipeline, or barging²⁵. It was not apparent that PKMJF had put any significant effort into helping address the shortfall in supply capacity to YVR (as is the PKMJF prerogative, as a Common Carrier entrepreneur). At the time, the maximum sustainable daily

²¹ See PKMJF June 4, 2007 application, Appendix D, page 1.

²² Exhibit B-13, VAFFC IR 1.3, pdf p. 6 also indicates: "To date, KMJF's shippers have had access to the Jet Fuel Line at a fair price established through negotiated settlements, where shippers all understood that recourse to the BCUC would be available to determine cost of service-based tolls if parties were unable to reach negotiated solutions."

²³ BCUC Order P-3-08, Appendix A, page 3 of 14.

²⁴ Note that in PKMJF's 2007 application, pages 6-7, PKMJF cited the following from the YVR Master Plan 2027 Technical Report: "The VAFFC has been concerned for some time about the viability of the existing Terasen Pipeline to supply fuel to YVR.... In 2001, VAFFC began to consider the alternatives for supply of fuel to the airport and to develop a list of possible alternatives for further review. VAFFC has met with YVR on a regular basis to discuss its concerns regarding fuel supply and its progress in identifying the possible alternatives."

²⁵ YVR report page 12-39. Appendix B to the PKMJF June 4, 2007 application.

supply was cited at 5,250,000 litres of which the pipeline would supply a practical maximum of 4,500,000 litres per day with 25 tanker trucks per day making up the remainder, consistent with the then-current off-loading facilities. However, as of 2005, the maximum daily usage was already at 4,700,000²⁶.

The 2007 application indicates that PKMJF had concluded that its pipeline would no longer be economic once a larger alternative supply was in place, and that doubling the capacity is not something that PKMJF considered an economic investment. Specifically: "The company has concluded that, after 2012 when it appears that the barging option could be implemented, there is no economic purpose to the Jet Fuel System". The then-owners Kinder Morgan also noted that there was "...no potential for growth from the Jet Fuel System and better opportunities for the capital exist for the company" such that Kinder Morgan sought to sell the system. However, as bypass options were already identified, there were no buyers for the system. In short, the application was predicated on the fact that the system would be of no value post-2012, and would need to be promptly decommissioned and abandoned.

As a result, PKMJF sought approval to recover all remaining capital costs, plus costs of abandonment, over 5 years to 2012. The company sought abandonment costs of \$3.025 million with recovery spread out over 5 years. The proposal reflected an increase in depreciation expense from 2007 levels (\$0.43 million) to 2008 levels (\$2.19 million) plus 2008 abandonment (\$0.52 million) or a net \$2.28 million impact to revenue requirement. This is a 70% increase to the 2007 forecast revenue requirement of \$3.29 million²⁷.

Unsurprisingly, the 2007 proposals were not supported by shippers.

VAFFC did not support the accelerated depreciation, in particular noting that the "the Airlines will continue to take service or buy supply from suppliers who use the TMJ Pipeline as long as that supply option remains competitive"²⁸. VAFFC also noted that twinning or tripling the pipeline in addition to a marine off-loading facility would provide greater security of supply than the marine off-loading facility alone²⁹. The BCUC also accepted that, at that time, there was no inevitability to PKMJF becoming uneconomic, as VAFFC "[did] not plan to "bypass the Jet Fuel System"" and noted VAFFC's statement that its fuel strategy simply aimed to meet growing YVR jet fuel needs³⁰.

Chevron also opposed the application, noting the refinery was effectively required to produce 10,000 barrels a day of jet fuel, and that the only other alternatives for shipping or disposing of this fuel were impractical or even effectively impossible. Specifically, barging would require upgrading the Chevron dock which would cost approximately \$6 million, and trucking would require 50 tanker loads per day, which exceeded the YVR receiving capability³¹. The Commission accepted this evidence in concluding "The Commission accepts

²⁶ YVR report page 12-32. Appendix B to the PKMJF June 4, 2007 application.

²⁷ All values from Kinder Morgan June 5, 2007 application, Appendix D Schedules.

²⁸ BCUC Order P-3-08, Appendix A, page 6.

²⁹ BCUC Order P-3-08, Appendix A, page 6.

³⁰ BCUC Order P-3-08, Appendix A, page 9.

³¹ BCUC Order P-3-08, Appendix A, page 10.

that Chevron would continue to use the TMJ Pipeline even if it were the only shipper and tolls increased substantially.”³²

A major omission in PKMJF’s application was a depreciation study that failed to recommend appropriate depreciation rates based on the view of the depreciation expert. Gannett Fleming, who prepared the study, accepted PKMJF’s instructions in regard to the remaining economic life and did not develop their own opinion. The BCUC rejected this depreciation study³³. Gannett Fleming simply took the undepreciated capital cost at that time (approximately \$11 million) and divided by 5 to come up with fixed asset depreciation expense³⁴.

Consequently, the accelerated depreciation aspects of the proposal were rejected by the BCUC in Order P-3-08 in February 2008. New tolls were implemented May 1, 2008 (Order P-5-08). The net effect of the BCUC rejection was material, from a 2007 forecast revenue requirement of \$3.29 million, the BCUC approved an increase for 2008 to \$3.423 million³⁵ instead of \$6.814 million³⁶ as proposed.

PKMJF then sought interim and final adjusted Tariffs (No. 37 and 38) on December 30, 2008³⁷ covering the remaining periods of 2008 and 2009. These final adjusted Tariffs were the subject of discussions and support of shippers, and as such represent negotiated values. These proposals were largely consistent with the principles adopted in P-3-08, except that for 2009 the depreciation expense was not based on the remaining life, but rather on a life maximum of 20 years. This maximum life cap increased depreciation expense by \$0.145 million (from \$0.401 million to \$0.546 million). Despite this increase, and a significant increase of \$0.307 million in operating expenses (over 30%)³⁸, revenue requirements remained below \$4 million per year³⁹.

3.3 Third Period: Further Material Increases and Negotiated Settlement

During 2009, PKMJF met with shippers “to set fixed annual revenue amounts for use of the pipeline that span the tolling periods commencing 2009 through to the end of 2018.”⁴⁰ The discussions resulted in a negotiated settlement that provides little detail on the calculation of revenue requirement amounts. The only specified schedule providing any analytical detail is a one page depreciation schedule that provides both a “forecast remaining life” from the 2009 approved rates (based on a 20 year maximum life) and a

³² BCUC Order P-3-08, Appendix A, page 10.

³³ BCUC Order P-3-08, Appendix A, page 13.

³⁴ A further approximately \$2.5 million was added for accruing for Cost of Removal. See Gannett Fleming study, page III-4, included as Appendix F of the PKMJF 2007 rate application. This comprises \$3.0 million for abandonment, less \$0.5 million for positive salvage (reuse or scrap) value for the storage tanks.

³⁵ Kinder Morgan December 30, 2008 letter to BCUC, page 4.

³⁶ Kinder Morgan June 5, 2007 application, Appendix D Schedules page 1.

³⁷ Kinder Morgan letter to BCUC, December 30, 2008 – see Annex A to this submission

³⁸ Per TMJF Application for January 1, 2009 rates (dated December, 2008), Executive Summary page “Exec 2” – see Annex A to this submission

³⁹ December 30, 2008 Application and 2009 Final Tariff Filing.

⁴⁰ Exhibit B-11, Appendix BCUC-KMJF 7.2: Jet Fuel Line 2009 Settlement Application, pdf p. 100.

“revised remaining life” with the revised remaining life being calculated based on a Terminal Date of 13 years from January 1, 2010 (i.e., to December 31, 2022).⁴¹

Within the 13-year period, the depreciation schedule sought to recover all Net Service Value as of December 31, 2009, of \$9,998,360.

There are four critical aspects of the tolls for this period:

- 1) **Lacks Detail:** The settlement documentation provided publicly to the BCUC lacks detail. Other than the total revenue requirement, and a depreciation schedule, no numerical detail is provided.
- 2) **Large Unexplained Increases:** The revenue requirements for PKMJF jumped massively compared to all previous forecasts. For 2009, the revenue requirements were surprisingly revised upwards from the original 2009 proposed level of \$3.973 million⁴², to \$4.800 million⁴³, a jump of 21% in the same year. This then escalated to \$5.694 million (a 19% increase) in 2010, a combined 66% increase (\$2.271 million) in 2 years, over the initially approved 2008 level. Of this increase, approximately \$0.381 million (or only 17%) relates to depreciation terminal date effects (\$0.145 million moving from Remaining Life (per 2008 approach) to 20 year maximum (per 2009 approach), and a further \$0.236 million moving to the 13 year maximum per the negotiated settlement approach⁴⁴).
- 3) **Terminal Retirement Date:** The settlement purports to implement a scheme to recover all original cost over 13 years starting January 1, 2010 (with limited exceptions where recovery is faster due to shorter physical lives than 13 years).
- 4) **Quantity Risk:** The PKMJF settlement introduces to tolls the concept of shippers bearing risk for volume. This is achieved by setting an overall revenue requirement, and only finalizing tolls once the annual volumes are known and adjustments can be made to ensure PKMJF recovers the specified revenue requirement, regardless as to throughput. This form of tolling for PKMJF is unusual, and appears to only have been used once prior – the incentive tolling agreement from 1998-2002.

The toll settlement provides no detail regarding justifying any PKMJF cost increases, outside of the depreciation revision on assets. However, the depreciation provision only accounts for \$0.236 million of the increase⁴⁵. The remaining increase from the original 2009 level to the negotiated 2010 level of \$1.485 million per year⁴⁶ is unexplained and no attempt is made to provide justification.

⁴¹ Exhibit A2-1.

⁴² December 30, 2008 letter, as per Annex A.

⁴³ December 7, 2009 letter [incorrectly dated 2010].

⁴⁴ Per the Depreciation schedule attached to the Negotiated Settlement, the expense increased from \$0.544 million to \$0.780 million.

⁴⁵ Per the Negotiated Settlement Appendix 1, total depreciation for 2009 was \$0.544 million and for 2010 was \$0.780 million

⁴⁶ From \$3.973 million (December 30, 2008 letter, per Annex A) to \$5.694 million (per Negotiated Settlement), excluding the \$0.236 million identified as a depreciation increase.

Concurrent with this period of negotiation and the first years of the excessive increases, the history indicates VAFFC expended focused and clear actions to develop alternative supply options to the JFL.

3.4 Summary of Historical Perspectives

A reasonable interpretation of the record suggests PKMJF acted consistent with a Common Carrier framework, with a balanced and largely negotiated approach to tolling, for most of the period to 2007. During this time, clear facts arose that suggested PKMJF's assets were insufficient to meet YVR's needs, which should have been an indication that considered and early actions were needed to preserve PKMJF's market share and dominance. PKMJF did not act in such a manner (or in any event PKMJF was unsuccessful in its efforts), and as such undermined the long-term value of its own investment.

Instead of addressing market needs, PKMJF attempted to act in a manner consistent with entrenched monopoly, so as to try to secure near-guaranteed capital cost recovery in the 2007 application. This application was rejected by the BCUC as the factual underpinnings of the PKMJF obsolescence were not adequately supported; however, the proposals should equally have been dismissed as PKMJF attempting to leverage a regulatory model based on the application of a principle that was not appropriate for this form of common carriage. Had the material increases proposed for 2007 actually been applied to VAFFC or other shippers, PKMJF would likely have even more decisively built early resolve in customers to pursue all available options for bypass.

Surprisingly, even though PKMJF had no entitlement to guarantees of capital cost recovery or accelerated depreciation, the 2009-2018 negotiated settlement largely secured this right for PKMJF (i.e., all asset costs to be recovered by 2023). But this was not the only surprising aspect – PKMJF also secured tolls with material unexplained increases from shippers. Costs to shippers therefore increased with little rationale and no apparent added value. As a Common Carrier and not a franchised Public Utility, customers are not captive to PKMJF, and it is clear PKMJF undermined their market position and the long-term potential value of their assets by making their own service less economic than necessary. Events since that time underline this perspective.

4.0 FINANCIAL EXPERIENCE FROM 2009-2018, AND THE RELEVANT OPENING BALANCE SHEET FOR 2019 AND BEYOND

On the basis of the above principles, it is clear that PKMJF is properly entitled to operate and to ship product priced on a non-discriminatory basis, and to receive tolls that represent a reasonable benchmark of the cost for the service provided. The default measurement for such costs would be linked to the cost-of-service standard, similar to most regulated utilities, but without excessive recourse to unique or special conditions or factors linked only to the operation in question.

The common carrier tariff should be representative of the cost to provide the service using reasonably financed assets – for example, the fact that a specific operator may have very bad credit for other reasons and cannot access debt at a reasonable market benchmark would not merit a higher tariff. Similarly the common carrier rate should be representative of a reasonable technological functioning – were a common carrier to elect to use a failed or high-cost technology to provide service at a cost well above a reasonable benchmark for the service, this would not be appropriately included in tariffs.

On this basis, it is reasonable to assume that PKMJF would have rates representative of the following costs:

- Operating costs, representative of the costs to provide the transportation and storage services, assuming an efficient and competitive operator.
- Depreciation costs on the assets, representative of the costs and age of the assets, spread across the reasonable physical life capability of the assets in question.
- Costs to remove the assets at end of life, less salvage that should be received for sale of scrap, reasonably spread across the life that remains in the physical assets from the time a credible estimate of removal costs are prepared. These costs would therefore be recovered most substantively in the later years of the asset's life, once firm cost estimates and plans were in place.
- Interest costs, where borrowed money is reasonably used to finance the balance sheet investments.
- A return on the shareholder's equity according to the appropriate standard adopted by the regulator, consistent with capital-intensive infrastructure.

Based on the above regulatory considerations, it is now possible to review the period from 2009 to the present to determine an appropriate starting point for tariff calculation in the Test Years.

The 2009-2018 Negotiated Settlement covers the period for which actual results are now available. From these results there are five main observations:

- 1) Excessive Tariff Escalation and Booked Returns
- 2) Risks Transferred to Customers
- 3) Failure to Account for Earned Revenues which were Needed to Fund Cost of Removal
- 4) Accelerated Depreciation, Misapplied in the 2009-2018 Period
- 5) Inflationary Increases

Each of these is dealt with in turn in the following sections.

4.1 Excessive Tariff Escalation and Booked Returns

For the year 2008, a litigated toll-setting process occurred leading to approved Test Year Revenue Requirements and related tolls. The 2008 proceeding was an extensive undertaking, leading to an approved revenue requirement of \$3.423 million⁴⁷.

This increased to \$3.973 million for the first approved version of a 2009 test year (Tariff 39)⁴⁸, which arose out of negotiations with shippers for the one year in question (this first variant of a 2009 Revenue Requirement was negotiated prior to the 10 year negotiated settlement (2009-2018)). The significant Revenue Requirement escalation of \$0.550 million in one year (13.8%) was subject to only limited explanation⁴⁹. One factor contributing to the \$0.550 million increase was a shortening of the depreciation life from an average of 26 years (the previously set depreciation life based on negotiations tied to the physical condition of the assets⁵⁰) to 20 years “due to the observed decline in number of shippers on the system”⁵¹, though this portion of the increase only amounted to \$0.145 million⁵².

The equity returns included in the 2008 final and 2009 first final revenue requirements, based on 45% equity, were \$0.383 million and \$0.377 million respectively⁵³. Inclusive of costs of debt, the total cost of capital (debt plus equity) was \$0.720 million and \$0.753 million respectively⁵⁴.

The massive and unexplained increases arising from the 10-year negotiated settlement 2009-2018 give rise to significant questions about how the added revenue was justified and managed. Focusing just on the first 2 years – 2009 (second variant) and 2010, the revenue requirements jumped massively from the 2008 litigated and 2009 first negotiated revenue requirements, as follows:

⁴⁷ Kinder Morgan December 30, 2008 letter to BCUC, page 4. See Annex A.

⁴⁸ December 30, 2008 Application and 2009 Final Tariff Filing. See Annex A.

⁴⁹ PKMJF Application for Tolls Effective January 1, 2009 – Toll Calculations and Supporting Materials *Ibid*.

⁵⁰ PKMJF indicates depreciation was set at 30 years when rates were agreed to with shippers, and that by 2009 this was equivalent to a 26.0 year average remaining life, per Schedule 8 of PKMJF Application for Tolls Effective January 1, 2009 – Toll Calculations and Supporting Materials, *Ibid*.

⁵¹ PKMJF Application for Tolls Effective January 1, 2009 – Toll Calculations and Supporting Materials (Schedule 8), *Ibid*.

⁵² Per TMJF Application for January 1, 2009 rates (dated December 2008), Executive Summary page “Exec 2”, *Ibid*.

⁵³ For 2008, the equity return was 8.71% at 45%, and for 2009 8.57% at 45%, on rate bases on \$9.784 million and \$9.775 million respectively, per PKMJF December 30, 2008 letter – see Annex A

⁵⁴ PKMJF Application for Tolls Effective January 1, 2009 – Toll Calculations and Supporting Materials (Exec 2) – see Annex A

Table 1: PKMJF Final Revenue Requirement 2008-2010

\$000s	litigated	negotiated (1 year)	negotiated (10 year)
2008	3423		
2009		3973	4800
2010			5694

Table 1 indicates the revenue requirement approved and implemented for PKMJF, with the oddity of the 2 different 2009 amounts. As noted above, the \$0.550 million increase from 2008 to the first negotiated 2009 amount was comprised of \$0.145 million due to shortening the asset lives (from 26 to 20 years) and the remainder from other factors. The further increase of \$0.827 million within the same year, and an additional \$0.894 million for 2010 (a combined \$1.721 million) has little added detail provided to justify the increase. The only identified factor was a further shortening of the asset lives (from 20 years to 13 years) which was responsible for only \$0.236 million of this increase⁵⁵. The remaining \$1.485 million from the first 2009 approved revenue requirement to the 2010 revenue requirement was entirely unexplained.

The significant escalation is also shown in Figure 1 below, covering the period 2006 to 2021.

⁵⁵ Per Exhibit A2-1, Appendix 1 to the Negotiated Settlement, the depreciation expense for 2009, at the 20 year life projection, was \$0.544 million, and the same assets for 2010, at the 13 year life projection, was \$0.780 million. This included "normal" cost of removal and retirements.

Figure 1: Revenue Requirements and Depreciation Periods 2006-2021

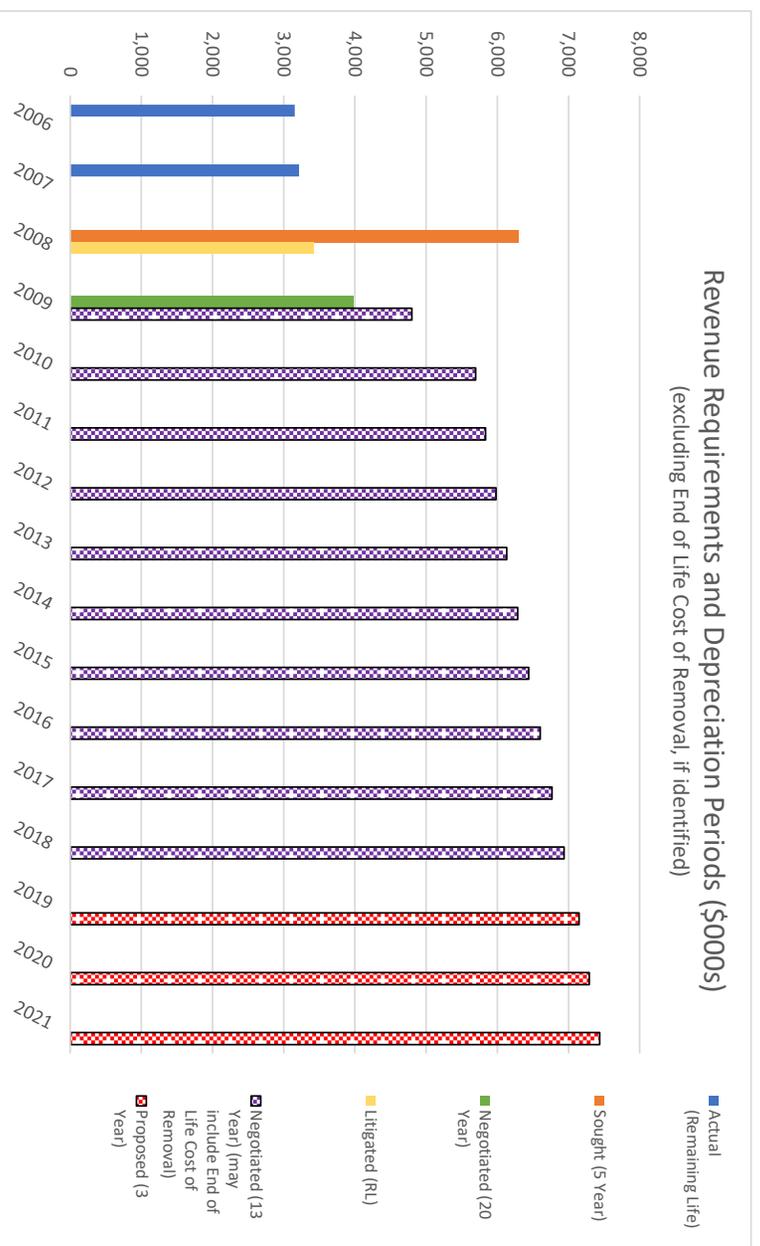


Figure 1 above shows the revenue requirements from 2006 and 2007 actuals in blue (based on depreciation over the 30 year estimated remaining life), the originally proposed 2008 amount based on depreciation over 5 years in orange, and the approved level in yellow (based on the 30 year remaining life, of which 26 remained as of that date). The chart also shows the increases implemented to the 2009 first negotiated amount, based on 20 year limited life, in green, and the further increase in cross-hatched purple for the 10 year negotiated settlement, based on 13 year life. Note that the 10 year negotiated settlement increases did not specify whether additional amounts were included for Abandonment costs, but without this explanation the reason for the severe escalation cannot be reasonably explained.

With the benefit of reporting on actuals, what is now known is that *returns* to PKMJF ██████████ from 2008 to 2010 and beyond. Income statements provided in Exhibit B41-1 indicate PKMJF earned ██████████ before income taxes in 2010, with income taxes at ██████████, for a net return on rate base (after tax) of ██████████. This compares to 2008 where the total return on rate base after tax was approved at \$0.720 million, and the first 2009 negotiated approval at \$0.753 million. The ██████████ return equals almost ██████████ in that 2010 year compared to the prior years, with no material new capital or equity investment. This occurs *despite* a reduction in the total investment – net Property, Plant and Equipment as of year-end 2008 is ██████████ while by 2010 is ██████████. No formal rate base is

calculated for the two years in question, but the resulting return on net Property, Plant and Equipment (the vast majority of rate base) [REDACTED] from [REDACTED] to [REDACTED]⁵⁶.

Despite PKMJF booking these [REDACTED] returns, as further noted below, it is not a reasonable assumption that the pipeline operator was simply able to secure such favourable returns from negotiation. A more reasonable assumption is that the excessive returns were due in part to PKMJF mis-accounting for the revenues received and their appropriate purpose, in light of a 13-year terminal life framework, by failing to set aside Abandonment reserve allocations.

4.2 Risks Transferred to Customers

For whatever reasons, which cannot be inferred post-hoc, the 2009-2018 Negotiated Settlement also included provisions that resulted in customers bearing the risks (positive and negative) for volume changes. Specifically, the Tariff No. 39 terms include a formula (Rule 15.3) that allocates a given dollar amount over the "actual volumes delivered". Not only do YVR shippers bear the risk of volume for their own quantities, the amounts to be recovered via this Rule 15.3 formula are the full Negotiated Settlement revenue requirements, less the actual recoveries from shipments from the refinery to Burnaby Terminal, effectively putting on the remaining YVR shippers the risks tied to volumes from Burnaby Terminal Line Gathering Fees. Because of this link to actual volumes, the actual amounts billed to shippers can only be known following the conclusion of the shipping period (i.e., determined monthly, after month-end).

This form of tariff is distinguished from a more normal commercial tariff where the unit costs of shipping are known in advance, calculated based on approved prospective required revenues divided by reasonably estimated prospective volumes. This typical tariff approach, which has been the norm for PKMJF outside of negotiated toll periods, keeps the risks tied to volume variances as part of the pipeline owner's account, not as a risk to shippers.

Based on the record available, it appears that the transfer of prospective risk to shippers has only occurred twice for PKMJF. Once as part of the 2009-2018 Negotiated Settlement, and once as part of the 1998-2002 negotiated Incentive Toll (as per BCUC Order P-1-06). No other references to shippers taking the risks related to long-term volume variances are noted in the record.

In relation to the returns on investment earned by PKMJF in the Negotiated Settlement period, it should be noted that transference of volume risk to shippers would reasonably be considered a risk-reducing feature for PKMJF. Such features would normally be understood to decrease the necessity and entitlement to returns on the shareholder's investment. It is an understatement to say that such a decrease in entitlement to returns is not noted in the revenue requirements arising from the negotiation.

⁵⁶ [REDACTED]

There is no evidence identified that any past contested Tariff settlement process for PKMJF resulted in volume risks being borne by shippers.

For the current situation, it is not apparent that go forward Tariffs (starting January 1, 2019, whether settled prospectively or retrospectively) should similarly burden shippers with volume risks.

4.3 Failure to Account for Earned Revenues which were Needed to Fund Cost of Removal

At the time of the 2009-2018 negotiated settlement, for whatever reasons were relevant at the time, shippers agreed to a tolling regime predicated on the PKMJF assets being fully depreciated and no longer in service as of the end of 2022 (13 years from the negotiated implementation of accelerated depreciation at January 1, 2010)⁵⁷. This approach to asset depreciation could only reasonably be consistent with an assumed termination of pipeline service starting in the year 2023 (service after 2022 would otherwise be provided by a zero rate base asset, and there would be no basis to calculate a tariff that would provide any return to the owner who had taken on the risks of operation, etc.). Such termination of pipeline service would normally be understood to coincide with the final chance to collect from customers the costs needed for Removal or Abandonment of the pipeline and related assets. However, PKMJF's current filing portrays no abandonment reserves are in place (or credited as an offset to future customer funding obligations) as of January 1, 2019⁵⁸.

It is not credible that a regime was implemented which targeted known and fixed, stable revenues for 10 years out of the remaining 13 year life of the pipeline, but failed to consider establishment of any abandonment fund. To so conclude would be to find that PKMJF deliberately accepted an omission of the chance to fund the future costs of abandonment during the last 10 of 13 years of the pipeline. Either PKMJF would have to have been supremely confident that it could, to be colloquial, assuredly wallop shippers for abandonment costs in the final 3 years, or PKMJF would have had to be intensely oblivious to this pending risk. Neither of these is credible. It is even less credible that this approach was purportedly implemented concurrent with a massive [REDACTED] in the net income taken by the pipeline operator, as reviewed above (a [REDACTED] from the traditional level of return on rate base of around \$0.720 million to [REDACTED] within 12 months). For more likely, the settlement was acceptable to all parties, including PKMJF, because it was understood to provide PKMJF with sufficient funds to address abandonment consistent with a 13-year life adopted for depreciation (whether recorded as abandonment accruals, or as extraordinary net income knowingly offsetting future as-yet recorded shareholder costs for abandonment). Whatever the intent at the time of the settlement, PKMJF's current Application effectively seeks to impose and crystallize now the identical *outcomes* that such improbable and commercially unreasonable approaches would have targeted, which is inherently double-counting abandonment recoveries from customers.

⁵⁷ Exhibit A2-1, Appendix 1, 2009-2018 Negotiated Settlement.

⁵⁸ With respect to toll development, the proposed Abandonment trust proposes to collect the full costs estimated by the abandonment study, with no offset or credit for amounts provided or accrued prior to January 1, 2019.

Note that PKMJF was already in possession at that time of a cost estimate to decommission and abandon the pipeline of \$3.025 million in 2013⁵⁹. Simply inflating this amount to 2023 values, at 2% per year, would total \$3.687 million. If recovered over 13 years, this would yield a \$0.284 million per year reserve allocation. As noted in the complementary evidence of Patricia Lee (Appendix E), it is an expectation on the part of a regulated company that, once a credible expectation of abandonment is in place, that provision will be made for accruing funds for the purpose of abandonment. Given the explicit agreement with customers as of 2009 that assets would be amortized over only 13 more years, the only prudent course of action at that time would be for PKMJF to have immediately begun accruing an abandonment reserve. It is clear PKMJF collected more than sufficient tolls from customers to fund such a reserve during the settlement period to 2018 (but elected to prioritize shareholder returns over prudent funding of abandonment provisions), and even setting aside \$0.284 million per year during that period (to a total \$2.556 million from 2010 to 2018) would be seen as a bare minimum that should be expected to have been recorded.

Arguably, if PKMJF really expected the initiation of the VAFFC project to result in cessation of shipping on the PKMJF pipeline, then any number of evidentiary triggers over the period since 2010 should have led to immediate actions to refine the abandonment cost estimate, and perhaps to develop cost estimates more in-line with the ELM preliminary report (\$5.7 million).⁶⁰ For example, the 2011 VAFFC filing for an Environmental Assessment Certificate (EAC), or the 2013 granting of the EAC could have been sufficient. Had PKMJF conducted such a preliminary study as now known from ELM, and discovered the associated cost estimate (i.e., in the vein of \$5.7 million), it would have been clear that the \$0.284 million/year allocation they should have been setting aside was insufficient. Indeed, as of 2013, PKMJF would have only had 4 years of such allocation (\$1.136 million) as compared to a \$5.7 million estimated abandonment cost, and would have calculated that in the remaining 9 years, the remaining \$4.564 million balance (\$5.7 million less \$1.136 million accrued to that time) would have required \$0.507 million/year accruals from 2014-2022 (a 9 year period) Even establishing such an accrual on its own initiative, without any adjustment to tolls, would still have permitted PKMJF to earn returns well in excess of anything awarded under a contested framework for the entirety of the negotiated settlement period.

In short, the only reasonable way to set forward-looking tolls today in the wake of the negotiated settlement, would be to assume PKMJF acted or was expected to act consistent with a prudent pipeline operator during that period. This would yield an abandonment reserve as of December 31, 2018 of between \$2.556 million⁶¹ and \$3.671 million⁶² (likely the latter). Such a reserve should be directed by the BCUC to be established (for the purposes of setting 2019-2021 tolls), effective December 31, 2018, out of PKMJF's past tolls which were instead recorded as net income to the shareholder. To be clear - these amounts should not be collected from toll-payers a second time. Revenue Requirements for 2019 and going forward should be set to reflect abandonment funding for the remainder of reasonably estimated abandonment costs over and above this level (see the complementary evidence of Patricia Lee) over the appropriate depreciation period.

⁵⁹ PKMJF June 4, 2007 Rate Application, pdf p. 22.

⁶⁰ Exhibit B-8, pdf p. 132.

⁶¹ 9 years of \$0.284 million/year

⁶² 4 years of \$0.284 million/year, revised to \$0.507 million/year for 5 years, to 2018.

4.4 Accelerated Depreciation, Misapplied in the 2009-2018 Period

In respect of depreciation, the 2009-2018 negotiated settlement included an adjustment to the lives used to depreciate assets. The concept applied is what would be considered a “terminal life” or “life span” in depreciation practice – where an asset is determined to have an effective end date for retirement, and all components are targeted to be depreciated by no later than that date, regardless as to their physical characteristics or condition.

The 2007 application, upon rejection of the 5-year accelerated depreciation, reverted to depreciation rates that were in effect from previous agreements with shippers. This remained until the 2009 application. For 2009, PKMJF proposed to revise the rates such that the then average remaining life (26 years) was driven down to an average of 20 years. This was shown in Schedule 8 of the 2009 Application, copied below.

Application for Tolls

Schedule 8

Depreciation Rates and Forecast Remaining Life Calculations
(\$000)

Account Number & Description	Original Cost 'Dec 31, 2008	Accumulated Depreciation 'Dec 31, 2008	Net Service Value 'Dec 31, 2008	2008 Depreciation Expense	Existing Depreciation Rates (%)	Forecast Remaining Life (h) = [e / f]	Proposed Recovery 20 years w exceptions (i) (j) = [i / b]	
(a)	(b)	(d)	(e)	(f)	(g)			
152 Land Rights	98,684	74,848	23,836	1,816	1.84%	13.1	1,192	1.21%
153 Line Pipe	4,606,352	1,550,028	3,056,325	82,873	1.96%	36.9	152,816	3.32%
156 Buildings	364,788	165,342	199,446	9,412	2.58%	21.2	9,972	2.73%
158 Pumping Equipment	1,131,243	405,854	725,390	38,802	3.43%	18.7	48,359	4.27%
159 Station Lines	2,092,011	899,182	1,192,829	61,505	2.94%	19.4	59,641	2.85%
160 Other Station Equipment ^[1]	2,819,995	608,498	2,211,497	36,942	1.31%	59.9	110,575	3.92%
160C Central Pipeline Control	251,761	251,761	0	0	10.00%	0.0	0	0.00%
161 Storage Tanks ^[1]	1,276,059	444,650	831,410	14,419	1.13%	57.7	41,570	3.26%
163 Communications	184,066	79,027	105,039	17,507	10.00%	6.0	17,507	10.00%
185WE Work Equipment	45,349	45,349	0	388	20.00%	0.0	0	20.00%
186HW Computer Hardware	3,789	3,789	0	0	20.00%	0.0	0	20.00%
186SW Computer Software	8,625	8,625	0	0	15.60%	0.0	0	20.00%
189D AFUDC (Interest)	181,894	101,479	80,415	6,912	3.80%	11.6	4,021	2.21%
189E AFUDC (Equity)	179,889	96,560	83,329	6,836	3.80%	12.2	4,166	2.32%
190 Construction Overhead	3,377,045	1,521,688	1,855,357	123,262	3.65%	15.1	92,768	2.75%
BS Costs of Removal ^[2]		(58,669)	58,669	0	0.00%		2,933	5.00%
	16,621,552	6,198,011	10,423,541	400,673	2.41%	26.0	545,521	
Base for computed average ^[3]	16,312,028						542,588	3.33%

Summary of Depreciation Rates

	2008	2009
Depreciation Expense without Balance Sheet ("BS") Costs of Removal	400,673	542,588
Amortization of normal Costs of Removal (and retirements)	0	2,933
Total Provision for Pipeline	<u>400,673</u>	<u>545,521</u>

For example, Schedule 8 shows for Line Pipe (account 153) the 2009 application indicated an original cost as of December 31, 2008 of \$4,606,352, an accumulated depreciation of \$1,550,028, yielding a net service value of \$3,056,325. Under the previously approved rates, this would have been depreciation at \$82,873 per year, which would be consistent with a 36.9 year average remaining life from 2009 (to approximately 2045, approximately 25 years from the current test years). The \$82,873 would arise in practice from

applying the then prevailing 1.96% depreciation rate against the gross plant balance of \$4.606 million. Since the 2009 application was seeking a 20 year amortization period, a new rate was developed, 3.32%, which was $1/20^{\text{th}}$ of the \$3.056 million remaining to be depreciation (or \$152,816 per year) divided by the gross plant of \$4.606 million. According to the best available information, this approach was applied for one year – 2009.

For the 2009-2018 negotiated settlement, an approach was adopted to *further* truncate the remaining life. In this case shippers agreed to a 13-year period as the terminal life. A similar calculation was performed for the Line Pipe category, based on assets in service as of December 31, 2009, to yield a new rate of 4.86%, an increase to the previous rate of 3.32%.⁶³ When applied to all of the assets in service, this rate would have amortized the full book value to \$0 by the end of 2022.

Issues arose, however, in the settlement period, starting with new assets added in 2010 and beyond. There was neither regulator nor shipper scrutiny of depreciation practices applied nor of capital additions. PKMJF has asserted that capital additions occurred despite the expectation that the pipeline would be retiring, and were “undertaken to provide safe and reliable operations”⁶⁴. For these new assets, the 4.86% rate is not mathematically correct for depreciating the book value over the period to 2022. Assets added in 2010 only have 13 years to amortize, so instead must be amortized at a rate of $1/13^{\text{th}}$ each year (7.7%). Assets added in 2011 only have 12 years to amortize, so instead must be amortized at a rate of $1/12^{\text{th}}$ (8.3%) etc. Despite this approach being the only correct way to apply the negotiated settlement principle of 13 year remaining life, PKMJF failed to implement this practice in its booked depreciation.

During the period 2010-2018, PKMJF added \$3.255 million in capital assets⁶⁵. These assets should have been depreciated consistent with the following Table 2 over their life to 2022, unless they were in one of the smaller asset categories with an even shorter life (e.g., communication equipment) in which case the depreciation expense would have been slightly higher):

⁶³ Exhibit A2-1.

⁶⁴ Exhibit B-13 VAFFC IR1 4.11, pdf page 26.

⁶⁵ See Exhibit B-11, Appendix BCUC-KMJF 6.9-A, starting pdf page 94.

Table 2: Depreciation based on 13-year Terminal Life Span for 2010-2018 Additions

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total Additions
Years Remaining to 2022	13	12	11	10	9	8	7	6	5	4	3	2	1	
Depreciation Rate for new addition	7.69%	8.33%	9.09%	10.00%	11.11%	12.50%	14.29%	16.67%	20.00%	25.00%	33.33%	50.00%	100.00%	
Depreciation for 2010 Additions	23,002.34	23,002.34	23,002.34	23,002.34	23,002.34	23,002.34	23,002.34	23,002.34	23,002.34	23,002.34	23,002.34	23,002.34	23,002.34	299,030.39
Depreciation for 2011 Additions	-	27,773.37	27,773.37	27,773.37	27,773.37	27,773.37	27,773.37	27,773.37	27,773.37	27,773.37	27,773.37	27,773.37	27,773.37	333,280.46
Depreciation for 2012 Additions	-	-	32,948.43	32,948.43	32,948.43	32,948.43	32,948.43	32,948.43	32,948.43	32,948.43	32,948.43	32,948.43	32,948.43	362,432.77
Depreciation for 2013 Additions	-	-	-	76,018.35	76,018.35	76,018.35	76,018.35	76,018.35	76,018.35	76,018.35	76,018.35	76,018.35	76,018.35	760,183.46
Depreciation for 2014 Additions	-	-	-	-	6,528.54	6,528.54	6,528.54	6,528.54	6,528.54	6,528.54	6,528.54	6,528.54	6,528.54	58,756.85
Depreciation for 2015 Additions	-	-	-	-	-	55,782.83	55,782.83	55,782.83	55,782.83	55,782.83	55,782.83	55,782.83	55,782.83	446,262.65
Depreciation for 2016 Additions	-	-	-	-	-	-	17,624.53	17,624.53	17,624.53	17,624.53	17,624.53	17,624.53	17,624.53	123,371.70
Depreciation for 2017 Additions	-	-	-	-	-	-	-	94,956.91	94,956.91	94,956.91	94,956.91	94,956.91	94,956.91	569,741.45
Depreciation for 2018 Additions	-	-	-	-	-	-	-	-	60,472.69	60,472.69	60,472.69	60,472.69	60,472.69	302,363.47
Annual Dep. Exp	23,002.34	50,775.71	83,724.14	159,742.49	166,271.03	222,053.86	239,678.39	334,635.30	395,107.99	395,107.99	395,107.99	395,107.99	395,107.99	3,255,423.20

Instead of the approach laid out in Table 2, by applying the incorrect rate to new assets (i.e., a rate which was derived for assets already in-service and partially depreciated as of December 31, 2009), PKMJF under-depreciated the new additions. It is a reasonable assumption that customers, by signing on to a harsh accelerated depreciation schedule over 13 years, would expect to get to year 11 (2019) with relatively little remaining net asset value. PKMJF however still records material net asset value to be amortized (\$5.656 million⁶⁶). The result of under-collecting depreciation during the settlement period is to increase shareholder profit and require future generations of shippers to pay those costs again in the future.

The corrected depreciation schedule requires recalculating annual depreciation expense based on annual life span calculations from 2010 to 2018. A close approximation of the impact is provided in Table 3 below. The figure assumes all additions were amortized by PKMJF at the rate of 4.86% used for account 143 (Line Pipe) since the majority of the additions were in this account⁶⁷, and assumes full year depreciation was used for simplicity (as opposed to monthly additions/adjustments).

⁶⁶ Exhibit B-14, Appendix A, Schedule 4, pdf p. 79.

⁶⁷ Exhibit B-13, PKMJF response to VAFFC, pdf page 32.

Table 3: Comparison of Application of Life Span to PKMJF Approach

Based on Life Span									
	2010	2011	2012	2013	2014	2015	2016	2017	2018
Years Remaining to 2022	13	12	11	10	9	8	7	6	5
Depreciation Rate for new addition	7.69%	8.33%	9.09%	10.00%	11.11%	12.50%	14.29%	16.67%	20.00%
Depreciation for 2010 Additions	23,002	23,002	23,002	23,002	23,002	23,002	23,002	23,002	23,002
Depreciation for 2011 Additions	-	27,773	27,773	27,773	27,773	27,773	27,773	27,773	27,773
Depreciation for 2012 Additions	-	-	32,948	32,948	32,948	32,948	32,948	32,948	32,948
Depreciation for 2013 Additions	-	-	-	76,018	76,018	76,018	76,018	76,018	76,018
Depreciation for 2014 Additions	-	-	-	-	6,529	6,529	6,529	6,529	6,529
Depreciation for 2015 Additions	-	-	-	-	-	55,783	55,783	55,783	55,783
Depreciation for 2016 Additions	-	-	-	-	-	-	17,625	17,625	17,625
Depreciation for 2017 Additions	-	-	-	-	-	-	-	94,957	94,957
Depreciation for 2018 Additions	-	-	-	-	-	-	-	-	60,473
Annual Dep. Exp	23,002	50,776	83,724	159,742	166,271	222,054	239,678	334,635	395,108
							sum 2010-2018		1,674,991
As applied by PKMJF									
	2010	2011	2012	2013	2014	2015	2016	2017	2018
Years Remaining to 2022	13	12	11	10	9	8	7	6	5
Depreciation Rate for new addition	4.86%	4.86%	4.86%	4.86%	4.86%	4.86%	4.86%	4.86%	4.86%
Depreciation for 2010 Additions	14,533	14,533	14,533	14,533	14,533	14,533	14,533	14,533	14,533
Depreciation for 2011 Additions	-	16,197	16,197	16,197	16,197	16,197	16,197	16,197	16,197
Depreciation for 2012 Additions	-	-	17,614	17,614	17,614	17,614	17,614	17,614	17,614
Depreciation for 2013 Additions	-	-	-	36,945	36,945	36,945	36,945	36,945	36,945
Depreciation for 2014 Additions	-	-	-	-	2,856	2,856	2,856	2,856	2,856
Depreciation for 2015 Additions	-	-	-	-	-	55,783	55,783	55,783	55,783
Depreciation for 2016 Additions	-	-	-	-	-	-	17,625	17,625	17,625
Depreciation for 2017 Additions	-	-	-	-	-	-	-	94,957	94,957
Depreciation for 2018 Additions	-	-	-	-	-	-	-	-	60,473
Annual Dep. Exp	14,533	30,730	48,345	85,289	88,145	143,928	161,552	256,509	316,982
							sum 2010-2018		1,146,014
							difference		528,977

Table 3 above indicates that had the appropriate life span rate been applied over the 2010-2018 period, there would have been approximately \$0.529 million more accumulated depreciation than is presently recorded by PKMJF. Instead, PKMJF applied too low a depreciation rate, which had the effect of leading to higher net income than would properly have been recorded. This requires correction by the BCUC to ensure that customers are not charged in future for \$0.529 million in depreciation that was properly related to the use of assets in past periods.

In summary, it seems clear that customers' rates over this period included this \$0.529 million in depreciation expense already, and so PKMJF's proposal today amounts to a request that customers should be double charged for these amounts. PKMJF's tariffs over the period were established with a clear view of the 13-year life span. The revenue requirements did not decrease over the 10 year period, despite there being a clear reduction in rate base intended which would have served to reduce PKMJF's costs. In fact, the revenue requirements increased each year to account for some unidentified inflationary change. Since rate base would be declining, it is only reasonable to assume that an overall increase in tariffs was meant to fund increases in operating costs (for inflation less productivity) and in depreciation. On this basis, it appears a reasonable conclusion that tariffs over the negotiated settlement period were not only capable, but reasonably intended to fund capital asset depreciation based on a life span of 2022, including for new additions.

4.5 Inflationary Increases

The 2009-2018 negotiated settlement provided for 2.5% per year inflationary increases. This not only exceeds the level of inflation experienced generally for BC over the period (See Appendix B to the InterGroup evidence), there is no relevance of inflation to many of PKMJF's cost categories. For example, Rate Base would have been expected to decline over the period, and indeed did decline. Further, depreciation would normally be expected, in the context of limited capital spending, to hold relatively steady. Third, a static utility operation providing no expansion in scale or scope should expect cost control efforts to not only meet, but exceed the level of inflation (i.e., see increases lower than inflation would otherwise suggest). Finally, PKMJF asserts the pipeline is in its final stages of operation despite having a material physical life remaining (25 years), which would be consistent with strict limitations on operating costs in the purported final years of the asset's economic life.

For these reasons, 2.5% annual increases in revenue requirement over the settlement period were of dubious relevance. They may, however, have been a necessary tool to deal with the fact that the settlement period was so long as to be unable to provide forecasts annually for the duration of the forecast period.

In a contested proceeding, however, with only 3 test years under review, detailed cost projections for each cost category would normally be expected, and adjustments for productivity and efficiencies would be carefully considered and actively sought by customers and regulators.

5.0 IMPLICATIONS FOR THE CURRENT APPLICATION

For the purposes of the current application, the above specific conclusions on the negotiated settlement, as well as observations on the functioning of the settlement period, suggest the following adjustments to PKMJF's proposals are required:

- 1) **PKMJF Should Retain Volume Risk:** Unlike a negotiated settlement period, the contested test years of 2019-2021 should have tolls designed on the basis that PKMJF retains risks for volume or underuse. Specifically, tolls should be designed based on a reasonable forecast of loads for a normal year. There is no reason customers should absorb underuse risks of a common carrier tied to the COVID virus or any other load variation, except in a case where customers negotiated such a tolling framework for the year in question and explicitly accepted such risk as part of a package of complementary concessions.
- 2) **Abandonment Reserve:** For the purposes of setting tolls for 2019-2021, establish test year abandonment requirements based on a calculated abandonment reserve, at a value of between \$2.556 million and \$3.671 million, as of opening 2019 balances. This adjustment should come as a downward revision to the shareholder retained earnings, to reflect prudent actions that should have been taken by PKMJF consistent with the negotiated settlement framework and known information about VAFFC plans during 2009-2018.
- 3) **Accumulated Depreciation Corrections:** Revise accumulated depreciation as of opening 2019 balances upwards by approximately \$0.529 million, as an adjustment to the shareholder retained earnings, to reflect proper application of life span depreciation over the negotiated settlement period.
- 4) **Reject Escalation:** No escalator of any type should be used to calculate tolls in 2020 and 2021, as proposed by PKMJF. The proper approach would have been a fully tested revenue requirement for each test year, with supporting justification. However, at this late date, and with the limited information provided by PKMJF regarding 2020 and 2021, such a review is not possible. Instead, it should be recognized that only a portion of PKMJF's costs are affected by inflation, and others ought to be offset by appropriate productivity factors. Depreciation, for example, does not increase each year, and Rate Base would decline over time along with associated returns. For this reason, the only practical approach to balance some potentially increasing categories with others that decrease is to approve a flat revenue requirement, maintaining the same 2019 revenue requirement across 2020 and 2021.
- 5) **Neither Accelerated Depreciation nor Accelerated Collection of Abandonment Costs:** PKMJF, as a Common Carrier, has no entitlement to the near certainty it seeks for recovery its remaining capital asset net book value, nor its full costs of abandonment in the purported terminal year of 2022. It is appropriate that tolls include depreciation on the reasonable outstanding net book value (subject to revision as noted in item 3 above) and collection of abandonment costs (as set out in Appendix E, less the adjustments noted in item 2 above) – but only over a life that is consistent with the true remaining physical capabilities of the assets (e.g., 25 years). The PKMJF assertions of entitlement to accelerated collection of these amounts would in effect protect PKMJF from its own failure (in the event a near-term retirement is even likely) – a failure to achieve the

inherent long remaining economic life that the assets could have provided had the PKMJF market position been properly secured. As a Common Carrier and entrepreneur, PKMJF retains this risk, and it should not be foisted on customers through erroneous mis-application of regulatory principles or gaming of tolls.

APPENDIX B
Pre-Filed Testimony Regarding
PKM Canada (Jet Fuel) Inc.'s ("PKMJF") proposed Revenue
Requirement for the 2019 Tariff Application

Prepared by:

InterGroup Consultants Ltd.

Melissa Davies¹

December 16, 2020

¹ Services provided by MNYD Consulting Inc.

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1.0 INTRODUCTION

This testimony has been prepared for the Vancouver Airport Fuel Facilities Corporation ("VAFFC") by Melissa Davies, in conjunction with the InterGroup Consultants Ltd. (InterGroup) team also comprising Mr. Bowman and Ms. Lee. The qualifications of Ms. Davies are provided in Appendix E.

For this Pre-filed Testimony, InterGroup was asked to review and assess PKM Canada (Jet Fuel) Inc.'s ("PKMJF") proposed revenue requirement for the 2019 Tariff Application and resulting proposed tariff for 2019, 2020 and 2021. The scope of this review does not include PKMJF's proposed changes to depreciation methodology nor PKMJF's proposed abandonment surcharge, which are covered in the Pre-Filed Testimony of Ms. Patricia Lee (Appendix C and D) and Mr. Patrick Bowman (Appendix A).

PKMJF provided multiple sets of data in support of its toll increase request. In preparation of this testimony the following information was reviewed and evaluated:

- PKMJF's Amended Revenue Requirement and Final Tolls Application for test year 2019 (Exhibit B-14) and responses to several information requests;
- PKMJF's confidential system generated income statements for 2009 – 2018 actuals, which set out the supporting information for the jet fuel line's operating expenses (Exhibit B-41-1, Confidential Parkland (IR2)-PKMJF, pdf pages 1 - 43);
- Two sets of PKMJF confidential system generated income statements for 2019, for each KM Canada Jet Fuel Inc. and PKM Canada (Jet Fuel) Inc. (Exhibit B-41-1, Confidential Parkland (IR2)-PKMJF, pdf pages 47 – 55);
- PKMJF actual 2019 operating costs as provided in response to Parkland(IR2)-PKMJF 7.1 Appendix; and
- External disclosures prepared for Pembina as part of due diligence related to the pipeline Transaction (Appendix C of PKMJF's September 21, 2020 letter (at pdf p. 18-19 of 20).

The costs presented in each bullet above, often are unreconcilable to each other. This is discussed in the sections below.

1.1 SUMMARY OF RECOMMENDATIONS

In general, the record as provided by PKMJF does little to justify the 2019 revenue requirement even with the substantial page count provided to date in this proceeding. The 2019 revenue requirement includes substantial cost increases compared to past years in many cost categories without justification, or demonstration of either changed pipeline operation or a unique operational event. PKMJF additionally provides no evidence of cost control or prudent management of operating activities in its Application.

Instead the main reason for the cost increases seems to be to justify the proposed level of tolls charged to customers and to protect PKMJF's annual revenues. For the past decade, PKMJF's tolls were set based on a negotiated settlement, where revenue requirement was not established based on a pure cost of service framework. This is discussed more in the Pre-Filed Testimony of Mr. Bowman (Appendix A). As a result, PKMJF booked substantial net returns in this period in excess of █████ of rate base.

Suddenly, this level of return has vanished for 2019, with PKMJF's forecast expenses increasing [REDACTED] from 2018 ([REDACTED] from operating cost increases alone).² This cost increase is **before** inclusion of PKMJF's proposed return and its proposed Abandonment surcharge. PKMJF's last Revenue Requirement Application before the BCUC (for 2008 tolls) similarly proposed large increases to costs that were not approved in revenue requirement and did not materialize in actual costs (see Figure 1 below).

Table 1 presents the outcomes of this Pre-Filed Testimony, including quantifications of all recommendations in Revenue Requirement. As Depreciation Expense and the overall level of return have not been addressed in this Pre-Filed Testimony, these expenses have been left out from the table completely:

Table 1: Resulting Revenue Requirement Adjustments from Pre-Filed Testimony Recommendations

2019 Proposed Revenue Requirement	2019 PKMJF Forecast	Proposed Adjustments	Resulting 2019 Rev. Requirement
Operating Costs			
Fuel & Power	304,000		
Property Tax	153,000		
Direct Field Expense	1,825,000		
A&G Allocation	1,358,000		
Total Operating Expense	3,640,000	(1,000,000)	2,640,000
Depreciation Expense	n/a	n/a	n/a
Provision for Income Taxes	628,000		
Integrity Costs	541,000		
Rate Case Costs	141,000		
Total Expenses	4,950,000	(1,718,113)	3,231,887

The resulting level of revenue requirement is based on specific and detailed recommendations summarized below. At a high level, however, the recommendations in this evidence remain extremely accommodating to PKMJF, permitting a level of cost growth since the last detailed regulatory review in 2008 exceeding [REDACTED] over 11 years (compounded growth of [REDACTED] per year)³, which is well over [REDACTED] the level of inflation. Comparatively, BC CPI was 17% or 1.44% per year for this period.⁴ This level of cost growth is still significant given the pipeline operations should have been able to find efficiencies over the period so as to drive cost growth below inflation, and notwithstanding that in the test years operating costs should be heavily constrained by PKMJF if the assertion that the pipeline faces imminent retirement is to be believed.

² 2019 Application forecast costs before return equal \$6.830 million compared to [REDACTED] in actual expenses for 2018 as per PKMJF's income statement, from Confidential Exhibit B-41-1 Parkland (IR2)

³ Compared to actual expenditures in 2008 of [REDACTED] (not including depreciation or level of return)

⁴ As per BC Statistics Consumer Price Index (CPI), Annual Averages, (All Items Index where 2002 equals 100, 2019 = 131.4 and 2008 = 112.3, calculated as $[(131.4/112.3)^{1/10}-1]=1.44\%$), available online: https://www2.gov.bc.ca/assets/gov/data/statistics/economy/cpi/cpi_annual_averages.pdf

Operating Expenses (Section 3.0):

PKMJF's 2019 operating expenses, specifically Direct Field Expenses and A&G allocations (including Integrity and Rate Case costs) are much higher than in previous years. Over the last 10 years, rates have not been set based on a regulated revenue requirement, and therefore the level of expenses in 2009 – 2018 have not been reviewed or approved. This increase has not been properly justified especially given, i) operations have not been altered, and ii) if the pipeline's retirement is imminent PKMJF should be reducing operating costs as much as possible over the forecast time period.

Direct Field Expenses (Section 3.1):

PKMJF has provided no justification for the substantial increase to 2019 Direct Field Expenses and Integrity Costs. The BCUC should caution PKMJF against excessive spending in an effort to justify tolls well above demonstrated costs. Meaningful reductions are warranted to PKMJF's forecast and are detailed in the following recommendations.

- For Field Payroll, actual expenditures of \$587,000 should be approved in the revenue requirement as long as the A&G cost allocations are reduced by the corresponding level of Direct staffing as a result. At present, it appears considerable overlap between these two cost components exists (as forecast A&G spending through shared allocations is increasing from previous year allocations).
- For Field and Tank Major Maintenance costs: For Field and Tank Major Maintenance costs: There is no supporting detail for these forecast costs despite the fact that there exists potential for considerable overlap with Integrity and even A&G Costs. Plus, there were no actual expenditures in this category for 2019. These costs (totalling \$355,000) should not be approved in revenue requirement, and instead removed as a subcomponent of Direct Field Expense (including forecast costs). These costs are provided for elsewhere. Further, unless PKMJF can provide detailed and specific known expenditures for 2020 or 2021 and can prove these costs are different than those included in Integrity costs, the BCUC should not include any costs in 2020 or 2021 either.
- For Employee Expenses, the forecast amount of \$93,000 should be approved.
- PKMJF claims "Outside Services" spending in Direct Field Expense (\$420k in 2019), that on its face appears to overlap with Direct Field Payroll and integrity costs, exceeds previous years, and conflicts with a claimed 2021 retirement. Despite this context, PKMJF has not provided support for this level of spending in its forecast, although it was repeatedly asked.

Also, actual expenditures raise substantial questions related to the ability of PKMJF to control costs and prudently manage spending to that which is needed to safely operate the pipeline given the overlap with Integrity cost reporting and lack of supporting detail.

Unless PKMJF can provide evidence that these services are outside of the abilities of its Direct Field Payroll and can show a management plan for how Outside Service spending is minimized and any spending that has occurred is necessary and different in application than Integrity Cost spending, these costs should be disallowed from revenue requirement within Direct Field Expense.

- PKMJF’s forecast expenditures for Direct Field Expenses and A&G costs are higher than actual costs⁵ and directionally supports the proposed reductions to both in PKMJF’s 2019 revenue requirement. While 2019 actuals include [REDACTED], as those are not costs incurred to provide service to shippers, [REDACTED] must be removed from actuals before making comparisons.

Table 2 below summarizes the recommended changes to revenue requirement for Direct Field Expense:

Table 2: Recommended Direct Field Expense Adjustments (\$000)

	<u>2019 Forecast</u>	<u>2019 Actuals</u>	<u>2019 Recommend</u>
Field Payroll	562	587	587
Field Non-Payroll			
Employee Expenses	93	180	93
Materials/Supplies/Parts/etc.	121	42	121
Outside Services	420	647	0
Vehicle Expenses	45	0	45
Rents	162	162	162
DOT Fees	7	8	7
Other	60	135	60
Field Major Maintenance	340	0	0
Tank Major Maintenance	15	0	0
Subtotal	<u>1,263</u>	<u>1,174</u>	<u>488</u>
Adjust for removal of [REDACTED]		[REDACTED]	
Direct Field Expenses	<u>1,825</u>	[REDACTED]	<u>1,075</u>

Integrity Costs (Section 3.1.3):

- Even assuming that PKMJF’s recent integrity spending has been appropriate from an engineering perspective, the BCUC should reject the level of Integrity Costs proposed by PKMJF *for tolls*. PKMJF just spent similarly high levels in 2017 and it would appear that most if not all pipes have already been assessed within PKMJF’s standard five-year timeframe. Averaging PKMJF’s forecast expenditures over five years instead of three would align with the user pay / cost causation principle, previously paced levels of spending and previously approved cost treatment. This results in normalized Integrity Costs of \$336,200 in revenue requirement.

Rate Case Costs (Section 3.1.4):

⁵ Removing from Actual Direct Field Expenditures reduces 2019 actuals to \$1.6 million. Removing from A&G results in actual expenditures of \$1.216 million, both below forecast expenditures.

- The BCUC should include the normalized Rate Case costs as forecast (\$141,000 per year).

A&G Allocation (Section 3.2):

There are multiple problems with the proposed A&G cost allocation: the allocation methodology drives a significant proportion of the proposed tolls, there is no transparency in the underlying costs and methodology used, the BCUC has not considered this methodology before for the jet fuel pipeline and, in the intervening period since the last BCUC review, the A&G allocation has both increased significantly and PKMJF has adopted different cost practises for direct staff cost assignment.

Careful BCUC scrutiny is therefore warranted. The previous allocation methodology was adopted only after it was examined and tested by the National Energy Board, for example, which unfortunately can not be undertaken with the information PKMJF has provided on the record. As a result, PKMJF's proposed A&G allocation can not be supported as reasonable for inclusion in tolls. Absent approval of the methodology for PKMJF's circumstances, or an adjusted variation of it, PKMJF's associated cost assertions should be treated as unsupported calculations.

- In the absence of PKMJF's finalized A&G allocation methodology review, A&G expense for inclusion in PKMJF's 2019 revenue requirement should be reduced by approximately \$250,000. In its next application PKMJF should be directed to file its completed review, with supporting justification for the allocation of relevant overhead costs based on appropriate cost drivers for review (based on annual amounts).

Income Taxes (Section 3.3):

- Revenue Requirement for 2019 should be approved in the amount of [REDACTED] based on actual Income Taxes as reported in PKMJF's 2019 income statements.

2.0 OVERVIEW OF REVENUE REQUIREMENT

PKMJF's proposed tolls for 2019 are based on a forecast revenue requirement, plus a surcharge for future abandonment costs, as brought forward in its Amended Application, Exhibit B-14. For subsequent years 2020 and 2021, PKMJF is proposing a 2% escalation factor to revenue requirement amounts.⁶

PKMJF's Application follows a 10-year period 2009 – 2018, where tolls were set based on a negotiated settlement. Tolls were last set based on proposed costs in 2008. Of note:

- Over the negotiated settlement period, PKMJF's approved revenue was much higher than total costs in all years. As a result, PKMJF's net return over this period was on average [REDACTED] of total revenue each year (or an average of [REDACTED] per year).
- Specifically for revenue requirement, PKMJF claims that its actual operating expenses (which includes Direct Field Expenses, Fuel and Power, Administrative & General allocation, and Property Taxes) more than [REDACTED] over the negotiated settlement period, growing [REDACTED] or [REDACTED] per year. Comparatively, cumulative CPI growth for British Columbia over the period

⁶ As confirmed in Exhibit B-38, Responses to VAFFC IRs No.2, VAFFC IR 24.3

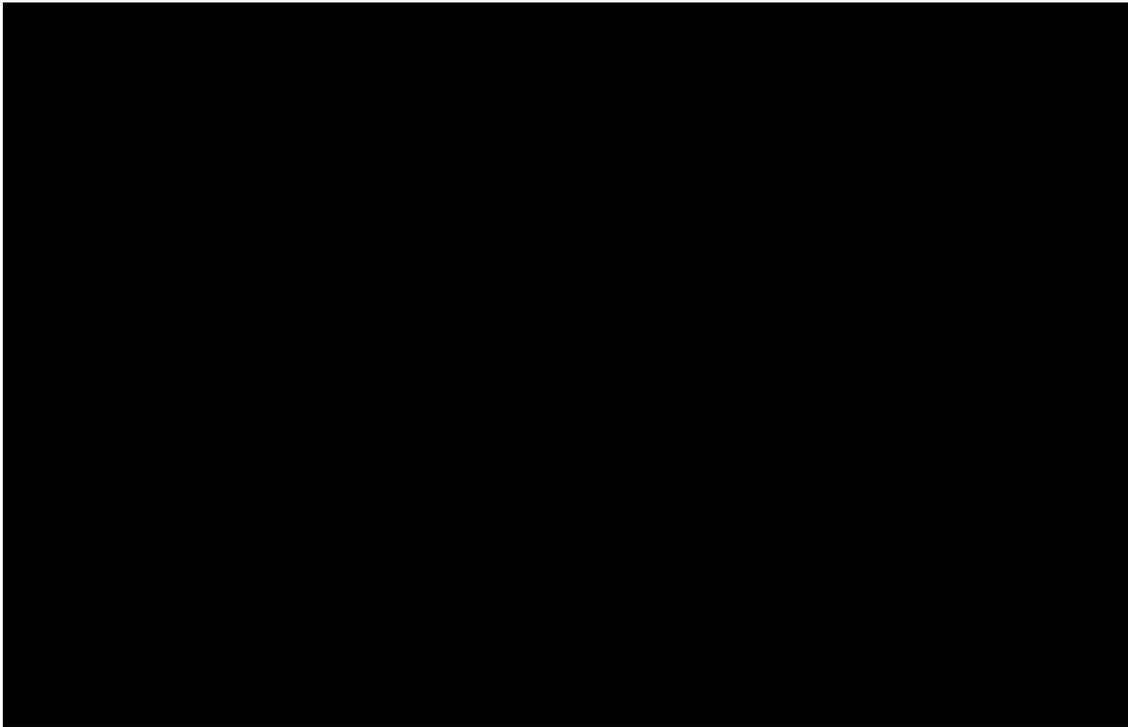
2008 – 2018 totaled 14.34%, or 1.35% average per year.⁷ PKMJF's growth is driven primarily by increases to Direct Field Expenses and the Administrative & General ("A&G") allocation.

This increase is nonsensical for a pipeline that has i) not altered its operation or service provision, and ii) claims to be nearing abandonment in the short-term. This is discussed more in the section on Operating Expenses below.

- The 2009 – 2018 negotiated settlement implemented a changed methodology that transferred the financial risk of fluctuating load from customers to PKMJF. As a result, regardless of the amount of fuel shipped over the pipeline, total revenue was guaranteed for PKMJF. This was a marked change in toll methodology that essentially eliminated the risk of PKMJF not receiving its full revenue requirement and protecting its level of return. PKMJF's 2019 toll Application proposes the same treatment in its 2019 Application without adjusting the level of return correspondingly to reflect its diminished financial risk.

Figure 1 below compares the proposed total revenue and expenses from the Application for years 2019 to 2021 (with and without the proposed Abandonment surcharge) with actuals from 2006 to 2019. Additionally, shown is the proposed revenue requirement (including return) proposed in the 2008-2011 Revenue Requirement Application for the pipeline before the BCUC.

⁷ As per BC Statistics Consumer Price Index (CPI), Annual Averages, (All Items Index where 2002 equals 100, 2018 = 128.4 and 2008 = 112.3, calculated as $[(128.4/112.3)^{1/10}-1]=14.34\%$), available online: https://www2.gov.bc.ca/assets/gov/data/statistics/economy/cpi/cpi_annual_averages.pdf

Figure 1: Actual and Proposed Revenue and Expenses (\$000)⁸

The five different coloured bars and one line provide relevant background when reviewing the 2019 Application:

- The yellow bars show the forecast revenue requirement last before the BCUC in the 2007 Application for tolls starting January 1, 2008. This is the last Application before the BCUC and included a proposal for accelerated depreciation and removal costs with a terminal retirement date of 2012. This Application was not approved but shows proposed revenue requirement in line with the current Application, despite the earlier Application including Abandonment costs and extreme acceleration of depreciation.
- The blue bars show total revenues as approved by the BCUC.⁹ From 2006 to 2008 revenues increased by 4% per year. Following the negotiated settlement, revenues increased by 41% from

⁸ Revenue as per Confidential Exhibit B-41-1 Parkland (IR2), Income Statements. 2007 Application Proposed Expenses as per Trans Mountain (Jet Fuel) Tolling Fuel Application, Exhibit B-5, Responses to BCUC IR Rd. 1, IR 15.1, pdf page 29 of 182. 2006 and 2007 Actual revenues and expenses as per 2007 Application, Exhibit B-1, Schedule 16, page 23 (where expenses equal total revenue requirement less Return on Rate Base). 2% escalator applied to 2008 Expenses is used as proposed by PKMJF in Exhibit B-11, BCUC (IR2) 4.1 that, "the 2.00% annual escalation factor is an estimate of overall cost increases ... that the total revenue requirement will increase by approximately 2.00% annually."

⁹ 2009 – 2018 as approved via negotiated settlement in BCUC Decision P-5-09. 2019 interim toll based on 2018 approved with 2.5% escalation as approved in BCUC Decision P-1-18. 2020 interim tolls based on 2019 interim as approved in BCUC Decision P-13-19. 2021 revenues not included as tolls have not yet been approved.

2008 to 2009. From 2009 to 2010 revenues increased a further 21%. Thereafter from 2010 to 2018, revenues have increased by 2.5% each year on average approved based on the negotiated settlement. 2019 revenues were approved on an interim basis, consistent with existing methodology of increasing tolls 2.5% per year. Thereafter 2020 and 2021 revenues have been approved on an interim basis equal to 2019.

- The red bars show reported expenses (not including a return component) from PKMJF's actual income statements from 2006 - 2019. These expenses are discussed further in this section below, however in general actual costs in every year were [REDACTED] than revenue. This does not hold for 2017, entirely due to an adjustment made to depreciation (to correct a PKMJF depreciation booking error) to align income statement depreciation with the approved levels agreed in the 2010 negotiated settlement as interpreted by PKMJF (Exhibit A2-1).
- The green bars show PKMJF's proposed revenue requirement for the test years 2019 – 2021 as provided in its 2019 Revised Application (Exhibit B-14, page 18).
- The grey bars show PKMJF's proposed full revenue requirement for the test years as shown by the green bars plus the abandonment surcharge of \$4.102 million per year.¹⁰
- The black dashed line tracks expenses to the level last approved in full with the 2008 Application, escalated by 2.00% each year, in line with PKMJF's proposed escalation factor for average annual cost increases (as a comparison, BC CPI was 1.44% per year over this timeframe).¹¹

The difference between the red and blue bars reflects the return earned by PKMJF's shareholder in each year. Contrasting the years 2006 to 2008 to the years thereafter (which were not subject to detailed regulatory scrutiny) shows the effective application of just and reasonable tolls from 2006 to 2008, in limiting the level of return for PKMJF.

For forecast 2019, PKMJF's Application, including the abandonment surcharge and return, represents a 62.2% increase from 2018 approved tolls. Compared to 2008 (the last time revenue requirement was reviewed and approved by the BCUC in a contested application) this is an **increase of 229% from approved tolls**.¹²

On a total expense basis (i.e. **not** including the proposed abandonment surcharge and return), PKMJF's 2019 forecast represents an increase in expenses of [REDACTED] from 2018 ([REDACTED] from operating cost increases alone).¹³ To be clear, the 2019 Application increases costs [REDACTED] from the last year of the negotiated

¹⁰ As calculated in Exhibit B-14, Amended Application, Updated Table 9

¹¹ As per BC Statistics Consumer Price Index (CPI), Annual Averages, (All Items Index where 2002 equals 100, 2019 = 131.4 and 2008 = 112.3, calculated as $[(131.4/112.3)^{1/11-1}] = 1.44\%$), available online: https://www2.gov.bc.ca/assets/gov/data/statistics/economy/cpi/cpi_annual_averages.pdf

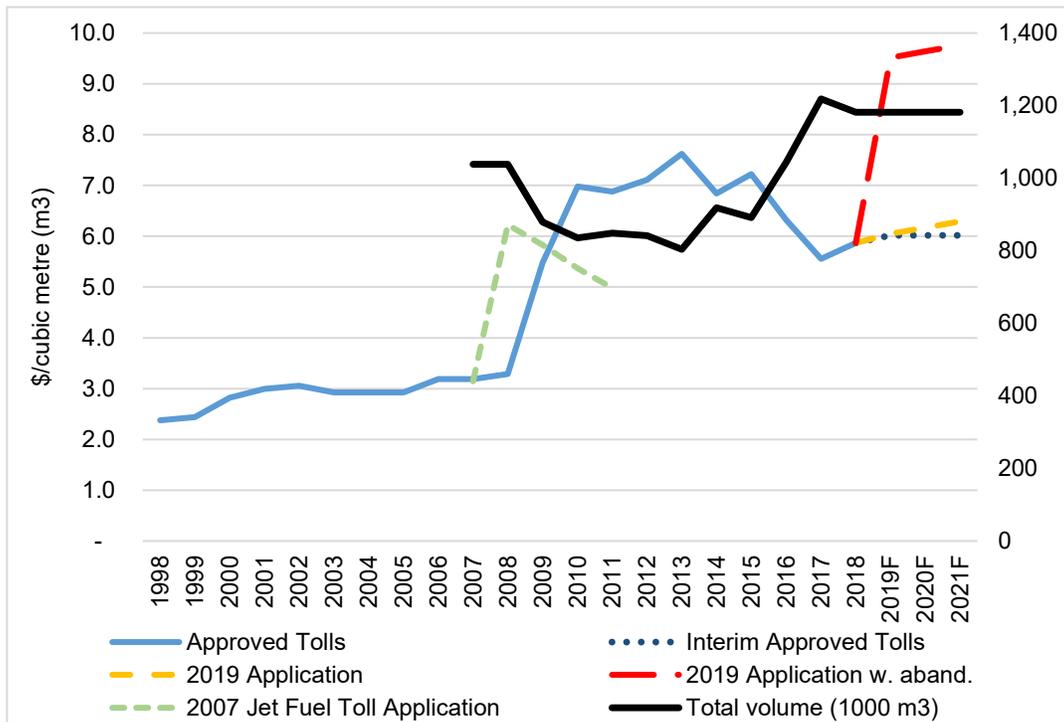
¹² 229% calculated as total revenue requirement for 2019 with abandonment surcharge is \$11.252 million, divided by 2008 approved revenue requirement of [REDACTED]. 62.2% calculated from total revenue requirement with abandonment surcharge of 11.252 million divided by actual 2018 revenue requirement of \$6.938 million

¹³ 2019 Application forecast costs before return equal \$6.830 million compared to [REDACTED] in actual expenses for 2018 as per PKMJF's income statement, from Confidential Exhibit B-41-1 Parkland (IR2)

settlement. Compared to 2008, forecast 2019 expenses have [REDACTED] or approximately [REDACTED] on average per year.

Figure 2 below (with supporting data table underneath) graphs the resulting historic and proposed tolls, on a dollars per cubic metres basis, dating back to 1998:

Figure 2: Comparison of Tolls 1998 - 2021¹⁴



	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Total Volume (1000 m3)	-	-	-	-	-	-	-	-	-	1,038,425	1,038,235	879,464
Approved Tolls	2.38	2.44	2.82	2.99	3.06	2.92	2.92	2.92	3.19	3.19	3.29	5.48
2007 Application	-	-	-	-	-	-	-	-	-	3.15	6.22	5.83
Interim Approved Tolls	-	-	-	-	-	-	-	-	-	-	-	-
2019 Application	-	-	-	-	-	-	-	-	-	-	-	-
2019 Application w. Abandon.	-	-	-	-	-	-	-	-	-	-	-	-

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019F	2020F	2021F
Total Volume (1000 m3)	835,633	848,592	841,405	804,095	918,360	891,831	1,044,884	1,218,497	1,182,134	1,182,142	1,182,142	1,182,142
Approved Tolls	6.98	6.88	7.11	7.63	6.84	7.22	6.32	5.55	5.87	-	-	-
2007 Application	5.37	4.98	-	-	-	-	-	-	-	-	-	-
Interim Approved Tolls	-	-	-	-	-	-	-	-	-	6.02	6.02	6.02
2019 Application	-	-	-	-	-	-	-	-	-	6.05	6.17	6.29
2019 Application w. Abandon.	-	-	-	-	-	-	-	-	-	9.52	9.64	9.76

From 1998 to 2008 the Commission’s decisions with respect to the Jet Fuel pipeline set final tolls on a dollar per cubic metre basis. Starting in 2009 (retroactively) to 2018, the negotiated settlement applied a total

¹⁴ Approved Tolls as per Decisions P-3-98, 9-2-99, 9-2-00, P-2-01, P-1-02, P-4-02; P-1-04; P-2-05; P-1-06; P-2-06, P-3-08 and P-5-08, P-1-09; P-9-08 and calculated for years 2009 – 2018 based on total revenues (shown in figure above) and confirmed in Exhibits B-1 at PDF p 10 divided by Total volume from Exhibit B-13, Response to VAFFC IR No.1, VAFFC 6.1 with Forecast volumes as per Exhibit B-14, Amended Application, page 10. Tolls from 2007 Application as per Trans Mountain (Jet Fuel) Tolling Fuel Application, Exhibit B-5, Responses to BCUC IR Rd. 1, IR 15.1, pdf page 29 of 182. Interim Tolls for 2019 – 2021 based on approved revenue requirement in Orders P-1-18, P-1-20, and P-8-20 divided by forecast volume. 2019 Application Tolls as per Proposed Revenue Requirement for years 2019-2021, shown in Exhibit B-14, page 18 divided by forecast volume.

revenue requirement, with tolls back calculated from actual load. This *fundamentally* changed the risk profile such that tollpayer charges no longer varied based on volume. Instead shippers paid a pre-calculated amount, consistent month over month, increasing on average 2.5% each year from 2010 – 2018. At the same time, the utility no longer bore any risk to revenues as a result of volume fluctuations.

For example, in the event this methodology is adopted for 2020, actual usage volumes are known to be dramatically lower due to the ongoing COVID-19 pandemic and reduced airline travel out of the Vancouver airport, which will result in a higher calculated $\$/\text{m}^3$ toll than the graph shows, all else equal. So, if volume decreased in 2020 by 50% this would effectively double the approved interim toll that shippers paid on a unit basis, from $\$6.02/\text{m}^3$ to $\$12.03/\text{m}^3$.

3.0 OPERATING EXPENSES

PKMJF's operating costs include Direct Field Expenses, Fuel and Power, Administrative & General, and Property Taxes. Combined for the 2019 test year these expenses make up $\$3.64$ million, or 51% of total revenue requirement. In years following, PKMJF forecasts expenses to each increase by 2% per year.¹⁵

Pembina Pipeline Corporation acquired KMJF, and relabelled it PKMJF, after the initial filing of Revenue Requirement Application, however the legal Applicant in this proceeding has not changed. The same corporate entity has provided service on the jet fuel line since 1969. As noted, PKMJF adopts the proposed cost forecasts in the Application and that:

PKMJF further notes that the Kinder Morgan Inc. and Kinder Morgan Canada Services entities are also large corporations, as is the case with Pembina Pipeline Corporation, who acquired KMJF and changed the name of KMJF to PKMJF. PKMJF for this reason does not expect that it will achieve any further economies of scale, not already reflected in the costs claimed in the Application. For these reasons, PKMJF will also rely on the costs of service amounts set out in the Application, where costs are allocated.¹⁶

The three main issues with operating expenses include:

1. PKMJF's 2019 operating expenses, specifically Direct Field Expenses and A&G allocations (including Integrity and Rate Case costs) are much higher than in previous years. Over the last 10 years, rates have not been set based on a regulated revenue requirement, and therefore the level of expenses in 2009 – 2018 have not been specifically reviewed or approved. The costs in these years cannot be justified as reasonable and there has been no evidence provided of reasonable cost control, especially given the very high annual average growth year-over-year. This increase has not been properly justified especially given, i) operations have not been altered, and ii) if the pipeline's retirement is imminent PKMJF should be reducing operating costs as much as possible over the forecast time period.
2. While PKMJF has provided a considerable amount of information in this process to date from a page count perspective, PKMJF has not provided the information requested by VAFFC to support its proposed expenses as reasonable for recovery from shippers, despite being asked. This Pre-

¹⁵ Exhibit B-38, Response to VAFFC IR 24.3

¹⁶ Exhibit B-33, paragraph 13, page 4

Filed Testimony provides detailed cost review of Direct Field Expenses, Integrity Costs and A&G allocations, with specific recommendations for adjustments to Revenue Requirement and resulting tolls.

3. [REDACTED]

Each of these issues is discussed in further detail in the sections below.

A typical method to assess the appropriateness of test year operating forecasts is to compare to actual operating expenditures in past years. As PKMJF's operating expenditures have not been reviewed in over ten years, its not adequate to merely confirm that 2019 forecast expenditures are reasonable compared to the previous year actuals. Any reliance on previous year actuals requires demonstrating the reasonableness of those costs, i.e. that expenditures over the period since 2008 (i.e. the last time the BCUC reviewed the jet fuel pipelines operating expenses in detail) have been prudently incurred and cost control has been effectively implemented.

VAFFC requested detailed actuals and expense justification in the interrogatory stage for this purpose. Unfortunately, it is difficult to assess the year-over-year changes and longer-term trends for the Direct Field Expenses and A&G cost categories due to account restructuring.¹⁷ Additionally comparisons are difficult, since while not included in its Application specifically as operating expenses, [REDACTED] have been included within the [REDACTED] category in PKMJF's actual income statements. Nevertheless this Pre-Filed Testimony attempts to reconcile and then review PKMJF's proposed and actual spending for these cost categories.

PKMJF's actuals as reported in this proceeding are compared to PKMJF's income statements actuals for the years 2008 to 2018.

The key takeaway from Table 3 below, is that from the 10-year period 2009 – 2018, which represents the negotiated settlement period, the cumulative net return (or overall return overall capital) was [REDACTED], averaging [REDACTED] per year or approximately [REDACTED] of total revenue. This level of return is excessive relative to any awarded in a cost of service based toll, in Canada or elsewhere.

In addition, the costs that PKMJF has booked against this revenue have more than [REDACTED] over this timeframe, increasing by [REDACTED] (on average [REDACTED] per year). On its face, this level of sustained cost increase does not represent responsible cost control and utility management. Tolls set based on reasonable and necessary costs to serve tollpayers in the test period should not reflect annual increases of this magnitude.

¹⁷ Exhibit B-25, Further Response to VAFFC IR 22.1 and 23.1

Table 3: 2008 – 2018 Actual Revenue Requirement compared to Income Statement Results¹⁸

	2008 Income Statement	2009 from Application	2009 Income Statement	2010 from Application	2010 Income Statement	2011 from Application	2011 Income Statement	2012 from Application	2012 Income Statement	2013 from Application	2013 Income Statement
Transportation Revenue		4,665,808		5,694,000		5,836,350		5,982,259		6,131,815	
Other Revenue		150,000									
Total Revenue		4,815,808		5,694,000		5,836,350		5,982,259		6,131,815	
Fuel & Power		157,188		194,991		203,580		228,439		218,476	
Property Tax		149,726		149,768		154,831		161,464		167,896	
Direct Field Expense		691,003		752,949		714,081		907,953		985,616	
A&G Allocation		919,577		1,076,967		1,327,924		1,507,182		1,949,026	
Total Operating Expense		1,917,494		2,174,675		2,400,416		2,805,038		3,321,014	
Depreciation Expense		559,223		781,405		794,372		802,916		844,368	
Depreciation Disposal Costs		-		-		-		-		-	
Provision for Income Taxes		224,446		980,629		577,075		477,959		376,659	
Total Expenses		2,701,163		3,936,709		3,771,863		4,085,913		4,542,041	
Net Return		2,114,645		1,757,291		2,064,487		1,896,346		1,589,774	
Integrity Costs		93,690		251,000		170,000		418,048		472,688	
Rate Case Costs		-		-		-		-		-	

	2014 from Application	2014 Income Statement	2015 from Application	2015 Income Statement	2016 from Application	2016 Income Statement	2017 from Application	2017 Income Statement	2018 from Application	2018 Income Statement	2008 - 2018 Inc. St. % Avg. Annual Increase
Transportation Revenue	6,285,111		6,442,238		6,603,294		6,768,377		6,937,586		
Other Revenue											
Total Revenue	6,285,111		6,442,238		6,603,294		6,768,377		6,937,586		
Fuel & Power	245,380		240,988		287,781		344,220		337,279		
Property Tax	177,785		173,978		171,996		158,243		148,270		
Direct Field Expense	1,010,889		718,863		988,965		1,432,769		1,454,554		
A&G Allocation	2,316,124		2,033,551		2,727,243		2,999,867		1,970,120		
Total Operating Expense	3,750,178		3,167,380		4,175,985		4,935,099		3,910,223		
Depreciation Expense	866,843		853,309		860,987		859,345		880,366		
Depreciation Disposal Costs	-		-		-		-		-		
Provision for Income Taxes	292,720		546,273		408,444		288,131		645,409		
Total Expenses	4,909,741		4,566,962		5,445,416		6,082,575		5,435,998		
Net Return	1,375,370		1,875,276		1,157,878		685,802		1,501,588		
Integrity Costs	247,198		177,986		413,222		1,167,771		250,275		
Rate Case Costs	-		-		-		-		-		

¹⁸ Actuals from Information Requests as per Exhibit B-11, pdf p. 18, BCUC IR 4.3, Exhibit B-13, pdf pp. 177-182, Appendix VAFFC-KMJF 4.13, Exhibit B-13, pdf p. 90, VAFFC IR 20.2 and Exhibit B-11, pdf p. 103, Tariff No 39, Table 1. Actual Transportation revenue from Final Letter to Shippers, December 7, 2009, page 2. Income statement expenses from Confidential Exhibit B-41-1 Parkland (IR2). Note: PKMJF was unable to provide 2008 historical operating expenses in the Application. See Exhibit B-13, PKMJF response to VAFFC 22.1(a)-(i) for example.

There are [REDACTED] between PKMJF's reported actuals and the actual results provided in the PKMJF income statements. This includes:

- Depreciation expense [REDACTED] This is completely due to a booked adjustment to depreciation in 2017 to align the accounting records with the approved depreciation rates.¹⁹ [REDACTED]
- PKMJF's actual income tax as reported in the Application is [REDACTED]²⁰
- Actual revenue [REDACTED]²¹
[REDACTED]²²

For 2019, in its last round of disclosures, PKMJF provided two sets of income statements for the full year, one for each Kinder Morgan and Pembina. [REDACTED]

Further, and completely inconsistent with normal regulatory practises and principles for rate setting²⁴ as well as prudent long-term asset management, PKMJF stated that historical cost data is of no relevance to the costs being forecast for 2019.²⁵

Before assessing the reasonableness of PKMJF's specific 2019 revenue requirement, it is necessary to ensure that the multiple data sets received from PKMJF can be reconciled to ensure proper comparison.

¹⁹ Exhibit B-38, PKMJF response to VAFFC Rd2 IR 24.5

²⁰ Total income tax paid per income statements from 2009 – 2018 is [REDACTED], compared to total income tax of \$4.817 million provided in Exhibit B-13, response to VAFFC IR 20.2, pdf page 90

²¹ Exhibit B-38, PKMJF response to VAFFC Rd2 IR 24.5

²² Comparing income statement and application revenue from Table 2, the amounts are [REDACTED]

²³ Exhibit B-13, PKMJF response to VAFFC Rd1 IR 22.1(a)-(i) and IR 23.1(a)-(d)

²⁴ For example, in Exhibit A-18, BCUC Order P-10-19, pdf page 10, the BCUC noted that, "the Panel agrees with VAFFC that a reasonableness review is a fundamental part of ratemaking and notes and that historical cost information as well as justification for certain expenditures is highly relevant and necessary to assess whether costs have been prudently incurred; if forecast costs are reasonable; and how costs, including those associated with accelerated depreciation of assets, should be appropriately recovered from shippers."

²⁵ Exhibit B-13, PKMJF response to VAFFC Rd1 IR 22.1(a)-(i) and IR 23.1(a)-(d)

The table below reconciles three different data sets for 2019, PKMJF's forecast revenue requirement (which includes normalized Integrity and Rate Case costs as well as accelerated depreciation), PKMJF's actual 2019 income statement results (which includes its approved Depreciation expense rates as well as total expenditures related to Integrity and Rate Case costs) and PKMJF reported 2019 actuals (again includes total not normalized spending for Integrity and Rate Case costs and approved Depreciation expense).

Table 4: 2019 Cost Reconciliation – Forecast vs. Actual²⁶

	2019F (Amended Application)	2019 Actuals Income Statement	2019 Actuals per Exh. B-39
Transportation Revenue	7,150,146		-
Other Revenue	-		-
Total Revenue	7,150,146		n/a
Fuel & Power	304,000		369,000
Property Tax	153,000		147,000
Direct Field Expense	1,825,000		1,761,000
A&G Allocation	1,358,000		1,468,000
Total Operating Expense	3,640,000		3,745,000
Depreciation Expense	1,880,000		782,191
Depreciation Disposal Costs	-		53,789
Provision for Income Taxes	628,000		n/a
Integrity Costs	541,000		1,409,000
Rate Case Costs	141,000		601,000
Total Expenses	6,830,000		6,590,980
Net Return	320,146		n/a

PKMJF's reported actuals [REDACTED]

[REDACTED]. As the income statements provide much more component level detail than does PKMJF's Application material and information request responses, the income statements are used to examine actual spending in more depth in the next sections. [REDACTED]

[REDACTED]²⁷

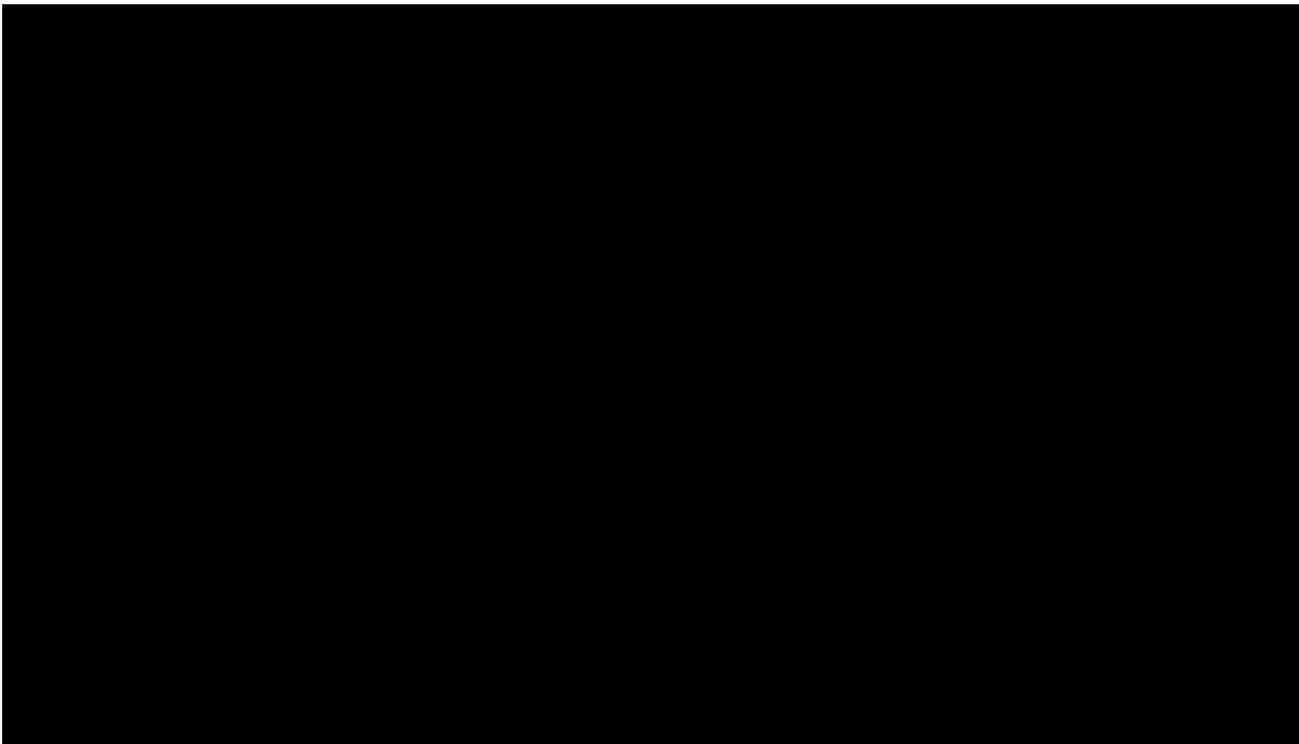
²⁶ 2019 Actual Income Statement – combined total from Confidential Exhibit B-41-1 Parkland (IR2) pages 47 – 55, sum of KM Canada Jet Fuel and PKM Canada (Jet Fuel) and 2019F from Amended Application Exhibit B-14, page 20. Transportation Revenue back-calculated to arrive at requested return on rate base. 2019 Actual Expenses as per Application from Exhibit B-39, Appendix Parkland(IR2)-PKMJF 7.1. 2019 Actuals from Exhibit B-39, Appendix Parkland(IR2)-PKMJF 7.1. Total revenue, actual return and provision for income tax not provided in this response.

²⁷ As shown in the table above and noted by PKMJF in response to Exhibit B-39, PKMJF response to Parkland Rd2 IR 5.1

In assessing PKMJF’s Application for reasonableness, 2019 operating expenses (including Rate Case and Integrity costs), are much higher than in all previous years, as shown in Figure 3 and supporting table below, due to increases in the A&G and Direct Field Expense cost categories. From 2008 – 2018, operating costs increased on average by [REDACTED] per year. For 2019, actual operating costs increased from 2018 [REDACTED]

While PKMJF does not propose to collect all of these expenditures in 2019 (both Integrity costs and Rate Case costs are proposed to be spread out over the three-year period 2019 – 2021), it is appropriate to include the total spending when assessing the reasonableness of overall expenditures in comparison to past years of total spending.

Figure 3: Comparison of Actual Operating Expenses (including Integrity and Rate Case costs) 2008 - 2019²⁸



As a further comparison for actual operating expenses, PKMJF (then owned by Kinder Morgan) disclosed its financial information as part of the due diligence undertaken for the pipeline acquisition by Pembina. In this version of its financials, operating costs are [REDACTED] compared to actual operating costs.

[REDACTED]

²⁸ Income statement expenses from Confidential Exhibit B-41-1 Parkland (IR2). Integrity Costs from Exhibit B-11, Response BCUC(R2) IR 4.5. Direct Field Expenses calculated as income statement actuals less Integrity costs for years 2009 – 2018. 2019 actuals as provided in Exhibit B-39, Appendix Parkland(IR2)-PKMJF 7.1 which at a total level [REDACTED] income statement actuals.

Table 5: Comparison of Actual Operating Expenses (including Integrity and Rate Case costs) 2008 - 2019²⁹

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Fuel & Power	[REDACTED]											369
Property Tax	[REDACTED]											148
Direct Field Expense	[REDACTED]											1,761
A&G Allocation	[REDACTED]											1,468
Integrity Costs	-	94	251	170	418	473	247	178	413	1,168	250	1,409
Rate case costs	[REDACTED]											601
Total Operating Costs	[REDACTED]											5,756
YOY % Change	[REDACTED]											[REDACTED]

Table 6: [REDACTED] ³⁰

[REDACTED]

²⁹ Income statement expenses from Confidential Exhibit B-41-1 Parkland (IR2). Integrity Costs from Exhibit B-11, Response BCUC(R2) IR 4.5. Direct Field Expenses calculated as income statement actuals less Integrity costs for years 2009 – 2018. 2019 actuals as provided in Exhibit B-39, Appendix Parkland(IR2)-PKMJF 7.1 which at a total level [REDACTED] income statement actuals.

³⁰ CONFIDENTIAL Appendix C of PKMJF’s September 21, 2020 letter (at pdf p. 18-19 of 20)

From Table 6, on average for the years [REDACTED] the disclosure reported cash flow operating costs are [REDACTED], even though all income statement operating costs should be cash flow items (direct field expenses, A&G costs, fuel & power, and property tax). By comparison [REDACTED]. As these files were disclosed in late September, VAFFC was unable to [REDACTED]. **There is no clear explanation for why PKMJF would** [REDACTED]

3.1 Direct Field Expense

PKMJF's proposed tolls include forecast Direct Field Expense of \$1.825 million for F2019, as shown in Schedule 16 of the Amended Application Exhibit B-14. PKMJF later provided its Actual 2019 Direct Field expenses totaling \$1.761 million for 2019. Direct Field Expense makes up half of PKMJF'S proposed operating costs.

3.1.1 High Level Review of Direct Field Expenses

For actuals, Direct Field Expenses includes Integrity Costs within the cost component. PKMJF in responses to Information Requests however, identified actual Integrity costs so net Direct Field Expenses can be back calculated. The table below shows total Direct Field Expenses (with Integrity Costs), Integrity Costs (including total integrity cost spending for 2019, even though PKMJF is proposing to average it out over three years), and the resulting calculated actual net Direct Field Expenses.

Table 7: Actual Direct Field Expenses and Integrity Cost Annual Comparison³¹

Yr.	Actual Direct Field Expenses (incl. Integrity Costs)	Year-over-Year % Change	Integrity Costs	Year-over-Year % Change	Calculated Direct Field Expenses Only	Year-over-Year % Change
	a	b	c	d	e = a - c	f
2008			n/a			
2009			93,690			
2010			251,000	167.9%		
2011			170,000	-32.3%		
2012			418,048	145.9%		
2013			472,688	13.1%		
2014			247,198	-47.7%		
2015			177,986	-28.0%		
2016			413,222	132.2%		
2017			1,167,771	182.6%		
2018			250,275	-78.6%		
2019	3,170,000		1,409,000	463.0%	1,761,000	

In reviewing the total Direct Field Expense year-over-year for reasonableness it is clear that total spending in 2019 was [REDACTED] than in any other year.

[REDACTED] Direct Field Expenses (less Integrity Costs) in each year from 2008 to 2017 varied [REDACTED]. In 2018, Direct Field Expenses increased drastically from any other year, partly due to the addition of Direct salaries and wages (previously allocated through A&G). However, offsetting this impact in part is lower than average spending in Integrity Costs, as seen in other years with higher-than-average Direct Field Expenses ([REDACTED]). For the reverse, in years where Integrity Costs are much higher, Direct Field Expenses have been much less ([REDACTED]). In short, 2019 is an extreme outlier in both total spending and in that PKMJF's actual operations for both Integrity and Direct Field expenses separately were extremely high.

For 2019 however, this is no longer the case as both Direct Field Expenses and Integrity Costs have meaningfully increased from years past, with the combined result of costs more than double those of any other year. There is no justification for this level of increase for 2019 in operating expenses.

Of note, however, total spending of \$3.170 million closely aligns with PKMJF's forecast revenue requirement of \$3.175 million. Especially given the lack of justification or changed operation for the increases in expenditures, it raises an obvious concern that PKMJF's actual spending in 2019 was both the basis for its

³¹ Actual Direct Field Expenses 2008 – 2018 as per Exhibit B-41-1 Confidential Parkland (IR2)-PKMJF Appendices Income Statement. 2019 Actual Direct Field Expenses from Exhibit 39, Appendix Parkland(IR2)-PKMJF 7.1, page 2 of 4. Integrity Costs from Exhibit B-11, Response BCUC(R2) IR 4.5.

forecast and undertaken to justify tolls at the level of the expired negotiated settlement, which for years have been well above costs.

While the remainder of this section provides detailed review and recommendations for PKMJF's proposed Direct Field Expenses, on a consolidated basis there is strong justification to reduce PKMJF's revenue requirement.

RECOMMENDATION: PKMJF has provided no justification for the substantial increase to 2019 Direct Field Expenses and Integrity Costs. The BCUC should caution PKMJF against excessive spending in an effort to justify tolls well above demonstrated costs. Meaningful reductions are warranted to PKMJF's forecast and are detailed in the following recommendations.

3.1.2 Detailed Review of Direct Field Expenses

PKMJF's detailed Direct Field Expenses forecast compared to actuals is shown in the table below.

Table 8: Direct Field Expenses (\$000s)³²

	<u>2019 Forecast</u>	<u>2019 Actuals</u>	<u>Variance</u>
Field Payroll	562	587	(25)
Field Non-Payroll			
Employee Expenses	93	180	(87)
Materials/Supplies/Parts/etc.	121	42	79
Outside Services	420	647	(227)
Vehicle Expenses	45	0	45
Rents	162	162	0
DOT Fees	7	8	(1)
Other	60	135	(75)
Field Major Maintenance	340	0	340
Tank Major Maintenance	15	0	15
Subtotal	<u>1,263</u>	<u>1,174</u>	<u>89</u>
Direct Field Expenses	<u>1,825</u>	<u>1,761</u>	<u>64</u>

PKMJF's Direct Field Expense forecast for the larger line item expenses include:

- **Field Payroll, Vehicles and Employee Expenses (Forecast - \$562k, \$45k and \$93k, combined total \$700k):** For the 2019 forecast, Direct Field Expenses includes five on-site full time employees; two operations technicians, two pipeline protection technicians, and one lead operations technician. Employee expenses includes travel/lodging for annual training, meals and cell phone expenses for the five employees. [REDACTED]

³² Exhibit B-39, Appendix Parkland(IR2)-PKMJF 7.1, page 2 of 4.

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For comparison to actuals, 2019 expenditures for Field Labour, Vehicle and Employee Expenses totalled \$767,000. Base labour was less than forecast

34

Prior to 2019, Field Labour (including overtime), Vehicle and Employee Expenses were included as A&G Direct Staff costs.³⁵ A&G Direct Staff costs (i.e., displacing wages, overtime, shift differential, vacation payouts plus any directly assigned operating costs such as training, vehicles, travel, etc.) are provided in the table below for years 2009 – 2018 compared to 2019 related forecast expenditures:

Table 9: Actual A&G Direct Staff Cost Comparison 2009 – 2018 with 2019 Forecast³⁶

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019F
A&G											
A&G Direct Staff	333	352	397	489	632	688	595	676	647	1,044	-
Allocations	586	725	931	1,018	1,317	1,628	1,438	2,052	2,353	926	-
Total	920	1,077	1,328	1,507	1,949	2,316	2,033	2,727	3,000	1,970	1,358
Direct Field Expense - Direct Employee Expenditures											
Field Payroll											562
Employee Expense											93
Vehicle Expense											45
Total	-	-	-	-	-	-	-	-	-	-	700

It is unclear why A&G Direct Staff costs significantly increased over the 10 year period 2009 – 2018. However, relative to prior year, 2018 A&G Direct Staff costs, the 2019 Field Payroll and Employee Expenses appear reasonable – as long as they are fully replacing A&G Direct Staff costs (i.e. resulting in direct cost efficiencies). While total A&G costs have been reduced for 2019 compared to past years, it is clear total A&G has not decreased by corresponding 2018 Direct Staff levels (approximately \$1 million). Forecast A&G allocations is discussed more in the section on A&G below.

RECOMMENDATION: For Field Payroll, actual expenditures of \$587,000 should be approved in the revenue requirement as long as the A&G cost allocations are reduced

³³ Exhibit B-27, Appendix (Suppl.) VAFFC-KMJF 22.1.FTE (confid), page 1 & 2

³⁴ Exhibit B-27, Appendix (Suppl.) VAFFC-KMJF 22.1.FTE (confid), page 1 & 2

³⁵ Exhibit B-25, KMJF further response to VAFFC IR 22.1

³⁶ Exhibit B-25, KMJF further response to VAFFC IR 22.1.4, Appendix (Suppl.) VAFFC 22.1.4, pdf page 50 of 52. For forecast 2019, as per Schedule 17 of Exhibit B-14, PKMJF does not categorize these costs in the same manner.

by the corresponding level of Direct staffing as a result. At present, it appears considerable overlap between these two cost components exists (as forecast A&G spending through shared allocations is increasing from previous year allocations).

- **Outside Services (Forecast - \$420k):** While A&G and Integrity Costs also have outside services cost categories, for Direct Field Expenses PKMJF states this cost relates to outside services incurred directly to operate the Jet Fuel Line.³⁷

Actual Outside Services expenditures for 2019 were higher than forecast by \$227,000 (54%). Although detail was requested to provide support for the Outside Services forecast, proper justification and demonstration of prudent and required expenditures in this cost category was not provided by PKMJF.³⁸ Nor was any explanation provided for why these costs were so high above forecast. PKMJF provided the following documentation which, while substantive in paper count, provides very little support for outside services, especially for the 2019 test year:

- [Redacted]

³⁷ Exhibit B-34, PKMJF Supplementary Responses to VAFFC IR 23.1

³⁸ VAFFC requested details, including supporting documentation on all outside services procured in excess of \$10,000 including a list of contracts and contract values in Exhibit B-25, KMJF Supplemental Response to VAFFC IR No.1, 22 & 23, 22.1(d), Appendix (Suppl.) VAFFC-KMJF 22.1.5, pdf page 51 of 52

- [REDACTED]
- [REDACTED]
 - [REDACTED]
 - [REDACTED]
- **Field Major Maintenance and Tank Major Maintenance (Forecast - \$340k and \$15k):**
Although the BCUC directed PKMJF to file detailed documents and explanation to support these expenses,⁴⁰ PKMJF claimed it was unable to provide detailed supporting information but noted these expenses in years past included station equipment maintenance, anomaly inspections, and pipeline outside services.⁴¹

Actual expenditures for 2019 did not occur for either cost categories.

RECOMMENDATION: For Field and Tank Major Maintenance costs, there is no supporting detail for these forecast costs despite the fact that there exists potential for considerable overlap with Integrity and even A&G Costs. Plus, there were no actual expenditures in this category for 2019. These costs (totalling \$355,000) should not be approved in revenue requirement, and instead removed as a subcomponent of Direct Field Expense (including forecast costs). These costs are provided for elsewhere. Further, unless PKMJF can provide detailed and specific known expenditures for 2020 or 2021 and can prove these costs are different than those included in Integrity costs, the BCUC should not include any costs in 2020 or 2021 either.

The bigger issue for all three of these expense categories is there is significant of overlap in these types of expenditures with other cost categories within Integrity Costs and A&G expenditures, without clarification. PKMJF provided a confidential breakdown of its actual income statement expenses for 2008 – 2019, which provides a mechanism to understand the nature of PKMJF's

³⁹ All capital additions from 2010 – 2018 are provided in Exhibit B-11, Appendix BCUC-KMJF 6.9-A: Jet Fuel Line Actual Capital Additions (2010 to 2018), and neither [REDACTED] nor [REDACTED] are not among listed capital additions.

⁴⁰ Decision P-2-20, Appendix B, page 6 of 8

⁴¹ Exhibit B-34, PKMJF Supplementary Responses to VAFFC IR 22.1(d) and (h)

forecast spending. Actuals, however, do not prove that the spending was needed, just that it occurred.

A blended line-item breakdown of actual Direct Field Expenditures, A&G costs, Rate Case and Integrity Spending for 2008 – 2019 as grouped in PKMJF’s income statements is provided in Table 10 below.

Table 10: Actual Direct Field Expense, A&G, Rate Case and Integrity Spending 2008 - 2019⁴²



⁴² As per Exhibit B-41-1 Confidential Parkland (IR2)-PKMJF Appendices Income Statement. * Indicates line items have been combined as they appeared very similar for comparison purposes.

PKMJF could not explain year-over-year spending changes in Direct Field Expenses, or the reasoning behind the spending from one year to another (including if it was or was not necessary in the year incurred):

Regarding comparing year over year fluctuations in operating expenses, KMJF took into account that certain costs are often normalized over a longer period of time. For example, the BCUC highlights there is an increase in Direct Field Expenses from 2015 – 2017. KMJF notes that Integrity Costs are unevenly distributed over time which requires normalization of these costs to give a more accurate view of operating expenses incurred by a pipeline. The increase in integrity costs is largely attributed to fluctuations in Anomaly Inspections related to Integrity Costs from 2015-2017. KMJF also notes that in the Application KMJF normalized Integrity Costs over a three-year period based on a three year average. Therefore, given these fluctuations in costs, such as Integrity Costs, KMJF is not able to give a meaningful explanation of the year over year changes in Direct Field Expenses.⁴³

As can be seen from the above Table, 

The below table focuses on 2019 detailed expenses and attempts to match to PKMJF's reported 2019 actuals from Exhibit B-39, Appendix Parkland(IR2)-PKMJF 7.1.

⁴³ Exhibit B-25, KMJF Supplemental Responses to VAFFC IR 22.1

Table 11: 2019 Actual Direct Field Expense, A&G, Rate Case and Integrity Costs⁴⁴

No.	Cost Component	2019 Inc. St	2019 PKMJF Actuals	2019 PKMJF Forecast
Direct Field Expenses & Integrity Costs				
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21	Total Direct Field Expense & Integrity		3,170,000	3,175,000
Rate Case Costs				
25			601,000	425,000
Administrative & General				
26				
27				
28				
29				
30				
31				
32				
33				
34				
35				
36				
37				
38				
39				
40				
41	Total A&G		1,468,000	1,358,000
42	Total		5,239,000	4,958,000

To start, the Consolidated total for 2019 in the above table [REDACTED] with PKMJF's reported actual expenditures for 2019, of \$5.239 million⁴⁵ (compared to [REDACTED] above). In addition each separated cost category [REDACTED] that provided by PKMJF.

There are certain line items that can be easily reconciled to PKMJF's reported actuals within the Application. For example, the [REDACTED] which for 2019 [REDACTED] [REDACTED] Focusing on 2019, there are other line-item expenditures worth flagging for additional scrutiny:

- [REDACTED]: These costs align with the types of expenditures included in Direct Field Expense 'Employee Expenses'. However, PKMJF [REDACTED] that can not be easily reconciled with the income statements. [REDACTED] in line with PKMJF's forecast amount for 2019.

RECOMMENDATION: For Employee Expenses, the forecast amount of \$93,000 should be approved.

- [REDACTED]: This amount is well outside any previous years spending by a large margin. [REDACTED]

[REDACTED] This matters because PKMJF is proposing to treat these expenses differently within its revenue requirement forecast and resulting tolls.⁴⁷

[REDACTED].⁴⁸ Anomaly inspection costs have shown up in PKMJF's expenses in the past as both Direct Field Expenses and Integrity costs and even Capital Additions.⁴⁹ [REDACTED]

⁴⁴ As per Exhibit B-41-1 Confidential Parkland (IR2)-PKMJF Appendices Income Statement. * Indicates line items have been combined as they appeared very similar for comparison purposes.

⁴⁵ To be clear, Direct Field Expenses (\$1.761 million), A&G allocation (\$1.468 million), Rate Case costs (\$0.601 million) and Integrity Costs (\$1.409 million) as provided in Exhibit B-39, Appendix Parkland(IR2)-PKMJF 7.1

⁴⁶ [REDACTED]

⁴⁷ [REDACTED]

⁴⁸ Exhibit B-25, KMJF Supplemental Response to VAFFC IRs 22.1 and 23.1, Appendix (Suppl.) VAFFC-KMJF 22.1.2

⁴⁹ Exhibit B-25, Appendix (Suppl.) VAFFC-KMJF 22.1.2, provides actual Direct Field Expenses for 2010 – 2018 including 'Anomaly Inspections',-, Separately 'Field Anomaly Investigations' is shown as a component of actual Integrity Spending in Exhibit B-11, KMJF response to BCUC(IR2) 4.5, and for Capital Additions for example a fixed asset addition in 2010 was described as a 'anomaly at KP' as shown in Exhibit B-11, Appendix BCUC-KMJF 6.9-A: Jet Fuel Line Actual Capital Additions (2010 to 2018), page 1 of 4.

[REDACTED]

This cost category is particularly troubling because PKMJF has not provided any evidence to the necessity of the excessive amount of spending, that some or all of these inspections cannot be done by the five directly employed operation technicians, or that anomaly inspections are occurring in a prudent, efficient and properly managed way annually, especially since 2016.⁵⁰

By comparison, in the 2008 Application, Outside Services was presented in only one place within revenue requirement (Direct Field Expenses) and was of a much lower magnitude (\$15,000 in 2006, \$60,000 in 2007 and forecast at \$61,000 for 2008).⁵¹

RECOMMENDATION: PKMJF claims “Outside Services” spending in Direct Field Expense (\$420k in 2019), that on its face appears to overlap with Direct Field Payroll and Integrity costs, exceeds previous years, and conflicts with a claimed 2021 retirement. Despite this context, PKMJF has not provided support for this level of spending in its forecast, although it was repeatedly asked.

Also, actual expenditures raise substantial questions related to the ability of PKMJF to control costs and prudently manage spending to that which is needed to safely operate the pipeline given the overlap with Integrity cost reporting and lack of supporting detail.

Unless PKMJF can provide evidence that these services are outside of the abilities of its Direct Field Payroll and can show a management plan for how Outside Service spending is minimized and any spending that has occurred is necessary and different in application than Integrity cost spending, these costs should be disallowed from revenue requirement within Direct Field Expense.

Outside Service spending as a part of Integrity Costs is discussed more below.

- [REDACTED]

⁵⁰ VAFFC requested details related to all outside service spending dating back to 2007. PKMJF’s response provided a few contracts for outside services, as reviewed in detail above.

⁵¹ TransMountain 2007 Jet Fuel Application, Schedule 21, pdf page 80 of 114

⁵² [REDACTED]

⁵³ [REDACTED]

- [REDACTED]
- [REDACTED]
- **RECOMMENDATION: PKMJF's forecast expenditures for Direct Field Expenses and A&G costs are higher than actual costs⁵⁴ and directionally supports the proposed reductions to both in PKMJF's 2019 revenue requirement.** [REDACTED]
- [REDACTED]

3.1.3 Integrity Costs

PKMJF's forecast methodology for Integrity Costs in light of pending abandonment was explained in response to Exhibit B-11, BCUC IR 4.6:

KMJF forecasted the integrity Costs for the period from 2019 to 2021 based on the requirements to ensure compliance with CSA Z662: Oil & Gas Pipeline Systems ("CSA Z662"), Kinder Morgan Integrity Management Procedures and recommended industry practices. As a starting point, Kinder Morgan ensures that all of its pipelines are assessed at an interval of 5 years not to exceed 68 months. Each pipeline interval and selected assessment is determined based on the threats and risks identified for that pipeline. KMJF notes that the vast majority of the forecast in Table 8 was set for the year 2019 and this work has already occurred and costs incurred.

As detailed Integrity Costs are quite ingrained with Direct Field Expenses, a lot of the detail of these costs was reviewed in the Direct Field Expense section. A few additional comments:

- PKMJF's revenue requirement proposes to average Integrity Costs over three years 2019 – 2021 given the fluctuations of these types of expenses. PKMJF does not provide justification for why the three year time period was appropriate over another period of time. PKMJF's explanation also does not explain whether or not these costs had to occur in 2019 or if the assessments were premature, with costs spent to provide justification for the level of tolls proposed.

PKMJF is proposing to include \$0.541 million in revenue requirement for each 2019 – 2021 based on the following annual spending, shown in the table below:

⁵⁴ Removing from Actual Direct Field Expenditures reduces 2019 actuals to \$1.6 million. Removing from A&G results in actual expenditures of \$1.216 million, both below forecast expenditures.

Table 12: PKMJF Normalized Integrity Costs (\$000)⁵⁵

	2019 Forecast	2019 Actuals	2020 Forecast	2021 Forecast	3-Year Total
ILI Assessment - Parkland to Airport	\$345				\$345
ILI Digs (Estimate 8 Digs)	\$680				\$680
DOC Survey			\$62		\$62
Dent Fatigue Analysis			\$50		\$50
KMAP (7 Days)	\$20				\$20
KMAP Digs (Estimated 3 @ \$85k)	\$255				\$255
ILI Assessment(s) Shell to Burnaby					\$0
ILI Digs (Estimate 4 Digs)					\$0
DOC Survey			\$30		\$30
Dent Fatigue Analysis					\$0
KMAP (Minimum Charge)					\$0
KMAP Digs (Estimated 2 Digs)					\$0
ILI Assessment(s) - Westridge to Ellerslie					\$0
ILI Digs (Estimated 4 digs)					\$0
DOC Survey			\$30		\$30
Dent Fatigue Analysis					\$0
KMAP (Minimum Charge)					\$0
KMAP Digs (Estimated 2 Digs)					\$0
PODS/Risk/HCA	\$50		\$50	\$50	\$150
Total	\$1,350	\$1,409	\$222	\$50	\$1,622
3-Year Total Normalized over 3 Years					\$541

- Given PKMJF's explanation for its forecast Integrity Costs above, that pipelines need to be assessed every five years, it follows that proper cost control and pacing would include assessment of 20% of pipelines each year, which would result in quite consistent costs year over year. At the very least, costs should be quite predictable within a five year period following planned inspections. This is not the case in recent years, as shown in the table below. Where as Integrity Costs were more consistent from 2009 – 2016, which as a 7 year period means each pipe would have had to have been assessed at least once; starting in 2017 and again in 2019 costs are over double any other year. This was not explained by PKMJF other than to note that Integrity Costs are unevenly distributed year-over-year.⁵⁶

Table 13: Actual Integrity Costs, and Calculated 5-year Average⁵⁷

Actual Integrity Costs	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
ILI Inspection - Pipelines			78,000	157,158		56,257	-	160,200	286,245	30,544	
Studies, Risk Assessments, Management Plans, FIMP	7,571	15,000	27,000	1,081	13,333	13,047	48,485	16,738	8,572	5,196	
Field anomaly Investigations (includes Capital Dig Estimates)	54,253	13,000		187,478	157,709	-	-	74,716	773,820	154,497	
Natural Hazards, CP Program & Weld Re-certs - Field Work	31,866	106,000	65,000	60,946	297,867	171,358	129,501	154,242	95,693	60,038	
Tank Inspection (includes Capital)				11,385	3,779	6,536	-	7,325	3,441	-	
Total	93,690	251,000	170,000	418,048	472,688	247,198	177,986	413,222	1,167,771	250,275	1,409,000
Rolling 5-year average					281,085	311,787	297,184	345,828	495,773	451,290	683,651

⁵⁵Exhibit B-39, Appendix Parkland(IR2)-PKMJF 7.1, page 3 of 4, Schedule 18

⁵⁶ Exhibit B-25, KMJF Supplemental Responses to VAFFC IR 22.1

⁵⁷ Exhibit B-11, KMJF response to BCUC(IR2)-4.5, 2019 actuals from Exhibit B-39, Appendix Parkland(IR2)-PKMJF 7.1, page 3 of 4

- Previous treatment for pipeline inspections (including Anomaly inspections) was to amortize the costs, which occurred once every 5 years, over a 5 year period. In the 2008 Application, PKMJF (then TransMountain) presented costs for In Line Inspections (including Anomaly Inspections) that occurred in 2001 and 2007, totalling \$327,897 and \$364,609 respectively.⁵⁸ The Application also provided detail on the expected 2007 works to justify the expenditure which has not been provided in this Application.⁵⁹
- As noted above, 2019 actual Integrity Costs are closely in line with forecast, however supporting documentation for actuals do not provide any detail for the spending (compared to past years which broke it out in more detail), are closely combined with Direct Field Expenses, and lack justification given the amount of spending that occurred in 2017. PKMJF simply has not met the onus required to justify that the level of spending is required specifically in the year incurred.

RECOMMENDATION: Even assuming that PKMJF's recent integrity spending has been appropriate from an engineering perspective, the BCUC should reject the level of Integrity Costs proposed by PKMJF for tolls. PKMJF just spent similarly high levels in 2017 and it would appear that most if not all pipes have already been assessed within PKMJF's standard five year timeframe. Averaging PKMJF's forecast expenditures over five years instead of three would align with the user pay / cost causation principle, previously paced levels of spending and previously approved cost treatment. This results in normalized Integrity Costs of \$336,200 in revenue requirement.

One further note on Integrity costs. The levels of spending and activity that PKMJF has undertaken in the past few years is not what would be expected from a utility preparing for pipeline abandonment. This is discussed more in Ms. Lee's Pre-Filed Testimony on Abandonment Costs (Appendix D) and Mr. Bowman's Pre-Filed Testimony on Common Carrier Regulatory Principles (Appendix A).

3.1.4 Rate Case Costs

PKMJF's F2019 Application forecasts these costs at \$425,000, which are proposed to be included on a levelized basis over three years of tolls at \$142,000 for F2019, F2020 and F2021.⁶⁰ This is broken down to include the costs of the Abandonment Study (\$62,000), Outside Legal Counsel (\$274,000) and Expert Ratemaking (\$91,000).⁶¹ Actual Rate Case costs for 2019 were higher than forecast, at \$601,000.⁶² Of note, the 2007 Jet Fuel Toll Application normalized Rate Case costs over 5 years, instead of PKMJF's proposed 3 years.⁶³

From PKMJF's income statements, these costs are

⁵⁸ Exhibit B-1, Trans Mountain 2007 Jet Fuel Application, Schedule 16, pdf page 75 of 114

⁵⁹ See Schedule 6 of the Trans Mountain 2007 Jet Fuel Application, pdf page 63 of 114

⁶⁰ Exhibit B-14, Amended Application, Schedule 19

⁶¹ Exhibit B-18 KMJF Supplemental Response to VAFFC IR responses, Appendix A 13.1-2.

⁶² Exhibit B-39, Appendix Parkland(IR2)-PKMJF 7.1, page 4 of 4

⁶³ Exhibit B-1, Trans Mountain 2007 Jet Fuel Toll Application, Schedule 6, pdf page 63 of 114

[REDACTED]⁶⁴ As the jet fuel pipeline acquisition also happened in this timeline there is potential that some of these costs were incurred as a result of the due diligence and legal requirements of the acquisition.

RECOMMENDATION: The BCUC should include the normalized Rate Case costs as forecast (\$141,000 for 2019). While PKMJF’s actual 2019 Rate Case costs are reported higher than forecast this amount should not be approved [REDACTED]

In addition, it may be appropriate to adjust Rate Case costs down by \$62,000 as the costs of the Abandonment Study are more appropriately treated as a cost of abandonment and not rate case costs, if PKMJF intends to follow through on pipeline abandonment in the coming years.

3.2 Administrative & General Allocation

PKMJF forecasts its Administrative & General (“A&G”) allocated costs for the 2019 forecast year as follows:

Table 14: A&G 2019 Forecast Costs (\$000)⁶⁵

	2019 Forecast
Payroll Tax [1/]	\$79
Allocated Corporate Overhead	\$15
Travel, Training, etc.	\$55
Employee Benefits [1/]	\$311
Labor [1/]	\$632
Materials and Supplies	\$4
Outside Services	\$49
Phones/Utilities	\$28
Rent	\$129
Insurance	\$50
Miscellaneous	\$7
Total	\$1,358

The basis for 2019 forecast A&G allocations was annualized actual A&G costs incurred during the period January through April 2019 multiplied by three, as PKMJF states this level of annualized A&G costs is representative of total year allocations.⁶⁶ PKMJF later provided its A&G allocations for 2019, without supporting justification, of \$1.468 million.⁶⁷

In respect to PKMJF’s forecast methodology, it is highly unusual to base a three-year period solely on a four-month period of actuals, especially four months where it is now known unusual integrity spending,

⁶⁴ [REDACTED]

⁶⁵ Exhibit B-14, PKMJF Application, Schedule 17, pdf page 100 of 245

⁶⁶ Exhibit B-11, PKMJF Response to BCUC 4.4

⁶⁷ Exhibit B-39, Appendix Parkland(IR2)-PKMJF 7.1, page 1 of 4

overhead activities related to the PKMJF rate case, and a pipeline acquisition were taking place. There is no indication that the months January to April are representative of the remainder of the year. Usually, these types of expenses would be forecast using a test year based on overarching budgets and/or past experience. This crude method for forecasting an A&G allocation is unreliable to base tolls, especially in calculating the percentages used allocate A&G between PKMJF assets.

At a glance, A&G allocations have decreased for 2019 compared to past years, as shown in the table below.

Table 15: Actual A&G Allocations 2008 - 2019⁶⁸

Yr.	Total Actual A&G	Annual Variance
2008		
2009	919,577	
2010	1,076,967	157,390
2011	1,327,924	250,957
2012	1,507,182	179,258
2013	1,949,026	441,845
2014	2,316,124	367,097
2015	2,033,551	(282,573)
2016	2,727,243	693,692
2017	2,999,867	272,624
2018	1,970,120	(1,029,747)
2019	1,468,320	(501,800)

Since the last review of tolls (2008), A&G allocations grew at an accelerated rate until 2018.⁶⁹ This growth has not been reviewed for regulatory purposes and should not be considered reasonable as a benchmark to compare to.

As noted in Section 3.1 of this Pre-Filed Testimony, starting in 2018, PKMJF underwent account restructuring and additionally hired five technicians directly for the pipeline, so where direct employee costs used to be transferred through A&G now these costs are included in Direct Field Expense. For actual 2019 this includes at least \$587,000 in Field Payroll and \$180,000 in Employee Expenses. On its face, 2019 A&G allocations should have seen at least a corresponding decrease of \$767,000, however 2019's A&G only decreases by \$501,800 as shown in Table 15 above.

Therefore, at a high level, although A&G allocations for 2019 appears lower than previous years, this is due to cost reallocation to other areas. This creates another issue in that previously allocated costs to the jet fuel pipeline (operating and maintenance related for example) that may have been appropriate to allocate to PKMJF before, are now covered through direct expenditures.

PKMJF explains in response to Exhibit B-12 Parkland IR 7.2 that actual A&G costs are allocated in the following manner:

⁶⁸ As provided in response in Exhibit B-11, pdf p. 18, BCUC IR 4.3, Exhibit B-39, Appendix Parkland(IR2)-PKMJF 7.1, page 1 of 4 for 2019 and for 2008 as provided in Exhibit B-41-1 Confidential Parkland (IR2)-PKMJF Appendices, 2009 income statement

⁶⁹ Exhibit B-25, Appendix (Suppl.) VAFFC-KMJF 22.1.4, where total staff allocation costs grew from \$586,240 in 2009 to \$2,353,333 in 2017.

With respect to general and administrative ("A&G") costs from September 1, 2018 onwards, there are no administrative staff directly employed by KMJF. A&G costs are allocated by Kinder Morgan and KMC Services to KMJF using the Massachusetts Model ("Mass Model"), which is similar to the NEB allocation model used by Canadian entities to allocate general and administrative type expenses.

The Mass Model allocates general and administrative expenses of the corporation to operating entities within the corporation. Costs incurred in departments that support the entire business operations such as Human Resources, IT, AP, Accounting, Scheduling, Procurement, Legal, Audit, Insurance, etc. are generally coded into an account on the parent company and allocated based on three factors: PP&E (plant in service), Revenue, and Direct Labour. Ratios are averaged and calculated as a percentage of the total for all operating entities and that average is used to allocate costs to the KMJF Jet Fuel Line each month.

KMJF understands that for the period 2014 to August 31, 2018 costs were allocated by the owner of the Trans Mountain Pipeline to the Jet Fuel Line based on the methodology set out in the 2002 Allocation Study filed with the NEB.

The "Mass Model", has not been approved by the BCUC or other regulator for use in rate setting. As well, PKMJF's explanation above could not be verified from the supporting information provided. Nevertheless the apparent model outcome results in ████████ of all general and administrative overhead costs accrued from the period January – April 2019 allocated to the jet fuel pipeline, regardless of whether operation of the jet fuel pipeline requires such activity or if the allocation weightings used are appropriate cost driver weightings.⁷⁰

Following the acquisition of the pipeline by Pembina in 2019, PKMJF states it is currently reviewing the A&G cost allocation methodology and will allocate costs accordingly once determined. PKMJF states that the overall level of requested costs is "reasonable and expects it to be lower than any amount that may be allocated based on a methodology determined by Pembina, since Pembina is a smaller entity than the Kinder Morgan entities and consequently expects to have lesser economies of scale for costs allocated amongst different Pembina related entities."⁷¹ PKMJF further notes that it does not believe cost reductions through synergies will be created through the acquisition as Pembina is much smaller than Kinder Morgan and all things equal, synergies are created through economies of scale.⁷²

A&G allocation methodology was last reviewed for rate regulation in 2002 and A&G forecasts were last reviewed by the BCUC for the 2008 revenue requirement. Since that time, A&G costs have increased substantially, and it is reasonable that the costs being allocated and the cost drivers used to determine the allocation weighting be reviewed before A&G expenses are approved for recovery in tolls.

⁷⁰ Exhibit B-27-2, Confidential Appendix to Exhibit B-27, Appendix (Suppl.) VAFFC-KMFJ 23.1.2 (confid), pdf pages 1113 - 1129

⁷¹ Exhibit B-38, PKMJF Response to IR No. 2, VAFFC IR 16.2

⁷² Exhibit B-39, PKMJF Response to IR No.2, Parkland IR 8.1.1

- [REDACTED] – it is not clear how this department supports the jet fuel pipeline which has five operations employees within Direct Field Expenses.

For the A&G activities related to general overhead or common costs including all accounting related, HR related, executive related, IT related, etc. it is reasonable to allocate a fair proportion of costs to PKMJF where these types of costs are not already directly expensed through Direct Field Expense. However, the allocation method between assets and to PKMJF should be linked to the cost driver, and this can not be verified (along with the resulting [REDACTED] allocation weighting used).

Previously, in support of its 2002 allocation methodology, PKMJF filed with the regulator a detailed Cost Allocation Study, refiled on this record in Exhibit B-25, Appendix (Suppl.) VAFFC-KMJF 22.1.3. This review noted that the common approach “to cost allocation is to directly charge where possible and to find an allocation method for other costs that suited the business environment of the company”.⁷⁶ It also notes that costs should be allocated to those who benefit from their incidence and by sharing jointly incurred costs in a defensible manner.⁷⁷ This report also notes that shared costs should be allocated based on key cost drivers for each activity, which should be calculated annually (and possibly quarterly). Any shorter time periods (such as a month) could exacerbate timing concerns for accrued versus expensed costs and lead to misleading information.⁷⁸ By comparison PKMJF uses a four-month timeframe for calculating its allocation weightings. The 2002 study gives examples of appropriate cost drivers/allocators to use for shared activities which are still applicable today. These are provided in the reproduced table below:

⁷⁶ Exhibit B-25, Appendix (Suppl.) VAFFC-KMJF 22.1.3, page 6 of Appendix

⁷⁷ Ibid page 7

⁷⁸ Ibid page 18

Table 16: Shared Activity Pools and Cost Allocators as Provided in the 2002 Cost Allocation Study⁷⁹

Shared Activity	Cost Driver	Definition of Cost Driver
Support System	Volume distance	The total distance that all cubic metres travel on the pipeline systems, taking into account receipt and destination points. This measurement is already in use for the Company's toll method.
Manage system capacity ⁷	Volume distance capacity	Similar to the measurement above, however this driver reflects capacity rather than usage.
Manage Surface	Right-of-way	Total surface distances (in kilometers) under management by the Company. These should be stable from year to year.
Manage Financial Resources	Financial Size	Tolled revenues by company
Administer projects and materials	Project expenditures + Operating expenditures.	Expenditures on capital projects. Operating costs (less salary, benefits, overtime and other premiums)
Insure facilities	Insurable Value	Combined value of insured assets and revenues.
Common	Other costs	All other costs that are assigned or allocated, excluding fuel and power, and property taxes

The information as provided in the 2002 Study provided useful context and justification that is entirely absent in the current proceeding.

PKMJF's A&G forecast should not be approved for collection from tollpayers as it has not proven that, 1) PKMJF first directly assigned all costs related to each asset to the extent possible to minimize shared/common costs, 2) that PKMJF has proven each overhead activity is justifiably used and useful by PKMJF's jet fuel pipeline and should be included in A&G (there's a possibility that while reasonably a 'common' cost, it is not common to all assets equally), and 3) that the allocation of each activity, once proven used and useful to PKMJF's jet fuel pipeline is allocated based on an appropriate cost driver between each asset (that uses annualized cost data at a minimum).

While it is hard to estimate the exact extent to which of the A&G allocations should be included in revenue requirement, it is clear that PKMJF's proposed A&G allocation is overstated. Further, the BCUC cannot include some or all of these costs without detailed and supported cost drivers given the overlap of some cost categories with Direct Field Expenses cost components and time that has elapsed since the last thorough review. Based on the list provided above, it is reasonable to exclude the costs that do not appear to apply to the jet fuel pipeline and/or may be double counted through direct cost assignments, reducing the A&G allocation by \$250,255 for 2019.

RECOMMENDATION: In the absence of PKMJF's finalized A&G allocation methodology review, A&G expense for inclusion in PKMJF's 2019 revenue requirement should be reduced by approximately \$250,000. In its next application PKMJF should be directed to file its completed

⁷⁹ Exhibit B-25, Appendix (Suppl.) VAFFC-KMJF 22.1.3, page 19

review, with supporting justification for the allocation of relevant overhead costs based on appropriate cost drivers for review (based on annual amounts).

3.3 Income Taxes

Regarding the level of income taxes included in 2019 revenue requirement, actual income taxes for 2019 were [REDACTED], much [REDACTED] than the forecast \$628,000, as shown in Section 3.0 of this Pre-Filed Testimony (Table 3 on page 13 above). Further, there are [REDACTED] PKMJF's reported income taxes in this proceeding with the amount reported in its income statement actuals, as noted in Section 3.0 (page 14) above.

Without proper justification by PKMJF for [REDACTED], the BCUC should approve a 2019 revenue requirement (and resulting tolls) with income taxes adjusted [REDACTED] to actual levels.

RECOMMENDATION: Revenue Requirement for 2019 should be approved in the amount of [REDACTED] based on actual Income Taxes as reported in PKMJF's 2019 income statements.⁸⁰

⁸⁰ Exhibit B-41-1, Confidential Parkland (IR2)-PKMJF, pdf pages 47 – 55

**APPENDIX C – Review of Depreciation Methodology
in PKM Canada (Jet Fuel) Inc.’s (“PKMJF”) proposed Revenue
Requirement for the 2019 Tariff Application**

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December 16, 2020

¹ Services provided by BCRI Inc. and Staff

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1.0 SUMMARY OF RECOMMENDATIONS

The purpose of this evidence is to analyze and critique PKMJF's application for approval to depreciate the remaining net assets associated with the Jet Fuel Line (JFL) over a three-year period, 2019-2021, based on the expectation that the VAFD Project will be operational in 2022 thus rendering the JFL uneconomical to operate. The proposed depreciation rates represent an increase in annual depreciation expenses by about 114% over existing depreciation rates and about 26% of PKMJF's proposed revenue requirement, excluding abandonment costs. Existing depreciation rates were approved in 2010 and are the result of a negotiated settlement. Those rates were based on the expectation of a year-end 2022 retirement date (13-year remaining life with limited exceptions²) of the JFL, closely matching the 2010-2018 contract period.

A review of PKMJF's 2019 Depreciation Study indicates that the proposed depreciation rates are excessive and not justified. First, the 2010 negotiated depreciation rates were designed to fully recover the JFL assets by a retirement date of December 31, 2022. By PKMJF's own submission, those rates should have been revised, but were not, each year of the contract period to reflect the impact of additions and retirements. It was PKMJF's responsibility to regularly review the depreciation rates and underlying life components which, from all appearances, it did not. This would have reduced the reported undepreciated costs as of December 31, 2018. Second, PKMJF's now assumed final retirement date January 1, 2022 is contradicted by [REDACTED]

[REDACTED]³ as well as the 25-year life expectancy used in the calculation of the Asset Retirement Obligation reported in the PKMJF 2019 financial reports.⁴

In sum, PKMJF provided no credible evidence supporting its proposed three-year remaining life and resulting depreciation rates

² Exhibit A2-1, Appendix 1, Note [1]. The remaining life for Communications, Account 163, was set at 10 years. The remaining life for Work Equipment, Account 185WE, Computer Hardware & Software, Accounts 186 HW and 186SW, were each set at 5 years, although these accounts were fully recovered at December 31, 2009.

³ Exhibit B-48, Appendix A, pdf p. 32, Q. 145 [REDACTED]

and Q. 148 [REDACTED]

⁴ Exhibit B-39, PKMJF Response to Parkland (IR2) 12.1 and 12.2, pdf p. 18.

2.0 HISTORICAL BACKGROUND

The JFL has been transporting jet fuel to the Vancouver International Airport since 1969. The originally established useful life of the JFL was 30 to 40 years.⁵ Over the years, the life has been revised mainly through negotiations. Prior to the 2007, the then existing depreciation rates were the result of a 1994 depreciation study.⁶

2.1 2007 TOLLS APPLICATION

The 2007 Tolls Application (2007 Application) was based in part on a five-year economic life for the JFL and sought amortization of the net book value of the associated pipeline assets. The accelerated economic life was predicated on the premise of VAFFC constructing a jet fuel barging facility by 2012 that would be capable of serving VAFFC's forecasted increased fuel requirements.⁷ PKMJF submitted that the barging bypass would result in a competitive disadvantage to the JFL. The 2007 Application also stated that PKMJF contemplated applying to the BC Oil and Gas Commission (OGC) to abandon the JFL at the end of the five-year period (2012).⁸

The accelerated shortened economic life in 2007 would have resulted in an increase in the composite depreciation rate for all accounts from 2.63% to 16.51%.⁹ The 2007 depreciation study, conducted by Gannett Fleming, Inc. (Gannett Fleming), was developed from PKMJF's specific instructions that a five-year remaining life be used for the pipeline assets.

By Order No. P-3-08, the BCUC, among other things, denied the request for accelerated depreciation. In the Reasons for Decision, Appendix A of the Order, the Commission found that PKMJF's accelerated depreciation request was premature as the VAFFC had not made a final decision to proceed with a barging facility.¹⁰ Moreover, Gannett Fleming had not formed a view of the economic life of the JFL, but rather simply complied with PKMJF's instructions.¹¹ However, in the reconsideration application, the BCUC was explicit that a further application could be justified if conditions changed. In Order P-7-08, the BCUC held:

[T]he Commission is of the view that the issue of pre-collection of abandonment costs by pipeline companies is worthy of debate, and where it has been shown that there is some

⁵ 2007 Application, Exhibit B-1, pdf pg. 11.

⁶ 2007 Application, Toll Calculations and Supporting Material, p. 2.

⁷ 2007 Application, p. 6. The YVR developed Master Plan for the 20-year period ending in 2027 forecasted significant growth in VAFFC fuel usage in the next 20 years suggesting pipeline capacity and storage for jet fuel would be exceeded by 2010. The Master Plan also noted VAFFC concerns with the reliability and viability of a single pipeline supplying the majority of the fuel to the YVR. The barging facility would bypass the JFL thus rendering it uneconomical to operate.

⁸ 2007 Application, pdf p. 11.

⁹ 2007 Application, Toll Calculations and Supporting Material, Schedule 5, p. 8 and Schedule 9, p. 16.

¹⁰ Order No. P-3-08, Reasons for Decision, Appendix A, p. 8.

¹¹ Ibid., p. 13.

certainty in the eventual abandonment or failure of the economic operation of a pipeline, then an application for accelerated depreciation might well succeed.¹² (emphasis added)

2.2 2009 AND 2010 TOLLS APPLICATIONS

In the 2009 Tolls Application (2009 Application), prior to the negotiated settlement resulting in the 2010 Tariff Filing, PKMJF proposed a 20-year life for most assets with a few noted exceptions.¹³ This also marked the **first time** a separate line item for cost of removal¹⁴ associated with interim retirements¹⁵ was proposed rather than debiting the removal costs to accumulated depreciation for the given account.

Schedule 1 of the Toll Calculations and Supporting Material to Tariff 38 indicates that Schedule 8 shows the calculation of the remaining life under existing rates for each account. It also notes that the remaining life for each account is different as "a result of several factors, including the net plant balance used when the rates were established (on or about 1994), capital additions, retirements and depreciation booked since the date the rates were approved (on or about 1995)."¹⁶

Schedule 8 of the 2009 Application indicates that the forecast remaining life is calculated by dividing the net service value (original cost less accumulated depreciation) for each account at December 31, 2008 by the 2008 depreciation expense. This appears to be the same calculation of remaining life shown in previous depreciation studies as well. As explained in the 2008 Depreciation Study conducted by Gannett Fleming, "the depreciation rate is determined by dividing the un-depreciated service value of the asset by the lesser of the assets economic or physical remaining life."¹⁷ (emphasis added). The remaining life is determined first and then the depreciation rate (unrecovered service value divided by the remaining life). Depreciation expense is not calculated without first determining the depreciation rate and the depreciation rate is not calculated without first determining the remaining life.

¹² BCUC Order F-7-08, Appendix A, Reasons for Decision (August 19, 2008), pdf p. 6.

¹³ 2009 Application, Schedule 1 and Schedule 8 Note [1]. Pumping Equipment remained at 15 years; Communications remaining at 10 years; and Work Equip., Computer (soft & hardware) remained at 5 years although there was no remaining net plant to be recovered.

¹⁴ Cost of Removal relates to costs incurred with the retirement, removal, and disposal of assets from service. National Association of Regulatory Utility Commissioners Public Utility Depreciation Practices, compiled and edited by Staff Subcommittee on Depreciation and The Finance and Technology Committee of the National Association of Regulatory Utility Commissioners, 1996, pp. 34 and 317.

¹⁵ Interim retirements are minor components of a major structure that occur prior to the removal of the structure itself. A life span group is comprised of large units, a forecasted overall life or estimated retirement date, and interim additions and retirements. National Association of Regulatory Utility Commissioners Public Utility Depreciation Practices, compiled and edited by Staff Subcommittee on Depreciation and The Finance and Technology Committee of the National Association of Regulatory Utility Commissioners, 1996, pp. 141-142, and 321.

¹⁶ 2009 Application, Toll Calculations and Supporting Material, Schedule 1.

¹⁷ Exhibit B-12, Appendix F, 2008 Depreciation Study, I-3, pdf . 7 of 20, Parkland-KMJF 1.1-TMJ 2008 Depreciation Study. Unrecovered service value refers to the net unrecovered investment or net service value.

PKMJF never addresses development of the remaining life. Major structures like the JFL are usually studied using a life span approach to develop the remaining life. The difference between the in-service date of the major structure and the planned or estimated date of final retirement is considered the overall life span. Within the major structure there are investments associated assets that will be replaced over the life span. An interim retirement rate can be developed ideally based on a combination of historical and estimated future retirements expected to occur between the date of study and the date of final retirement. The interim retirement rate is then applied to the remaining life span (final retirement date less the depreciation study date) to determine the remaining life. It is clear that PKMJF's determination of remaining life is not supported by accepted depreciation methods, procedures, or techniques.

The 20-year proposed remaining life in the 2009 Application was basically an amortization of the net service value of the associated JFL assets over 20 years (net service value divided by 20 years with a few exceptions). This implies a final retirement of 2029 for the JFL. Schedule 8 noted that:

The proposed reduction in useful life is largely based on the observed decline in number of shippers on the system. When the original study was completed, there were 5 active shippers on the pipeline, today there are 2 active shippers and 1 minor shipper or approximately 50% of the original shippers remain and 2 of them account for 99% of the volumes. This reduction reflects a potential risk to TMJ of under-recovery of the remaining costs if the depreciation rates are set on an extended life.¹⁸

The 2010 Tariff Filing, Appendix 1, is one-page revising recovery of the JFL assets to 13 years.¹⁹ PKMJF confirms that the depreciation rates approved assumed an end-life of December 31, 2022.²⁰ The 2010 Tariff Filing, Appendix 1, also notes that:

Reduction of the useful life to align with the contract term, reduces some of the risk to TMJ for not recovering the full asset value over the term of the negotiated agreement. TMJ further expects that a shipper may continue using the pipeline services after the term of the agreement expires.²¹

The rationale for the decrease in remaining life between 2009 and 2010 is not clear but it was the result of negotiations. Therefore, it is reasonable to assume that PKMJF found the resulting depreciation rates, which were clearly based on a 2022 retirement date, satisfactory. The only way full recovery would be achieved by the end of the 13-year remaining life span is if the depreciation rates were recalculated each year to adjust for the impact of any incurred interim additions or retirements. PKMJF agrees with this concept given its response to a BCUC request in the 2007 Application that asked, "should the annual depreciation rate (Opening Net Book Value cost less accumulated depreciation) be updated in the remaining life (years 4-1) of the assets to reflect additions, retirements and more accurate retirement cost estimates?" TMJ responded in part as follows:

¹⁸ 2009 Application, Calculations & Supporting Material, Schedule 8.

¹⁹ Exhibit A2-1.

²⁰ Exhibit B-37, PKMJF Response to BCUC IR3, 3.5, pdf pp. 18-19.

²¹ Exhibit A2-1.

- Depreciation rates on invested capital (i.e., assets): The depreciation rates as calculated for the invested capital are based on forecast 2007 closing balances. To the extent that the 2007 additions, retirements and proceeds differ from that provided for in the application, the depreciation rates should be recalculated. It is unlikely that these annual depreciation rates would need to be recalculated to reflect post 2007 additions and/or retirements as all capital improvements would be curtailed to the extent possible and if the expenditures are required, the costs would likely be expensed into the operations and maintenance accounts.²²

The important point in the above response is that future additions and retirements would likely be expensed as operations and maintenance costs rather than capitalized given the expected pending retirement. No future additions or retirements were forecasted in the 2009 depreciation study. This would have been a principled and reasonable approach that I have seen in similar circumstances during the final years of an asset's life.

In reality though, additions were not expensed in the ensuing years but capitalized. Moreover, depreciation rates were not recalculated to reflect the impact of the additions on the remaining life for each account.

In keeping with the above, PKMJF should have either expensed spending during the negotiated settlement period (totaling \$3,354,000 as outlined below) or, if capitalized, PKMJF should have recalculated the remaining life and resultant depreciation rate each year during the 2010-2018 period for each account. If this had happened, the unrecovered costs associated with the JFL would be fully recovered by year-end 2022. Also see the complementary evidence of P. Bowman regarding misapplication of the 13-year terminal life during the course of the negotiated settlement.

3.0 2019 TARIFF AND DEPRECIATION STUDY

Existing depreciation rates have been in effect since 2010. In the current proceeding, PKMJF is proposing a three-year recovery of the JFL assets based on the assumption that when the VAFD project begins operation, at the end of 2021 per PKMJF, the JFL will immediately no longer receive jet fuel from the Westridge Marine Terminal and will become economically unviable for any purpose by any party.²³ However in response to VAFFC requests, PKMJF admits that there may be a transition period of decreasing volumes.²⁴ The economic unviability may not be as fast as PKMJF anticipates. In fact, [REDACTED]

[REDACTED].²⁵ This is very interesting given that a three-year remaining life was being proposed at essentially the same time in the 2019 Application. Moreover, PKMJF conducted no reports, studies or investigations on the economic viability of

²² Exhibit B-5, 2007 Application, Responses to BCUC (IR1) 6.1.

²³ Exhibit B-14, 2019 Amended Application for Revenue Requirement and Final Tolls for 2019-2021, pdf pp. 16 and 20.

²⁴ Exhibit B-13, PKMJF Response to VAFFC (IR1) 6.11, pdf p. 37.

²⁵ Exhibit B-48, Appendix A, pdf p. 32, Q. 145 [REDACTED]

[REDACTED] and Q. 148 [REDACTED]

the JFL in relation to the VAFD project.²⁶ It relied solely on VAFFC's statements that the JFL will decline to a point where it is not economical to maintain.²⁷ There is nothing coherent about the potential economic life of the JFL presented by PKMJF. Nonetheless, PKMJF has been well aware since the late 1990s that YVR needs had surpassed the JFL's capacity, requiring tanker trucks to deliver excess fuel and that expansion would cost well in excess of other options.²⁸ There is no evidence that PKMJF ever did anything to meet the expected increased VAFFC demand.

The 2019 Depreciation Study is presented in Schedule 5, Toll Calculations & Supporting Materials as duplicated below.²⁹ PKMJF asserts that complete support for the December 31, 2018 remaining life for each account is included in column (f) of Schedule 5.³⁰ Unfortunately, column (f) is not supportive of any remaining life. The remaining life for each account in column (g) is simply backed into based on the 2018 depreciation expense.

²⁶ Exhibit B-13, PKMJF response to VAFFC (IR1) 7.6, pdf p. 40; Exhibit B-17, PKMJF further response to VAFFC (IR1) 7.6, pdf p. 14.

²⁷ Ibid.

²⁸ VAFFC Evaluation of Fuel Delivery Options, December 16, 2011, pages 50-56, available online: <http://www.vancouverairportfuel.ca/files/Fuel%20Delivery%20Options%20Report.pdf>.

²⁹ Exhibit B-14, 2019 Amended Application, Toll Calculations & Supporting Materials, pdf p. 81.

³⁰ Exhibit B-38, PKMJF Response to VAFFC IR2, 10.7 (c), pdf p. 60.

Application for Tolls									
Schedule 5									
2019 Depreciation Study									
		Original Cost	Accumulatd Depreciation	Net Service Value	2018 Depreciation Expense	Existing Depreciation Rates	Forecast Remaining Life	Proposed Recovery 3 Years w Exception	
Account Number & Description	12/31/2018	12/31/2018	12/31/2018	12/31/2018	Expense	Rates	Life	3 Years w Exception	
(a)	(b)	(c)	(d)	(d)	(e)	(f)	(g)=[d/e] [1/]	(h)	(i)=[h/b]
152	Land Rights	98,683.73	91,762.48	6,921.25	1,746.70	1.77%	4.0	2,307.08	2.34%
153	Line Pipe	6,107,724.24	3,558,941.50	2,548,782.74	282,472.58	4.86%	9.0	849,594.25	13.91%
156	Buildings	480,479.33	341,743.90	138,735.43	19,219.17	4.00%	7.2	46,245.14	9.62%
158	Pumping Equipment	1,138,930.25	900,553.22	238,377.03	52,390.80	4.60%	4.5	79,459.01	6.98%
159	Station Lines	1,931,570.82	1,572,956.16	358,614.66	81,898.61	4.24%	4.4	119,538.22	6.19%
160	Other Station Equipment	2,760,133.99	1,989,824.62	770,309.37	153,627.16	5.73%	5.0	256,769.79	9.30%
160C	Central Pipeline Control	329,325.99	329,325.99				na	na	na
161	Storage Tanks	1,878,251.02	1,228,896.83	649,354.19	91,993.66	4.90%	7.1	216,451.40	11.52%
163	Communications	239,200.52	223,358.50	15,842.02	5,513.46	10.00%	2.9	5,280.67	2.21%
185WE	Work Equipment	51,974.45	47,999.11	3,975.34	1,325.12	20.00%	3.0	1,325.11	2.55%
186HW	Computer Hardware	3,789.43	3,789.43			20.00%	na	na	na
186SW	Computer Software	8,625.11	8,625.11			20.00%	na	na	na
189D	AFUDC (Interest)	149,198.01	132,466.61	16,731.40	4,819.10	3.23%	3.5	5,577.13	3.74%
189E	AFUDC(Equity)	160,050.56	136,072.52	23,978.04	5,425.72	3.39%	4.4	7,992.68	4.99%
190	Construction Overhead	3,252,311.99	2,773,177.53	479,134.46	130,417.68	4.01%	3.7	159,711.49	4.91%
BS	Cost of Removal		(404,795.28)	404,795.28	49,516.56	7.69%	8.2	134,931.76	33.33%
	Total	18,590,249.44	12,934,698.23	5,655,551.21	880,366.33		6.4	1,885,183.74	10.14%
Summary of Depreciaton Rates					2018			2019	
	Depreciation Expense without Costs of Removal				830,849.77			1,750,251.98	
	Amortization of normal Costs of Removal				49,516.56			134,931.76	
	Total Provision for Pipeline				<u>880,366.33</u>			<u>1,885,183.74</u>	
Notes:									
	[1/]	Reflects depreciation and amortization effective as of January 1, 2010.							

No additions are forecast for the 2019-2021 Tolling Period.³¹ No additions or retirements were forecast in the 2007 and 2009 Applications for the respective Tolling Periods either when, in actuality, additions of \$3,354,000 and retirements of \$1,290,657.36 were incurred during 2010 to 2018.³²

A review of the depreciation study indicates areas of concern where depreciation actions have not been in accord with generally accepted depreciation practices.

3.1 GROUP DEPRECIATION

PKMJF claims that its depreciation expenses each year for 2010-2018 were calculated in accordance with the group method of depreciation.³³ However, it also states that in some cases where individual assets became fully depreciated, the original cost of those assets were no longer depreciated while not decreasing

³¹ Exhibit B-14, pdf p. 22.

³² Exhibit B-11, PKMJF response to VAFFC (IR1), Appendix BCUC-KMJF 6.9A and 6.9B, pdf pp. 94-98.

³³ Exhibit B-13, VAFFC IR1 4.10, pdf p. 26; Exhibit B-8, p. 42.

the tolls in a like manner.³⁴ **This is not group depreciation.** Group depreciation as defined by the National Association of Regulatory Utility Commissioners (NARUC) Public Utility Practices is:

A procedure under which depreciation charges are accrued on the basis of the original cost of all property included in each depreciable group.³⁵ (emphasis added)

Under group depreciation, retirements reduce plant and reduce accumulated depreciation in the same amount (in-plant book cost of the associated assets).

It is not known how PKMJF determined which assets were fully depreciated. Only if each asset is tracked individually with the existing depreciation rate, depreciation expense, and accumulated depreciation will one be able to tell if an asset is fully depreciated. My nearly 40 years of experience as a depreciation professional is that companies do not usually maintain this level of detail for each asset because it is cost prohibitive. Additionally, this procedure is known as unit depreciation, and not the group depreciation that PKMJF claims it uses.³⁶

Removing assets that are said to be fully depreciated before the given account is fully depreciated results in an understatement of depreciation expenses for the account. The extent to which this has occurred is unknown but could certainly have a material effect of understating accumulated depreciation and overstating net service value at December 31, 2018. In any event, any decrease to depreciation expense from incorrectly ceasing depreciation on assets within the group should not be a reason for recording lower depreciation expense and correspondingly higher net income, which would be the outcome of PKMJF's approach. The only other way to correct this issue is for tolls to have been decreased to correspond with the lower depreciation expenses, which they were not. This misapplication of a depreciation procedure understates depreciation expenses and artificially overstates earnings. At best, PKMJF does not have the needed depreciation expertise to realize its error and inflated earnings. At worst, it is intentionally gaming the system by not recording correct depreciation expense, with the intent of recovering the remaining undepreciated value after the negotiated settlement period has ended.

In summary, PKMJF has misapplied the Group Depreciation procedure in calculating depreciation expenses. It removed assets allegedly fully depreciated while the account that contained those assets was not fully depreciated. This misapplication has understated annual depreciation expenses and artificially overstated earnings, the effect of which could be material.

3.2 MISAPPLICATION OF 2010 DEPRECIATION RATES

It was discovered through responses to a VAFFC request that the depreciation rates prescribed in effective January 1, 2010 were not used to calculate depreciation expenses during the period 2010 – 2016.³⁷ An

³⁴ Exhibit B-38, PKMJF response to VAFFC (IR2) 10.7(c), pdf p. 60.

³⁵ NAURUC Public Utility Practices, p. 320.

³⁶ NARUC Public Utility Depreciation Practices, pp. 49, 326.

³⁷ Exhibit B-13, pdf p. 64.

corrective adjustment was recorded in 2017. This action understated depreciation expense and likewise overstated earnings for those years, which is an indication that PKMJF did not well understand its own depreciation approach. However, assuming the adjustment was correctly applied and calculated, there should be no ongoing impact on the 2019-2021 Application.

3.3 COST OF REMOVAL

As part of the 2009 Tolls Application, a separate line item for cost of removal was approved. These removal costs are associated with interim retirements (retirements that occur over the life of the associated plant) and not final abandonment costs. Rather than charging the interim retirements and associated removal costs to the accumulated depreciation, as is the norm, PKMJF stated the following:

There is no rate established to extinguish the current cost of normal asset retirements and removals. Due to changing fixed assets systems, the cost of current retirements and removals can no longer be recorded against accumulated depreciation. To maintain this financial data, this information is placed on the balance sheet, separate from the fixed asset system and plant records. As a result, a separate amortization rate is required to extinguish this balance.³⁸

While there may have been no separate rate for cost of removal, these costs were certainly accounted for historically in some fashion. Some companies treat removal costs as a current period expense while others capitalize removal costs as part of the cost of the replacing asset. I have never seen interim retirements and removal costs accounted in the way PKMJF does by recording them in a separate account on the balance sheet. This is certainly outside normal depreciation practices.

The 2010 Tariff Filing Application indicates that the base for computing the average depreciation rate for the cost of removal line item excludes "asset classes that are fully depreciated and amortization of cost of removal."³⁹ This statement does not make sense. As I understand, this line item contains retirements and associated removal costs associated with interim retirements. As discussed under Group Depreciation, retirements reduce plant (original cost) and reduce accumulated depreciation in the same amount (in-plant book cost of the associated retiring assets). Under the Company's procedure, the retirements do not reduce accumulated depreciation of the associated plant account but are shown as a separate line item along with related removal costs that decrease accumulated depreciation. Further, it is not known how PKMJF determined that assets related to the removal costs were fully depreciated.

It is unclear how the unrecovered removal costs of \$58,669 shown in 2009 were determined. Also, there is no detail separately distinguishing interim retirements from the associated removal costs. There is also a question as to why those removal costs did not have any historical accumulated depreciation applied. As mentioned above, it is not clear how removal costs were treated prior to 2009. It is possible that the

³⁸ 2009 Application, Toll Calculations and Supporting Material to Tariff 38, Schedule 8, Note [2].

³⁹ Exhibit A2-1, 2010 Tariff Filing Appendix 1.

cost of removal shown in 2009 reflects the net of the net book value of the retirements less removal costs. Despite the fact that this was found acceptable in 2009 by all parties, the amount could be overstated.

PKMJF did not apply for revised depreciation rates before 2019.

During the same time as the 2009 Application, VAFFC submitted its Project Description (PD) for the VAFD Project to the BC Environmental Office. The website for the project was launched in February 2009.⁴⁰ It is evident that by 2009 "fuel supply options for the Vancouver airport [had] sufficiently matured" and that VAFFC had made a "more than tentative" decision to proceed with the VAFD Project.

VAFFC filed an application for an Environmental Assessment Certificate (EAC) with the BC Environmental Assessment Office (EAO) in February 2011 wherein it stated the need for the VAFD Project (Project) and expectations that PKMJF would abandon the JFL facilities soon after the Project became operational. The EAC was issued in 2013. Thus, it was clearly evident in 2009 and certainly by 2011 and 2013, at the latest, that VAFFC had made more than a tentative decision to proceed with the VAFD Project.

In response to a VAFFC request asking why PKMJF had not sought changes to depreciation rates when it became apparent that current rates did not adequately reflect current life expectations, PKMJF stated:

It has only recently become apparent with a reasonable level of certainty that the Jet Fuel Line's economic life will end by 2021. As noted, only within the last year has the in-service date for the VAFD projected become reasonably certain, including the Government of British Columbia's September 17, 2018 determination that the VAFD Project had been substantially started, the VAFD project receiving its final outstanding approval from the City of Richmond during the period these IR responses were being prepared (July 22, 2019), and recent confirmation on the VAFD website that its expected in-service date remains at the end of 2021.⁴¹ (additional footnotes omitted)

In its reasons for Decision for reconsideration of the 2007 application, the BCUC stated as follows:

In the fullness of time, if [KMJF] is persuaded that the fuel supply options for the Vancouver airport have sufficiently matured and that shippers on the pipeline have made even tentative decision to abandon service on the pipeline, then a further application to the Commission would be justified.⁴²

Even though 2010-2018 was a negotiated toll settlement period, there was sufficient evidence by 2009, 2011, and incontestably by 2013 that the VAFD project was proceeding.⁴³ It was PKMJF's responsibility

⁴⁰ VAFFC, Vancouver Airport Fuel Delivery Project, Public Consultation Summary Report 2012 (VAFFC 2012 Consultation Report), pdf pp. 4 and 18.

⁴¹ Exhibit B-13, PKMJF Response to VAFFC (IR1) 12.12, pdf p. 66.

⁴² Reasons for Decision and Order P-7-08, Reconsideration of an Application for Approval of Tolls and Accelerated Depreciation, Reasons for Decision, p. 4.

⁴³ VAFFC submitted its PD for the VAFD Project to the BC EAO in 2009. VAFFC filed its application for an EAC in February 2011 explaining the need for the VAFD Project. In 2013, the VAFD Project received its conditional EAC.

to either apply its practice of recalculating depreciation rates in response to a fixed date, or otherwise seek additional depreciation recovery. By not booking the appropriate depreciation expense needed to achieve full recovery by 2022 as designed, PKMJF received increased earnings and only now requests increased depreciation rates to make up for the shortfall. In other words, it benefitted financially by not implementing the 2010 depreciation rate design in a manner consistent with its own procedures. Shippers have already paid the funds that should be directed toward depreciation balances and should not have to pay twice.

On December 16, 2019, Pembina purchased the Kinder Morgan Assets, which included the JFL. [REDACTED]

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4.0 ECONOMIC LIFE/REMAINING LIFE PARAMETERS

PKMJF takes the position that the economic life of the JFL is three years based entirely on the predicate that the VAFD Project will become operational the end of 2021 rendering the pipeline uneconomical to operate. PKMJF's proposal to adjust depreciation rates using a 3-year recovery period effective January 1, 2019 is not justified.

PKMJF contends that the only scenario where depreciation rates would not be sufficient to recover costs over the remaining life, is if its economic life of 3 years is not approved. It asserts that depreciation rates should not be designed in a way to leave stranded costs when the costs have been incurred prudently, nor should they be designed to put PKMJF at risk for bearing the risk of such stranded costs. PKMJF submits that would be evidence of unjust and unreasonable depreciation rates.⁴⁵ This indicates PKMJF has misunderstood the regulatory principles appropriate for a Common Carrier, as outlined in Appendix A prepared by P. Bowman.

PKMJF has been aware since the Vancouver Airport Master Plan – 2027 Technical Report that the fuel supply needs would be double the capacity of the pipeline by 2017 and triple the capacity by 2027.⁴⁶

As discussed previously, existing depreciation rates approved in 2010 were the result of a negotiated settlement and based on the expectation of a 2022 retirement date (13-year remaining life) closely matching the contract period. A reasonable interpretation of the 2010 depreciation rates is that they established the necessary pattern to recover the net investments by the terminal date of end of year 2022. This was confirmed by PKMJF. In Schedule 8 of the 2009 Application, the forecast remaining life is calculated by dividing the net service value (original cost less accumulated depreciation) for each account. This appears to be the same calculation of remaining life used in previous depreciation studies as well. This is not in accord with accepted depreciation principles unless the remaining life is a planned retirement date. Normally, the remaining life is determined first, then the depreciation rate. Nevertheless, the 2010 negotiated depreciation rates did not relieve PKMJF from its responsibility to regularly review the rates and

⁴⁴ Exhibit B-48-1, Confidential Letter Dated September 21, 2020, PKMJF Submitting Supplemental responses Regarding Order P-5-20, Appendix B and D, Response to Parkland (IR2)C-PKMJF 6.1.5 14.1 and 14.2.

⁴⁵ Exhibit B-37, PKMJF Response to BCUC (IR3) 7.13, pdf p. 49.

⁴⁶ 2007 Application, Exhibit B-1, Appendix B, pp. 12-39.

underlying life component.⁴⁷ If this had been done over the course of the 2010-2018 period, the risk of undepreciated facilities, to the extent they existed, could have been reduced.

Using PKMJF's method of remaining life determination, the 13-year remaining life established in 2010 would have been adjusted each subsequent year to ensure recovery of any additions. In other words, the 2010 depreciation rates would apply to the January 1, 2010 embedded investments until fully recovered; additions in 2010 would be subject to a 12-year period or an 8.3% depreciation rate; 2011 additions would be subject to an 11-year period or a 9.1% depreciation rate; 2012 additions would be subject to a 10-year period or a 10% depreciation rate; and so on. In this manner, January 1, 2010 embedded net investments as well as all subsequent additions would be fully recovered by 2022, a reasonable interpretation of PKMJF's intent of the 2010 depreciation rate design.

It is unclear if PKMJF's failure to book depreciation expense in this way reflects a lack of understanding or an attempt to increase earnings. As addressed in the complementary evidence (Appendix A, by P. Bowman), PKMJF has received more than sufficient toll revenue to recover the expenses it should have booked under the 2010 depreciation rate design.

Based on the above, PKMJF's determination of remaining life in the development of its depreciation rates has historically not been in accord with generally accepted depreciation practices. However, the method does provide depreciation expense recovery by the date of retirement (2022) if applied as designed. PKMJF did not apply the 2010 depreciation rate design as it should have.

Notably, as well, on December 16, 2019, Pembina purchased the Kinder Morgan Assets, which included the JFL.

[REDACTED]

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.⁴⁹ This undermines the reasonableness of the 3-year remaining life being proposed in the 2019 Application.

⁴⁷ NEB Decision RH-002-2004.

⁴⁸ Exhibit B-48, Appendix A, pdf p. 32, Q. 145

and Q. 148

⁴⁹ Exhibit B-48, Appendix B, pdf p. 17

Exhibit B-48, Appendix D, PKMJF Response to Parkland (IR2) – PKMJF 6.1.5 pdf p. 20

; Exhibit B-48, Appendix A, pdf pp. 1619

In sum, there is no clear retirement date of the JFL other than PKMJF's estimate of the VAFD Project in-service date. **No prospect of continuing JFL operation has even been considered by PKMJF.** It is conceivable that Parkland and some other shippers (airline and non-airline) may use the JFL even if it had higher tolls. The JFL has a physical 25-year remaining life and PKMJF acknowledges that it connects to a myriad of supply sources: marine delivery options, the Parkland refinery, and the Trans Mountain pipeline.⁵⁰ None of these factors have been fully considered to date. Regardless of which *longer* depreciation period might be best applied, the existing depreciation rates would provide full recovery of the remaining service value of the JFL assets by 2022, which is too short. Therefore, PKMJF's proposal for the depreciation rates in the current application is not supported and should be rejected.

and 1620

⁵⁰ Exhibit B-13, PKMJF response to VAFFC IR 6.4, pdf p. 35.

**APPENDIX D – Review of
PKM Canada (Jet Fuel) Inc.’s (“PKMJF”) proposed
Abandonment Costs for the 2019 Tariff Application**

Prepared by:

InterGroup Consultants Ltd.

Patricia Lee¹

December 16, 2020

¹ Services provided by BCRI Inc. and Staff

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1.0 ABANDONMENT FUND AND ASSESSMENT OF ELM REPORT

Provision for abandonment of the Jet Fuel Line (JFL) is a substantive component of PKMJF'S 2019 Tariff Filing Amended Revenue Requirement and Final Tolls Application for 2019-2021 (2019 Amended Application),² representing about 36.5% of the requested revenue requirement.³ The proposed abandonment cost estimate and surcharge are predicated on the JFL becoming uneconomical and ceasing operations at the end of 2021⁴, when the VAFD Project is expected to become operational. The preliminary abandonment cost study and estimate (Preliminary Report) contained in Appendix E of the 2019 Revenue Requirement and Final Tolls application (2019 Application)⁵ was based on a desktop review of the JFL and relied mainly on the National Energy Board's (NEB) Base case assumptions set forth in Decision MH-001-2013.⁶ The resulting estimated dismantlement costs were \$5.746m.⁷ Subsequently, PKMJF submitted a Final Abandonment Cost Report (Final Abandonment Report), Appendix E.1 of the Amended Revenue Requirement and Final Tolls Application for 2019-2021 (2019 Amended Application), that was based on a site-specific review and onsite inspection of the JFL.⁸ This updated cost report estimated abandonment costs of \$11.862m.⁹ Note that ELM provides no schedule in its report for the activities, and is not clear about the date at which the cited costs are referenced (e.g., 2022 dollars, or other).

To provide some context, below is a table showing the various abandonment cost estimates that PKMJF or its affiliates publicly provided over the years that will be discussed herein.

² Exhibit B-14.

³ Exhibit B-11, pdf p. 52.

⁴ Exhibit B-14, pdf p. 16.

⁵ Exhibit B-8.

⁶ Exhibit B-37, pdf p. 44. While the JFL is not regulated by the National Energy Board's successor, the Canada Energy Regulator (CER), PKMJF submits that the guidelines in MH-001-2012 are a reasonable basis for abandonment assumptions in the present circumstances: Exhibit B-37, PKMJF Response to BCUC IR 3.1.2, pdf p. 16..

⁷ Exhibit B-8, Appendix E.1, pdf pp. 124-139.

⁸ Exhibit B-10, pdf pp. 1-2; Exhibit B-14, pdf p. 5.

⁹ Exhibit B-10, pdf p. 8.

Table 1: Comparison of Historically Provided Abandonment Cost Estimates

	Estimated Abandonment Costs
2007 Tolls Application	\$3.025m
2009 Tolls Application	\$3.025m
April 24, 2017 Kinder Morgan Preliminary Prospectus	\$2m - \$3m
ELM Preliminary Report	\$5.746m
ELM Final Cost Report	\$11.862m

Based on a review of the ELM Final Abandonment Report, significant concerns arise about the quality of the report, and its underlying assumptions and data inputs given the scale of toll impact that arises. The report should be deemed entirely insufficient to justify charging shippers a toll increase of over 50%¹⁰. At minimum, a reduction to the PKMJF proposed abandonment cost estimate of \$3,528,363 from \$11,861,577 to \$8,333,214 is recommended; however, even with this reduction, the impact on tolls would be excessive if amortized over 3 years. The specific adjustment is based on the following:

- ELM’s assumption of total removal of the pipeline in the City of Richmond is not justified. There has been no showing of a compelling reason for removal other than an indication of the city’s expectation. Considering that some removal may be reasonable due to redevelopment, 20% removal and 80% abandonment should be assumed at this time. This change reduces the cost estimate by \$2,250,375 for pipeline removal.
- In response to a VAFFC request, PKMJF acknowledged that, due to an oversight, costs for post-abandonment monitoring costs activities had been applied by ELM to the full length of the pipeline, including portions that were to be abandoned in place and portions that were to be removed, rather than only being applied to those sections that were proposed to be abandoned-in-place.¹¹ Correcting this reduces the cost for post-abandonment monitoring by \$152,800.
- The remaining \$1,125,188 reduction to the cost estimate is associated with Project Management and Contingency reflecting the recommended changes to Pipeline Removal within the City of Richmond.

¹⁰ Exhibit B-11, PKMJF Response to BCUC (IR2) 9.3 and 9.3.2, pdf pp. 50-52.

¹¹ Exhibit B-38, PKMJF Response to VAFFC (IR2) 4.1 and 4.5(b), pdf pp. 23 and 25.

2.0 OVERVIEW

The concept of abandonment relates to the ultimate physical/demolition/removal/disposal from service of a pipeline offset by any attendant gross salvage from the removed assets, potentially at a time when the pipeline no longer has volumes or shippers.¹² Abandonment may involve physically removing the pipeline from the ground or leaving it in place, with environmental reclamation. Abandonment costs are often referred to as terminal net salvage. While the JFL is not regulated by the NEB, PKMJF submits that the guidelines established by the NEB (now the CER) in MH-001-2012 are a reasonable basis for abandonment assumptions in the present circumstances.¹³ In addition to estimating costs, the NEB/CER framework also addresses concepts related to abandonment trusts.

In addition to regulatory approaches, there are accounting requirements to ensure investors are aware of liabilities related to asset retirements such as abandonment. These requirements are Asset Retirement Obligations (AROs) and result from a legal obligation to retire or decommission a plant asset. An ARO is reported when a reasonable estimate of the fair value of the legal obligation can be made.¹⁴ PKMJF reported in 2019 for the first time an ARO relative to the abandonment costs of the JFL. In response to why an ARO had not previously been reported, PKMJF asserted in August 2019 that it was unable to determine a reasonable fair value estimate.¹⁵

The use of an abandonment trust fund, as opposed to an ARO, is comparatively rare in Canada and the United States. Abandonment/decommissioning obligations and requirements in the United States are typically constrained to nuclear power plants and fossil-fueled power plants. Nuclear power plants are generally required to utilize a decommissioning trust fund, while fossil-fueled power plants do not. Even though the JFL is not a public utility, it is still subject to the regulations of the BC Oil and Gas Commission (BCOGC) and the BCUC. Similar to the JFL abandonment requirements, nuclear plants are decommissioned¹⁶ and, due to public health and safety issues, are required to provide financial assurance that funds will be available for decommissioning at the time of license expiration.¹⁷ The primary objective of a decommissioning trust fund is to have enough money on hand at decommissioning to meet all required expenses at the lowest possible cost, also a desired goal of pipeline abandonment/decommissioning. In contrast to nuclear plants in the United States, fossil-fueled plants, are dismantled or abandoned upon retirement from service but do not typically have pre-funded trust accounts or other financial assurance to address the decommissioning costs. This is because there are far less health and safety concerns involved with abandoning a fossil-fueled plant than a nuclear plant. I understand that major federally regulated pipelines in Canada have abandonment funds while provincially regulated pipelines do not.

¹² For example, the Canadian Energy Regulator (CER) Onshore Pipeline Regulations, 1999 defines "abandon" as "to permanently cease operation such that the cessation results in the discontinuance of service" and "decommission" as "to permanently cease operation such that the cessation does not result in the discontinuance of service." (SOR/99-294)

¹³ Exhibit B-37, PKMJF Response to BCUC IR 3.1.2, pdf p. 16.

¹⁴ Submissions of Trans Mountain (Jet Fuel) Inc., 2007 TMJ Toll Application, para. 41, p. 18.

¹⁵ Exhibit B-11, PKMJF Response to BCUC IR 11.10.1, pdf pp. 72-73.

¹⁶ Decommissioning involves the process of dismantling and removing materials and equipment that are no longer used and useful but which remain following retirement of the nuclear generating unit.

¹⁷ Nuclear Regulatory Commission's final rule, Code of Federal Regulations, Chapter 10, Section 50.75.

PKMJF engaged Environmental Liability Management Inc. (ELM) to prepare an abandonment cost estimate for the JFL and associated facilities. PKMJF is proposing an abandonment trust type of account to manage the funds. The preliminary abandonment cost estimate (Preliminary Report) was based on a desktop review of the JFL relying mainly on the NEB's Base case assumptions set forth in Decision MH-001-2013.¹⁸ This Decision held that the timing of abandonment of a pipeline for the purpose of estimating future abandonment costs should be the shorter of the estimated economic life or physical life.¹⁹ For the economic life of the JFL, PKMJF contends the appropriate timeframe is three years from 2019-2021 coinciding with the expected in-service date of the VAFD Project, implying a December 31, 2021 date of retirement. The resulting estimated dismantlement costs in the Preliminary Report were \$5.746m.²⁰ Subsequently, ELM submitted a Final Abandonment Cost Report (Final Abandonment Report) that was based on a site-specific review and onsite inspection of the JFL.²¹ This updated cost report estimated abandonment costs of \$11.862m.²²

3.0 HISTORICAL BACKGROUND

The JFL is regulated by the BCOGC and the BCUC. At the time of the 2007 Tolls Application (2007 Application), PKMJF's stated assessment was that VAFFC would be constructing a bypass that would be capable of serving all of VAFFC's jet fuel needs, thus rendering the JFL uneconomical to continue operating. Accordingly, PKMJF opined that the economic life of the JFL was five years and sought accelerated recovery of the associated net service value over that period. PKMJF was also considering applying at the end of 2012 to the BCOGC to abandon the pipeline in accordance with the required operational and safety standards and was requesting to establish a provision for abandonment costs.²³ It estimated abandonment costs at the time to be \$3.025 million.²⁴ The 2007 Application also assumed \$0.5 million could be secured from sale of some parts of the pipeline assets, for a net abandonment cost of \$2.525 million.²⁵ The application sought to include those costs in its tolls. Ultimately, the BCUC denied PKMJF's request for accelerated depreciation and found that it was premature to establish an abandonment trust fund given 1) VAFFC had not yet made a firm and final decision with regard to the bypass; 2) the Chevron Refinery (now Parkland) would likely continue to take the same amount of service as Jet Fuel was a necessary by-product of the light crude oil stream Chevron refined; and 3) the uncertainties of income tax treatment and the impact on tolls made the abandonment request premature.²⁶

¹⁸ Exhibit B-37, pdf p. 44.

¹⁹ Decision MH-001-2013, p. 26.

²⁰ Exhibit B-8, Appendix E.1, pdf pp. 124-139.

²¹ Exhibit B-10, pdf pp. 1-2.

²² Exhibit B-10, pdf p. 8.

²³ 2007 Application, Exhibit B-1, pdf p. 11.

²⁴ 2007 Application, Exhibit B-1, pdf p. 22.

²⁵ 2007 Application, Exhibit B-1, pdf pp. 68, 107 and 112.

²⁶ BCUC Order No. P-3-08, Appendix A, Reasons for Decision (February 13, 2008) (the "BCUC 2008 Decision") at pdf pp. 8-9, 11-16.

By Order No. P-3-08, the BCUC found that PKMJF is required to obtain its approval to abandon the operation of the JFL pursuant to the common carrier duties under Section 42 and 43 of the Act. These sections have since been removed with the repeal of the Pipeline Act, but the addition of subsection 65(3.1) of the UCA specifically provides that the BCUC may establish conditions with respect to a common carrier in relation to abandonment of service. Thus, PKMJF claims the BCUC has the jurisdiction to consider and approve a stand-alone abandonment cost estimate, collection mechanism, and set-aside mechanism.²⁷

Despite denial of PKMJF's 2007 Application and request for a provision of abandonment costs, the BCUC explicitly encouraged that PKMJF maintain a close watch on the likelihood of eventual abandonment. The BCUC specifically noted that pre-collection of abandonment costs would potentially be appropriate if conditions changed. In Order P-7-08, the Commission stated:

The Commission agrees with Chevron that the central issue before the Commission was the determination of the economic life of the pipeline.

...

Further, the Commission is of the view that the issue of pre-collection of abandonment costs by pipeline companies is worthy of debate and where it has been shown that there is some certainty in the eventual abandonment or failure of the economic operation of a pipeline, then an application for accelerated depreciation might well succeed.

...

In the fullness of time, if TMJ is persuaded that the fuel supply options for the Vancouver airport have sufficiently matured that shippers on the pipeline have made even tentative decisions to abandon service on the pipeline, then a further application to the Commission would be justified.²⁸

Note, of course, that by 2009, PKMJF had negotiated such accelerated depreciation with its shippers.

In 2008, the NEB (now the CER) initiated a proceeding to address the financial issues of pipeline abandonment, identified as Stream 3 in its Land Management Consultation Initiative (LMCI). This proceeding introduced the trust fund concept in Canada. In May 2009, the NEB issued RH-2-2008 Reasons for Decision that set forth guiding principles and a Base Case for preparing preliminary abandonment cost estimates for pipeline abandonment costs. Also, the NEB recognized that preliminary abandonment cost estimates would require the use of assumptions rather than actual numbers. Even so, the use of assumptions was not a sufficient rationale to preclude making the cost estimates.²⁹ On March 4, 2010, the

²⁷ Exhibit B-13, PKMJF Response to VAFFC IR1, 2.2, pdf p. 14.

²⁸ BCUC Order P-7-08, Appendix A, Reasons for Decision (August 19, 2008), pdf pp. 5-6.

²⁹ Order RH-2-2008, Land matters Consultation Initiative Stream 3, Reasons for Decision, May 2009, pdf p. 34.

NEB released a revised Base Case that included physical assumptions but no Unit Costs. Subsequently, in December 2010, the NEB issued a table containing revised Unit Costs.³⁰

In the 2009 Tolls Application (2009 Application, dated December 2008), PKMJF noted that it continued recommending the inclusion of a provision for abandonment costs in its tolls.³¹ While PKMJF did not believe it prudent to wait for financial issues to be resolved before collection of an abandonment fund began, it nevertheless did not pursue this issue. In the 2009 Application, PKMJF stated:

At the shippers meeting, TMJ briefly discussed collection of Negative Salvage with the Shippers. It was decided to continue discussions in 2009 and not pursue collection at this time.³² (emphasis added)

PKMJF also asserted that the proposed Revenue Requirement did not provide for the abandonment costs within its tolls.³³ PKMJF did note, however, that the provision for abandonment would be calculated using the previously estimated costs of \$3.025 million, commenting that a refinement of that estimate would be undertaken in 2009.³⁴ Thus, PKMJF recognized the need in 2009 to begin providing for abandonment and decommissioning costs of the JFL and expected a near-term need to update the cost estimate but appears to have made a conscious decision not to pursue the issue.

During the same time as the 2009 Application was being reviewed, VAFFC submitted its Project Description (PD) for the VAFD Project to the BC Environmental Office. The website for the project was launched in February 2009.³⁵ It is evident that by 2009 "fuel supply options for the Vancouver airport [had] sufficiently matured" and that VAFFC had made a more than "tentative" decision to proceed with the VAFD Project.³⁶

The subsequent 2010 Tolls Application covering the 10-year period 2009-2018 was the product of negotiations. The Application indicated a shortened remaining life for the JFL (13 years) for depreciation purposes, with no explicit indication whether or not abandonment costs were included in the revenue requirement (for further information see the complementary testimony filed by Patrick Bowman). The shortened remaining life was based on a final retirement date of 2022 for the JFL.

VAFFC filed an application for an Environmental Assessment Certificate (EAC) with the BC Environmental Assessment Office (EAO) in February 2011 wherein it stated the need for the VAFD Project and expectations that PKMJF would abandon the JFL facilities soon after the Project became operational. The EAC was issued in 2013. Thus, it was clearly evident in 2009 and certainly by 2011 and 2013, at the latest, that VAFFC had made more than a tentative decision to proceed with the VAFD Project. Thus, PKMJF had ample

³⁰ NEB December 21, 2010 letter. See Exhibit B-10, Appendix C, pdf pp. 37-40 for a copy of the table with unit costs.

³¹ 2009 Application, Annex A to this submission, Appendix 1, p. 31.

³² 2009 Application, Annex A to this submission, Schedule 1, p. 1.

³³ 2009 Application, Annex A to this submission, Schedule 1, p. 1.

³⁴ 2009 Application, Annex A to this submission, Appendix 1, p. 32.

³⁵ VAFFC, Vancouver Airport Fuel Delivery Project, Public Consultation Summary Report 2012 (VAFFC 2012 Consultation Report), pdf pp. 4-6 and 18.

³⁶ BCUC Order P-7-08, Appendix A, Reconsideration Reasons for Decision, p. 4.

opportunity to file an application concerning the provision of abandonment costs as the BCUC encouraged it to do in Order P-7-2008. Regulators can provide the opportunity and mechanisms for recovery but it is the responsibility of the company, in this case PKMJF, to pursue the recovery when the need arises. With respect to the provision for abandonment costs, PKMJF failed its responsibility.

Indeed, PKMJF waited until the end of the current settlement period, some seven to ten years after there was clear definitive notice of the VAFD Project, to again pursue the abandonment cost issue.

It seems apparent that PKMJF had ample opportunity to begin funding and setting aside amounts for decommissioning at some point between 2009 and 2013 at the latest. There is a substantive question as to whether PKMJF had an obligation to do so, regardless of regulatory processes, for the purposes of appropriate accounting reporting, once it believed the JFL had a measurable limited life. It is clear PKMJF could have filed an application concerning the provision of abandonment costs, as the BCUC encouraged it to do in Order P-7-08, had it seen a need to also adjust tariffs for the noted funding. PKMJF could have readily absorbed decommissioning funding without needing to adjust its then-existing negotiated tariffs from simply reducing net income from the JFL, i.e., the negotiated tolls were compensating PKMJF against the risk that airline shippers would leave the pipeline during the settlement period.

In response to a 2016 announcement of the Burnaby refinery owners' intention to sell the refinery, it was unclear how much Jet Fuel Burnaby would continue supplying the JFL. The April 24, 2017 Preliminary Prospectus and the May 25, 2017 Long Form Prospectus Kinder Morgan Canada Securities Filings stated:

... To the extent it becomes uneconomic to continue shipping jet fuel to the Vancouver International Airport, the Company estimates that the decommissioning and abandonment costs of the Jet Fuel Pipeline would be in the range of \$2.0 million to \$3.0 million, subject to regulatory approval of the BCUC and the BC OGC.³⁷

Note that this estimate is in the range or somewhat below the previous estimate submitted as far back as the 2007 Application, even though the 2009 Application expected these activities to occur in 2013, and this updated information presumably was expecting the activities to occur some number of years after 2017.

The 2019 Application and 2019 Amended Application are based entirely on PKMJF's claim that the JFL will be uneconomical to operate by 2022 due to the VAFD Project (Project), expecting no throughput volumes will continue to move on the JFL.³⁸ PKMJF has not provided any information as to what it expects will happen to Jet Fuel produced at the Burnaby refinery. PKMJF also indicates it recognizes that before actual abandonment, it is required to apply to the BCUC to cease providing service and to the BCOGC for permission to physically abandon the system which it has not done as yet.³⁹ The reason neither of the above has been done yet it appears is that there is no firm date for retirement of the JFL or when dismantlement will begin⁴⁰.

³⁷ Exhibit C2-3, VAFFC(IR1) to PKMJF, Appendices C1, p. 40 of 62, and C2, pp. 61-62 of 62.

³⁸ Exhibit B-13, PKMJF Response to VAFFC (IR1) 6.1, pdf p. 34.

³⁹ 2019 Tariff Filing, Amended Application, IV. Abandonment Costs, pdf p. 62.

⁴⁰ Exhibit B-11, PKMJF Response to BCUC(IR2) 11.10.1, pdf pp. 72-73.

As discussed further under heading 7.4 below, ELM's Preliminary Abandonment Cost Report contained in the 2019 Application was based on a desktop review of the JFL without completion of a field inspection. The abandonment costs estimated were in the amount of \$5.746 million using the NEB's guidelines regarding unit costs for the various abandonment activities.⁴¹ Note that this balance is already net of all anticipated salvage, of \$18,580 for scrap steel.⁴²

ELM subsequently prepared a Final Abandonment Report, which was based on a site-specific review and onsite inspection of the JFL.⁴³ The purpose of the abandonment cost study is stated to identify actual and potential abandonment liability. ELM submits that "the scope of work does not represent an exhaustive study, but rather a reasonable inquiry, consistent with good commercial practice."⁴⁴ ELM submitted that the updated costs are based on the NEB 2008 set of preliminary cost parameters and physical assumptions set forth in Decision MH-001-2012 in Appendices II (Table A-1: Land Use and Facility), and IV (Table A-3: Unit Costs for Abandonment Activities) (Base Cost) supplemented with site-specific information.⁴⁵ The abandonment cost estimate resulting from the site-specific cost study is \$11.862 million,⁴⁶ almost four times reported in the 2017 Kinder Morgan Canada Securities Filings and more than twice the estimated amount in the preliminary cost study.

3.1 WHEN IT BECAME CLEAR THAT FUEL SUPPLY OPTIONS HAD SUFFICIENTLY MATURED, PKMJF DID NOT PURSUE RECOVERY OF ESTIMATED DISMANTLEMENT COSTS AS ENCOURAGED BY BCUC ORDER P-7-08

If PKMJF believed it necessary and prudent to begin providing for dismantlement costs in 2007 as it asserted in its 2007 and 2009 Applications, it could have, and indeed should have, begun reflecting this liability in its financial statements which it did not until 2019⁴⁷. If it believed a change in tolls was necessary, PKMJF could have sought agreement with its shippers, or pursued toll revisions with the BCUC. The point being, there were avenues available to PKMJF to pursue if the provision for dismantlement was as important as PKMJF is claiming and was not already provided for in tolls. PKMJF should not now be protected from the consequences of its business decisions and responsibilities.

⁴¹ Exhibit B-8, 2019 Revenue Requirement and Final Tolls Application, pdf pp. 132-133.

⁴² Per Exhibit B-11, BCUC IR 10.10.2, pdf p. 63. This compares to the assumptions in the 2007 Application that salvage would be \$500,000.

⁴³ Exhibit B-10, 2019 Tariff Filing Final Site-specific Abandonment Cost Estimate Report, pdf pp. 1-2.

⁴⁴ Exhibit B-10, pdf p. 20.

⁴⁵ Exhibit B-11, PKMJF Response to BCUC (IR2) 10.1 pdf pp. 53-54; Exhibit B-14, 2019 Amended Application, pdf pp. 26-27.

⁴⁶ Exhibit B-10, pdf p. 19.

⁴⁷ Exhibit B-11, PKMJF Response to BCUC(IR2) 11.10.1, pdf pp. 72-73.

In the current application, PKMJF oddly contends that it was not aware of the risk of bypass by the VAFD Project in 2007⁴⁸ (even though it provided evidence to the BCUC of exactly this scenario, and requested tolls based on this assumption, in the 2007 Application). In any case, PKMJF certainly should have been aware of the bypass risk in 2009 (when it negotiated a 13-year remaining life of the assets), 2011, and unquestionably by 2013. Moreover, if PKMJF had sought an abandonment provision to begin prior to 2013 when there was a high degree of certainty of the VAFD Project, tolls would have had a longer period, up to a full 13 years, to provide for estimated abandonment costs. In such a case, either the abandonment costs could have been a new accrual that simply reduced PKMJF's net income it otherwise recorded, or it could potentially become part of the revenue requirement in a new negotiated settlement, if one was needed. If that option was not appropriate, and there was no other source of funds already included in the tolls then being charged, PKMJF could have sought a BCUC order that dismantlement funds be collected during the term of the existing settlement and treated as a flow through cost item. PKMJF could have thus proposed to limit the issue to collection of abandonment funds only. Moreover, PKMJF asserts that its mitigation efforts have been limited since 2009 given that VAFFC "controls the majority of the product moved on the JFL."⁴⁹ It was not VAFFC's responsibility to have pursued dismantlement earlier. That responsibility was clearly a business decision of PKMJF, one that it chose to disregard, if it is to be believed that tolls in the period 2009-2018 were insufficient to provide for an abandonment reserve. Additionally, waiting until this late date to seek explicit abandonment cost recovery is not consistent with Bonbright principles of fairness and avoiding undue discrimination and the corollary principle of intergenerational equity.⁵⁰ It is patently unfair and discriminatory to begin collecting abandonment funds now that should have rightly began some years ago when the risk of bypass was clearly known. Intergenerational inequity would be caused by this PKMJF failure to set aside funds (or to claim to have failed to set aside funds) for abandonment earlier.

PKMJF contends that its proposed toll surcharge collection is not discriminatory because abandonment costs are allocated in the same manner as the JFL's annual revenue requirement based on relative volumes shipped by each shipper.⁵¹ However, as shown in a PKMJF information request response, the proposed abandonment surcharge represents a 62.2% increase in revenue requirements over the 2018 approved revenue requirement and a 58.2% increase over the 2019 interim toll increase.⁵² While PKMJF does not consider 2018 to 2019 Revenue Requirements (including the abandonment surcharge) to be an apples-to-apples comparison, as it asserts no abandonment costs were included in the 2018 Revenue Requirement, I believe the comparison is valid in determining a true and fair picture of the impact of the surcharge on customers. On its face, this amounts to rate shock directly resulting from PKMJF's suggestion that it failed to pursue abandonment costs until now even though it was fully aware of the imminent VAFD Project.

⁴⁸ Exhibit B-13, PKMJF Response to VAFFC (IR1) 16.1, pdf p. 81.

⁴⁹ Exhibit B-37, PKMJF Response to BCUC(IR3) 3.5.2, pdf p. 22.

⁵⁰ James C. Bonbright, *Principles of Public Utility Rates*, 1st ed. (New York: Columbia University Press, 1961), p. 291.

⁵¹ Exhibit B-13, PKMJF Response to VAFFC (IR1) 16.6, pdf p. 82.

⁵² Exhibit B-11, PKMJF Response to BCUC (IR2) 9.3 and 9.3.2, pdf pp. 50-52.

While the costs of abandonment are part of PKMJF’s normal business operations, the fact that PKMJ has acted in an imprudent manner with respect to this issue by not seeking a dismantlement provision before now mean that it should bear the risk of dismantlement cost recovery or at least a portion thereof rather than the shippers. Based on the above, PKMJF’s proposed recovery of the estimated costs of dismantlement is not fair and is discriminatory.

The 2019 financial reports marked the first time an asset retirement obligation or liability was noted, and it assumed a 25-year life for the JFL.⁵³ This completely contradicts the three years being sought in this proceeding and does not lend credence to the assumed abandonment in 2022 especially given that the abandonment cost study submitted in this proceeding was being developed at the same time as the financial reports.⁵⁴

[REDACTED]

- [REDACTED];
- [REDACTED]
- [REDACTED]
- [REDACTED]⁵⁵

[REDACTED]

PKMJF’s applied-for abandonment costs in this proceeding are based on an unreasonably short economic life of the JFL.

4.0 ABANDONMENT COST STUDY REVIEW

ELM submits that the purpose of the abandonment cost study is to identify PKMJF’s actual and potential abandonment liability. The scope identified “does not represent an exhaustive study, but rather a reasonable inquiry, consistent with good commercial practice.”⁵⁶

PKMJF submits that the NEB guidelines in MH-001-2012 are a reasonable basis for abandonment assumptions, but ultimately the BCOGC will determine the abandonment requirements for the JFL since NEB (CER) regulations are not binding on provincial regulators.⁵⁷ The unit cost estimates contained in the Final Abandonment Report generally appear to be within industry standards. Cost activities are reasonable for abandonment that is expected sometime in the distant future. They are not reasonable however if abandonment is really expected to take place in three years, which is PKMJF’s position. The detail in the

⁵³ Exhibit B-39, PKMJF Response to Parkland (IR2) 12.1 and 12.2, pdf p. 18.

⁵⁴ Exhibit B-8, The Preliminary Report was submitted to the BCUC on June 7, 2019.

⁵⁵ Exhibit B-48, Appendix A at pdf pp. 31-32.

⁵⁶ Exhibit B-10, Final Site-Specific Abandonment Cost Estimate Report, pdf p. 20.

⁵⁷ Exhibit B-37, PKMJF Response to BCUC (IR3) 3.1.1 and 3.1.2, pdf pp. 15-17.

Final Abandonment Report is not what would be expected for a planned near-term abandonment. For example, the report contains no timeline of activities. Also, the report has no specific information about how the activities would be undertaken.

PKMJF states that no documented abandonment plan has been completed yet but will be prepared at the time of abandonment and will include abandonment details.⁵⁸ PKMJF submits that discontinuing operations on the JFL is not the same as abandonment and that there is no abandonment application before the BCOGC because the JFL is still in operation.⁵⁹ This raises questions as to when precisely will the JFL be determined to have ceased operations and when will the abandonment process begin? Does PKMJF plan to cease operations and then not abandon the JFL until sometime in the future or not at all?

Further, as PKMJF notes, "ELM was tasked to provide an estimate of the expected abandonment costs based on the assumptions in the ELM study."⁶⁰ Thus the results of the cost study were predetermined by the ELM abandonment assumptions. There is no indication there was an effort by ELM in its assumptions to develop the abandonment cost estimate in the least cost most cost-efficient manner, which should be a requirement.

I would expect "preliminary discussions" would have advanced far further were the situation really this close to abandonment. For example, ELM discusses in the Final Abandonment Report that "preliminary" discussion with cities of Burnaby and Richmond lead it to believe there "could" be significant additional time and effort required to complete tasks in the Engineering & Project Management category.⁶¹ These words have been used as justification for applying a section 1 (Engineering & Project Management) factor of 25%, which is higher than the base case. I would not expect such an implication of uncertainty at this close to abandonment. The cost study submitted is more in line with what would be expected for a retirement/abandonment more than 10 years out.

While my work experience is with respect to nuclear decommissioning, and in fossil dismantlement cost studies and estimates, I have never encountered a case where funding for the liability was recommended to begin only three years before the final retirement/shut down of the facility. Things like future development in research, technology, information sharing and actual experience should lead to greater precision in the estimation of abandonment costs. However, such is highly unlikely if abandonment is really expected to take place in three years. Even the NEB contemplated that abandonment costs and funds should be reviewed at least every five years.⁶² Indeed, it noted that such regular reviews of cost estimates would mitigate the risk of underfunded abandonments.⁶³ This is impossible if the JFL will really be abandoned in three years.

Furthermore, as discussed previously, PKMJF was well aware in 2009 and definitely by 2011 or 2013 that the VAFD project was going forward. Still, it did not seek another application for the provision of

⁵⁸ Exhibit B-37, PKMJF Response to BCUC(IR3) 4.4, pdf p. 28.

⁵⁹ Exhibit B-37, PKMJF Response to BCUC(IR3) 7.16, pdf p. 50.

⁶⁰ Exhibit B-37, PKMJF Response to BCUC(IR3) 4.4, pdf p. 28.

⁶¹ Exhibit B-10, pdf p. 14 ; Exhibit B-11, PKMJF Response to BCUC (IR2) 10.2, pdf p. 54.

⁶² RH-2-2008 Reasons for Decision; MH-001-2012

⁶³ RH-2-2008 Reasons for Decision, p. 35.

abandonment as the BCUC encouraged it to do in Order P-7-2008. VAFFC should not be held to experience rate shock and excessive costs simply due to any failure of PKMJF's business decisions.

Consultation with Municipalities

ELM consulted the City of Richmond, the City of Burnaby, and the BCOGC concerning the abandonment of the JFL via email. ELM conveyed to the City of Richmond and the City of Burnaby that the standard industry practice is to abandon the pipe in place. ELM also quoted the following from Z662.15:

The decision to abandon a section of pipeline whether in place or through removal, shall be made on the basis of a documented abandonment plan that includes the rationale for the abandonment, landowner consultation, effect on terrain and water, road and railway crossings, as well as current and potential land use.⁶⁴

Further, ELM prefaced an email to the City of Burnaby with the statement:

To be clear, abandonment of this pipeline is not being proposed now or anytime in the foreseeable future.⁶⁵

This statement contradicts the entire basis of PKMJF's proposed three-year abandonment provision.

The City of Richmond responded to the ELM email that "Richmond's expectation is for the pipeline to be fully removed as part of the decommissioning process."⁶⁶ This is the total correspondence with the City justifying this assertion.⁶⁷ ELM states that "it is assumed that landowners, municipalities, and regulators will allow for pipeline abandonment in place unless there is a compelling reason to remove a segment of the pipeline".⁶⁸(emphasis added) This is standard practice. When asked if the City had provided compelling reasons for its expectation, PKMJF submits that no further justification was provided.⁶⁹ The assumed 100 percent removal is being driven totally by the email correspondence with the City that does not include any rationale for its preference of removal.

The BCOGC communicated to ELM in an email that the minimum requirements for abandonment are outlined in CSAZ662 and the details of the abandonment plan must be developed by the pipeline company.⁷⁰ While any BCOGC Order regarding removal may govern, the fact is that no plan has been submitted to the BCOGC and may not be for a significant while, depending on when exactly the JFL ceases operations. Moreover, the plan submitted to the BCOGC must include rationale for removal rather than abandonment in place. There is no reasonable rationale at this point to assume total removal is appropriate.

⁶⁴ Exhibit B-22, Response to BCUC Order P-10-19, Appendix (Suppl.) VAFFC-KMJF 18.3, pdf p. 56.

⁶⁵ Exhibit B-22, Appendix (Suppl.) VAFFC-KMJF 18.3, pdf p. 28.

⁶⁶ Exhibit B-10, Final Site-Specific Abandonment Cost Estimate Report, pdf p. 17.

⁶⁷ Exhibit B-22, PKMJF Response to BCUC (IR2) 18.3.

⁶⁸ Exhibit B-10, Final Site-Specific Abandonment Cost Estimate Report, section 5, pdf p. 16.

⁶⁹ Exhibit B-37, PKMJF Response to BCUC (IR3) 5.11, pdf p. 34.

⁷⁰ Exhibit B-22, Appendix (Suppl.) VAFFC-KMJF 18.3, pdf p. 20.

Based on the City of Richmond's expectation, ELM assumed the removal of all 13.2 km of pipeline in the City of Richmond.⁷¹

In the event the Commission decides to initiate an abandonment provision, the following adjustments should be made to ELM's cost estimates:

- In email communication with the City of Richmond concerning abandonment, ELM stated it assumed abandonment in place unless there is compelling reason for removal.⁷² The City of Richmond indicated its expectation for the pipeline to be removed as part of the abandonment process but no compelling reason was given for that expectation. There was no successful contact with the City of Burnaby so ELM assumed 20% removal and 80% abandonment in place to give some recognition for possible future development in industrial and commercially zoned areas.⁷³ ELM was also instructed by PKMJF to assume municipal preferences received the full effect in the cost estimates.⁷⁴ Given there was no compelling reason for the City of Richmond's expectation for total removal, I suggest assuming 20% removal and 80% abandonment at this time. This is in line with PKMJF's expectations that some removal may be reasonable due to the amount of recent redevelopment.⁷⁵ I believe this assumption may be conservative based on PKMJF's estimate that 20% of the pipeline is located on developed land.⁷⁶ The result of this change will reduce the cost estimate of Pipeline Removal, section 5a, from a total of 2,810,625 to \$560,250. In this calculation I also assumed 40% rural and 60% urban with an additional 15% for rural area restoration of disturbed areas as ELM did.⁷⁷
- According to the NEB's framework for estimating abandonment costs, costs for the "Provision for Post abandonment activities only apply to those sections of a pipeline which are proposed to be abandoned-in-place."⁷⁸ However, in response to a VAFFC request, PKMJF acknowledged that, due to an oversight, costs for post-abandonment monitoring costs activities have been applied by ELM to the full length of the pipeline, including portions that were to be abandoned in place and portions that were to be removed, rather than only being applied to those sections that were proposed to be abandoned-in-place..⁷⁹ Correcting this reduces the value for section 3b from \$764,800 to \$612,000 assuming 20% of the pipeline in Richmond and 20% of the pipeline in Burnaby is removed as discussed above.
- An additional \$1,125,188 reduction to the cost estimate is associated with Project Management and Contingency reflecting the recommended changes to Pipeline Removal for the City of Richmond assuming 20% removal and 80% abandonment in place rather than 100% removal due to the lack of any compelling reasons.

⁷¹ Exhibit B-10, Final Site-Specific Abandonment Cost Estimate Report, pdf p. 17.

⁷² Exhibit B-10, Final Site-Specific Abandonment Cost Estimate Report, section 5, pdf p. 16.

⁷³ Exhibit 37, PKMJF Response to BCUC (IR3) 6.1.3, pdf p. 39. ELM assumed at 20 percent generic contingency number to represent future development.

⁷⁴ Exhibit B-38, PKMJF Response to VAFFC (IR2) 5.3, pdf p. 31.

⁷⁵ Exhibit B-37, PKMJF Response to BCUC (IR3) 5.12, pdf pp. 34-35.

⁷⁶ Exhibit B-38, PKMJF Response to VAFFC IR2, 6.1, pdf pp. 35-36.

⁷⁷ Exhibit B-10, Final Abandonment Report, pdf p. 17.

⁷⁸ Exhibit B-11, Appendix BCUC-KMJF 10.1, NEB Reasons for Decision MH-001-2012, pdf p. 203.

⁷⁹ Exhibit B-38, PKMJF Response to VAFFC (IR2) 4.1 and 4.5(b), pdf pp. 23 and 25.

The minimum total adjustment to ELM's abandonment cost estimate is therefore a decrease of \$3,528,363 from \$11,861,577 to \$8,333,214 as shown in the table below. There may be other concerns from an engineering perspective.

Table 2: Summary of Recommended Abandonment Cost Categories

Project Phase	Cost Description	ELM Final Cost Report Value*	VAFFC Recommended Value	Difference	Unit
1. Project Management	Planning & Preparation. Land use study, depth of cover survey abandonment methodology, notifications & agreements	\$1,849,463	\$1,286,869	(\$562,594)	25% of project (applies to Sections 2, 3a, 4, 5 and 6)
2. Abandonment Preparation	Pipeline isolation, pigging, purging	\$267,040	\$267,040	\$0	\$6,983/km
3. Pipeline Abandonment	a. Basic Pipeline Abandonment in Place	N/A for 6" Pipe	N/A for 6" Pipe		
	b. Post-abandonment Monitoring	\$764,800	\$612,000	(\$152,800)	\$20,000/km
4. Special Treatment	Brunette River crossing	\$0	\$0		N/A
	Cut, cap and fill with cellular material at two crossings of the Fraser River	\$90,000	\$90,000	\$0	\$45,000/crossing
5a. Pipeline Removal-City of Richmond (13.2 km or 35% of total length)	a. Pipeline Removal - Rural (approx. 1.06km)**	\$525,000	\$106,000	(\$419,000)	\$100,00/km
	b. Pipeline Removal - Urban (approx. 1.58 km)**	\$1,987,500	\$395,000	(\$1,592,500)	\$250,000
	c. Pipeline Removal Land Restoration (Urban Areas)**	\$298,125	\$59,250	(\$238,875)	15% of above
5b. Pipeline Removal-City of Burnaby (25km or 65% of total length)	a. Pipeline Removal - Urban (20% or approx. 5.0km)	\$1,250,000	\$1,250,000	\$0	\$250,000/km
	b. Pipeline Removal Land Restoration (Urban Areas)	\$187,500	\$187,500	\$0	15% of above
6. Above-ground facilities	a. Decommission at Parkland Refinery	\$184,879	\$184,879	\$0	
	b. Decommission at Westridge Terminal	\$148,724	\$148,724	\$0	
	c. Decommission at Burnaby Terminal	\$174,137	\$174,137	\$0	
	d. Decommission at Shell Burmount Terminal	\$85,000	\$85,000	\$0	
	e. Decommission at KMJF Airport Terminal	\$1,110,758	\$1,110,758	\$0	
	f. Decommission 6 Block Valve Sites	\$529,686	\$529,686	\$0	\$88,281/site
	g. Decommission at 3 riser sites	\$76,560	\$76,560	\$0	\$25,520/site
	h. Decommission at Brunette River Crossing	\$118,679	\$118,679	\$0	
	Subtotal:	\$2,428,423	\$2,428,423	\$0	
	i. Restoration at Above-ground Facilities	\$364,263	\$364,263	\$0	
7. Contingency	Unforeseen impairments	\$1,849,463	\$1,286,869	(\$562,594)	25% of project (applies to Sections 2, 3a, 4, 5 and 6)
	Total:	\$11,861,577	\$8,333,214	(\$3,528,363)	

* Exhibit B-10, pdf p. 19.

** Cost Description for 5a Pipeline Removal - City of Richmond - ELM Final Cost Report assumed removal of all 13.2km pipeline.

**APPENDIX E: RESUMES OF PATRICK BOWMAN,
MELISSA DAVIES, AND PATRICIA LEE**

December 16, 2020

PATRICK BOWMAN
Principal Consultant
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R2H 0A5 CANADA

AREAS OF EXPERIENCE:

- Utility Regulation and Rates
- Project Development and Planning
- Utility Resource Planning

EDUCATION:

- MNRM (Master of Natural Resources Management), University of Manitoba, 1998
- Bachelor of Arts (Human Development and Outdoor Education), Prescott College (Arizona), 1994

PROFESSIONAL EXPERIENCE:

Bowman Economic Consulting Inc., Winnipeg, Manitoba

2020 – Principal Consultant

Conduct consulting assignments as Principal Consultant of new economic consulting firm, focused on utility regulation.

InterGroup Consultants Ltd., Winnipeg, Manitoba

1998 – 2020 – Research Analyst/Consultant/Principal/Senior Associate

Utility Regulation

Conducted research and analysis for regulatory and rate reviews of electric, gas and water utilities in eight Canadian provinces and territories and international. Prepared evidence and expert testimony for regulatory hearings. Assisted in utility capital and operations planning to assess impact on rates and long-term rate stability. Major clients included the following:

- **For Manitoba Industrial Power Users Group (1998 – 2020):** Prepare analysis and evidence for regulatory proceedings before Manitoba Public Utilities Board representing large industrial energy users. Appear before PUB as expert in General Rate Application and revenue requirement reviews, the Needs For and Alternatives To (NFAT) resource planning hearing, depreciation, cost of service, and rate design matters. Assist in regulatory analysis of the purchase of local gas distributor (Centra Gas) by Manitoba Hydro. Assist industrial power users with respect to assessing alternative rate structures, surplus energy rates and demand side management initiatives including curtailable rates and load displacement.
- **For Northwest Territories Power Corporation (2000 - 2020):** Provide technical analysis and support regarding General Rate Applications and related Public Utilities Board filings, major capital developments and utility acquisition and valuation topics. Assist in preparation of evidence and providing overall guidance to subject specialists in such topics as depreciation and return. Appear before PUB as expert in revenue requirement, cost of service and rate design matters, and on system planning reviews (Required Firm Capacity).
- **For Industrial Customers of Newfoundland and Labrador Hydro (2001 – 2020):** Prepare analysis and evidence for Newfoundland Hydro GRA hearings before Newfoundland Board of Commissioners of Public Utilities representing large industrial energy users. Provide advice on interventions in respect of major new transmission facilities, depreciation, rate mitigation for major new capital spending. Appear before PUB as expert in cost of service and rate design

matters.

- **For Nelson Hydro (2013 - 2020):** Development and updating of a Cost of Service model and filings before the BCUC.
- **For City of Chestermere (2015 – 2020):** Analysis of rate proposals from Chestermere Utilities Inc. and review of strategic options for utility.
- **For the Office of the Utilities Consumer Advocate of Alberta (2016 – 2020):** Provide expert witness and strategic support of multiple depreciation and revenue requirement proceedings. This includes ongoing participation in depreciation working group discussions on behalf of the UCA.
- **For the Association of Major Power Consumers of British Columbia (2015 – 2020):** Provide expert advice in the current 2020-2021 Revenue Requirement Application with a focus on general service large and transmission service customers. Provide consulting support regarding transmission service customer and rate design issues in the 2015 Rate Design Application.
- **Vancouver Airport Fuel Facilities Corporation (2019 – 2020):** Review pipeline tolling application on revenue requirement and depreciation, prepare interrogatories and draft issues for evidence.
- **Jamaica Public Service (2019):** Assist in preparation of regulatory documents, Executive Summary, review of strategic issues for General Rate Application.
- **For Hualapai Tribal Utility Authority (2017 - 2018):** Provided strategic advice to the HTUA Board, and completion of a feasibility study and Cost of Service analysis for the acquisition of assets and development of a tribally-owned distribution utility, including power purchase and transmission, asset purchase (acquisition value) and replacement costs, and ongoing operation and maintenance costs. The assignment included a review of comparable jurisdiction cost and rate structures, building a financial model with input cost variables, reporting and presenting in HTUA Board meetings.
- **For Yukon Energy Corporation (1998 - 2014):** Provided analysis and support of regulatory proceedings and normal regulatory filings before the Yukon Utilities Board. Appeared before YUB as expert on revenue requirement matters, depreciation, cost of service, rate design, and resource planning. Prepared analysis of major capital projects, financing mechanisms to reduce rate impacts on ratepayers. Analysis and support regarding utility asset transfer and system rationalization among various utilities.
- **For City of Swift Current (2013 - 2014):** Utility system valuation for acquisition and disposition alternatives assessment.
- **For Municipal Customers of City of Calgary Water Utility (2012 - 2017):** Analysis of proposed new development charges and reasonableness of water and wastewater rates (City of Chestermere, City of Airdrie, Town of Cochrane, and Town of Strathmore).
- **For Yukon Development Corporation (1998 - 2012):** Prepared analysis and submission on energy matters to Government. Participated in development of options for government rate subsidy programs. Assisted with review of debt purchase, potential First Nations investment in utility projects, and corporate governance.
- **For NorthWest Company Ltd. (2004 - 2006):** Reviewed rate and rider applications by Nunavut Power Corporation (Qulliq Energy). Provided analysis and submission to rate reviews before the Utility Rates Review Council.

Project Development, Socio-Economic Impact Assessment and Mitigation

Provide support in project development, local investment opportunities or socio-economic impact mitigation programs for energy projects, including northern Manitoba, Yukon, and NWT. Support to local communities in resolution of outstanding compensation claims related to hydro projects.

- **For Yukon Energy Corporation (2005 - 2014):** Participated in preparation of resource plans, including Yukon Energy's 20-Year Resource Plan Submission to the Yukon Utilities Board in 2005 (including providing expert testimony before the YUB), advisor on 2010 update. Project Manager for all planning phases of the Mayo B hydroelectric project (\$120 million project) including environmental assessment and licencing, preliminary project design, preparation of materials for Yukon Utilities Board hearing, joint YEC/First Nation working group on all technical matters related to project including fisheries, managing planning phase financing and budgets. Assistance in preparation of assessment documentation for Whitehorse LNG generation project.
- **For Northwest Territories Power Corporation (2010 - 2012):** Participated in planning stages of \$37 million dam replacement project; appear before Mackenzie Valley Land and Water Board (MVLWB) regarding environmental licence conditions; participate in contractor negotiations, economic assessments, and ongoing joint company/contractor project Management Committee. Provided economic and rate analysis of potential major transmission build-out to interconnect to southern jurisdictions.
- **For Northwest Territories Energy Corporation (2003 - 2005):** Provided analysis and support to joint company/local community working groups in development of business case and communication plans related to potential new major hydro and transmission projects.
- **For Kwadacha First Nation and Tsay Keh Dene (2002 - 2004):** Supported and analysed potential compensation claims related to past and ongoing impacts from major northern BC hydroelectric development. Reviewed options related to energy supply, including change in management contract for diesel facilities, potential interconnection to BC grid, or development of local hydro.
- **For Manitoba Hydro Power Major Projects Planning Department (1999 - 2002):** Initial review and analysis of socio-economic impacts of proposed new northern generation stations and associated transmission. Participation in joint working group with client and northern First Nation on project alternatives (such as location of project infrastructure).
- **For Manitoba Hydro Mitigation Department (1999 - 2002):** Provided analysis and process support to implementation of mitigation programs related to past northern generation projects, debris management program.
- **For International Joint Commission (1998):** Analysis of current floodplain management policies in the Red River basin, and assessment of the suitability of alternative floodplain management policies.
- **For Nelson River Sturgeon Co-Management Board (1998 and 2005):** An assessment of the performance of the Management Board over five years of operation and strategic planning for next five years.

Government of Northwest Territories, Yellowknife, Northwest Territories

1996 – 1998 Land Use Policy Analyst

Conducted research into protected area legislation in Canada and potential for application in the NWT. Primary focus was on balancing multiple use issues, particularly mining and mineral exploration, with principles and goals of protection.

Patrick Bowman - Experience in Utility Regulatory Proceedings

Regulated Company	Proceeding	Work Performed	Before	Client	Year	Oral Testimony
Yukon Energy Corporation	Final 1997 and Interim 1998 Rate Application	Analysis and Case Preparation	Yukon Utilities Board (YUB)	Yukon Energy	1998	No
Manitoba Hydro	Curtaileable Service Program Application	Analysis, Preparation of Intervenor Evidence and Case Preparation	Manitoba Public Utilities Board (MPUB)	Manitoba Industrial Power Users Group (MIPUG)	1998	No
Yukon Energy	Final 1998 Rates Application	Analysis and Case Preparation	YUB	Yukon Energy	1999	No
Westcoast Energy	Sale of Shares of Centra Gas Manitoba, Inc. to Manitoba Hydro	Analysis and Case Preparation	MPUB	MIPUG	1999	No
Manitoba Hydro	Surplus Energy Program and Limited Use Billing Demand Program	Analysis and Case Preparation	MPUB	MIPUG	2000	No
West Kootenay Power	Certificate of Public Convenience and Necessity - Kootenay 230 kV Transmission System Development	Analysis of Alternative Ownership Options and Impact on Revenue Requirement and Rates	British Columbia Utilities Commission (BCUC)	Columbia Power Corporation/Columbia Basin Trust	2000	No
Northwest Territories Power Corporation (NTPC)	Interim Refundable Rate Application	Analysis and Case Preparation	Northwest Territories Public Utilities Board (NWTPUB)	Northwest Territories Power Corporation (NTPC)	2001	No
NTPC	2001/03 Phase I General Rate Application	Analysis and Case Preparation	NWTPUB	NTPC	2000 - 2002	No - Negotiated Settlement
Newfoundland Hydro	2002 General Rate Application	Analysis, Preparation of Intervenor Evidence and Case Preparation	Board of Commissioners of Public Utilities of Newfoundland and Labrador (NLPUB)	Newfoundland Industrial Customers	2001 - 2002	No
NTPC	2001/02 Phase II General Rate Application	Analysis, Preparation of Company Evidence and Expert Testimony	NWTPUB	NTPC	2002	Yes
Manitoba Hydro/Centra Gas	Integration Hearing	Analysis and Case Preparation	MPUB	MIPUG	2002	No
Manitoba Hydro	2002 Status Update Application/GRA	Analysis, Preparation of Intervenor Evidence and Expert Testimony	MPUB	MIPUG	2002	Yes
Yukon Energy	Application to Reduce Rider J	Analysis and Case Preparation	YUB	Yukon Energy	2002 - 2003	No
Yukon Energy	Application to Revise Rider F Fuel Adjustment	Analysis and Case Preparation	YUB	Yukon Energy	2002 - 2003	No
Newfoundland Hydro	2004 General Rate Application	Analysis, Preparation of Intervenor Evidence and Expert Testimony	NLPUB	Newfoundland Industrial Customers	2003	Yes
Manitoba Hydro	2004 General Rate Application	Analysis, Preparation of Intervenor Evidence and Expert Testimony	MPUB	MIPUG	2004	Yes
NTPC	Required Firm Capacity/System Planning hearing	Analysis, Preparation of Company Evidence and Expert Testimony	NWTPUB	NTPC	2004	Yes
Nunavut Power (Quilq Energy)	2004 General Rate Application	Analysis, Preparation of Intervenor Submission	Nunavut Utility Rate Review Commission (URRC)	NorthWest Company (commercial customer intervenor)	2004	No
Quilq Energy	Capital Stabilization Fund Application	Analysis, Preparation of Intervenor Submission	URRC	NorthWest Company	2005	No
Yukon Energy	2005 Required Revenues and Related Matters Application	Analysis, Preparation of Company Evidence and Expert Testimony	YUB	Yukon Energy	2005	Yes
Manitoba Hydro	Cost of Service Methodology	Analysis, Preparation of Intervenor Evidence and Expert Testimony	MPUB	MIPUG	2006	Yes
Yukon Energy	2006-2025 Resource Plan Review	Analysis, Preparation of Company Evidence and Expert Testimony	YUB	Yukon Energy	2006	Yes
Newfoundland Hydro	2006 General Rate Application	Analysis, Preparation of Intervenor Evidence	NLPUB	Newfoundland Industrial Customers	2006	No - Negotiated Settlement
NTPC	2006/08 General Rate Application Phase I	Analysis, Preparation of Company Evidence and Expert Testimony	NWTPUB	NTPC	2006 - 2008	Yes
Manitoba Hydro	2008 General Rate Application	Analysis, Preparation of Company Evidence and Expert Testimony	MPUB	MIPUG	2008	Yes
Manitoba Hydro	2008 Energy Intensive Industrial Rate Application	Analysis, Preparation of Intervenor Evidence and Expert Testimony	MPUB	MIPUG	2008	Yes
Yukon Energy	2008/2009 General Rate Application	Analysis, Preparation of Company Evidence and Expert Testimony	YUB	Yukon Energy	2008 - 2009	Yes
FortisBC	2009 Rate Design and Cost of Service	Analysis and Case Preparation	BCUC	BC Municipal Electrical Utilities	2009 - 2010	No
Yukon Energy	Mayo B Part III Application	Analysis, Preparation of Company Evidence	YUB	Yukon Energy	2010	No
Yukon Energy	2009 Phase II Rate Application	Analysis, Preparation of Company Evidence and Expert Testimony	YUB	Yukon Energy	2009 - 2010	Yes
Newfoundland Hydro	Rate Stabilization Plan (RSP) Finalization of Rates for Industrial Customers	Analysis, Preparation of Intervenor Evidence	NLPUB	Newfoundland Industrial Customers	2010	No
Manitoba Hydro	2010/11 and 2011/12 General Rate Application	Analysis, Preparation of Intervenor Evidence and Expert Testimony	MPUB	MIPUG	2010 - 2011	Yes
NTPC	Bluefish Dam Replacement Project	Analysis, Preparation of Company Evidence and Expert Testimony	Mackenzie Valley Land and Water Board	NTPC	2011	Yes
NTPC	2012/14 General Rate Application	Analysis, Preparation of Company Evidence and Expert Testimony	NWTPUB	NTPC	2012	Yes

Patrick Bowman - Experience in Utility Regulatory Proceedings

Regulated Company	Proceeding	Work Performed	Before	Client	Year	Oral Testimony
Manitoba Hydro	2012/13 and 2013/14 General Rate Application	Analysis, Preparation of Intervenor Evidence and Expert Testimony	MPUB	MIPUG	2013	Yes
Manitoba Hydro	Needs For and Alternatives To Investigation	Analysis, Preparation of Intervenor Evidence and Expert Testimony	MPUB	MIPUG	2014	Yes
Manitoba Hydro	2015/16 General Rate Application	Analysis, Preparation of Intervenor Evidence and Expert Testimony	MPUB	MIPUG	2015	Yes
Newfoundland Hydro	Amended 2013 General Rate Application	Analysis, Preparation of Intervenor Evidence and Expert Testimony	NLPUB	Newfoundland Industrial Customers	2015	No - merged into 2015 General Rate Application
Newfoundland Hydro	2015 General Rate Application	Analysis, Preparation of Intervenor Evidence and Expert Testimony	NLPUB	Newfoundland Industrial Customers	2015	Yes
Manitoba Hydro	2016 Cost of Service review	Analysis, Preparation of Intervenor Evidence and Expert Testimony	MPUB	MIPUG	2016	Yes
Chestermere Utilities Inc.	2017 Rate Increase Request	Analysis, Preparation of Rate Review	City of Chestermere City Council	City of Chestermere City Council	2016	Presentation to Council
Newfoundland Hydro	2017 General Rate Application	Pre-Filed Evidence and Negotiated Settlement	NLPUB	Newfoundland Industrial Customers	2017 - 2018	No - Negotiated Settlement
Altalink Management Limited	2017-18 General Tariff Application	Analysis, Support of Consumer Advocate during Negotiated Settlement Process on depreciation matters	Alberta Utilities Commission (AUC)	Alberta Utilities Consumer Advocate (UCA)	2016 - 2017	No - Negotiated Settlement
ATCO Pipelines	2017-18 General Rate Application	Analysis, Preparation of Intervenor Evidence on depreciation matters	AUC	UCA	2016 - 2017	No - Written Process only
Manitoba Hydro	2017/18 and 2018/19 General Rate Application	Analysis, Preparation of Intervenor Evidence and Expert Testimony	MPUB	MIPUG	2017 - 2018	Yes
ATCO Pipelines	2017-18 GRA Review and Vary	Analysis and Case Preparation	AUC	UCA	2017 - 2018	No
ATCO Pipelines	2019-20 General Rate Application	Analysis, Preparation of Intervenor Evidence	AUC	UCA	2018 - present	No - Written Process only
Altalink Management Limited	2019-20 General Tariff Application	Analysis, Support of Consumer Advocate during Negotiated Settlement Process on depreciation matters, Preparation of Intervenor Evidence and Expert Testimony	AUC	UCA	2018 - present	Yes
ATCO Pipelines	Keephills Transmission Facilities Assessment	Analysis, Preparation of Intervenor Evidence	AUC	UCA	2018 - 2019	No - Written Process only
Manitoba Hydro	2019/20 Electric Rate Application	Analysis, Preparation of Intervenor Evidence and Expert Testimony	MPUB	MIPUG	2019	Yes
Chestermere Water, Wastewater, Stormwater and Solid Waste Utility	2019 Rate Request	Analysis, Preparation of Rate Review	City of Chestermere City Council	City of Chestermere City Council	2019	Presentation to Council
ATCO Electric Distribution	Distribution Depreciation	Analysis and Case Preparation	AUC	UCA	2019	No
AltaGas	Distribution Depreciation	Analysis, Preparation of Intervenor Evidence	AUC	UCA	2019	No - Written Process only
ATCO Gas	Distribution Depreciation	Analysis, Preparation of Intervenor Evidence	AUC	UCA	2019	No - Written Process only
Nalcor Energy, Newfoundland and Labrador Hydro	Muskkrat Falls Rate Mitigation Hearing	Analysis, Preparation of Intervenor Evidence and Expert Testimony	NLPUB	Newfoundland Industrial Customers	2019	Yes
Manitoba Public Insurance	2021 General Rate Application	Review insurer evidence, draft IRs and prepare evidence on regulatory and rate setting principles	MPUB	Taxicab Coalition	2020	Yes
Chestermere Water, Wastewater, Stormwater and Solid Waste Utility	2021 Rate Request	Analysis, Preparation of Rate Review	City of Chestermere City Council	City of Chestermere City Council	2020	Presentation to Council
ATCO Pipelines	Acquisition of Pioneer Pipeline	Review evidence, draft IRs. Evidence TBD	AUC	UCA	2020 (con't)	TBD
Kinder Morgan Canada (Jet Fuel) Inc.	2019 Tariff Filing Application	Review pipeline tolling application on revenue requirement and depreciation, prepare interrogatories and draft issues for evidence	BCUC	Vancouver Airport Fuel Facilities Corporation (VAFFC)	2019 - 2020 (con't)	No

MELISSA DAVIES

CONSULTANT

MNYD Consulting Inc.

AREAS OF EXPERIENCE:

- Utility Regulation and Rates, including load forecast, revenue requirement, cost of service and rate design
 - Financial and Economic analysis, projections and modelling
 - Financial Evaluation including Cost-Benefit Analysis, NPV and Business Valuation
 - System and Resource Planning including supply and demand projections and cost modelling
-

EDUCATION:

- Master of Business Administration (MBA), majors in Finance and Sustainability, Asper School of Business, University of Manitoba, 2015
 - Bachelor of Commerce (Honours), major in Actuarial Mathematics, Asper School of Business, University of Manitoba, 2010
 - Passed Society of Actuaries Exam FM/2, 2008
-

PROFESSIONAL EXPERIENCE:

- **For the Association of Major Power Consumers of British Columbia (2014 – Present):** Provides technical and analytical support electric utility revenue requirement applications, rate design and cost of service matters before the British Columbia Utilities Commission with a focus on general service large and transmission service customers. This includes the current 2020-2021 Revenue Requirement Application, which included expert oral testimony, and in cost of service matters for the 2015 Rate Design Application. Provides ongoing project management and technical support to the group regarding rate design and industrial energy issues.
- **For the Utilities Consumer Advocate of Alberta (2016 – Present):** Support in review and analysis related to depreciation matters in the Altalink Management Ltd. 2017 – 2018 General Tariff Application (GTA) (#21341) and in the following 2019 – 2021 GTA proceeding (#23848). Support in the review and analysis of depreciation matters, including preparation of expert evidence in the ATCO Pipelines 2017 – 2018 General Rate Application (#22011). Technical support and analysis in review of the ATCO Pipelines 2019 – 2020 General Rate Application (#23793) focused on revenue requirement forecasts, the ATCO Pipelines Pembina-Keephills Transmission Pipeline Project review (#23799) and in related interim rate and compliance filing proceedings (#24817). Technical support in the AltaGas 2018 Depreciation Application proceeding (#24161) and the ATCO Gas 2018 Depreciation Application proceeding (#24188). Technical support in the ATCO Gas Phase II 2020 General Rate Application (#25428). Technical support in the AUC Generic Depreciation Proceeding (#25560).
- **For the Vancouver Airport Fuel Facilities Corporation (2019 – Present):** Technical support in the review of Kinder Morgan's 2019 Jet Fuel Tariff Application before the British Columbia Utilities Commission. Review includes revenue requirement, cost of service and rate design topics,

including the accelerated depreciation proposal of the pipeline due to potential future abandonment.

- **For the City of Surrey District Energy Utility Rate Review Panel (2019 – Present):** One of three panelists. Responsibilities include meeting with the energy utility’s finance group on an annual basis to provide objective and expert advice regarding utility rate structure and proposed rates consistent with the rate-setting principles. Panel recommendations are reviewed by the utility and provided to the City Council in their consideration for district energy utility rates.
- **For Manitoba Industrial Power Users Group (2010 – 2020):** Analytical and strategic support for expert and legal services participation in general rate applications and other proceedings (including most recently the 2016 Cost of Service Review proceeding) which review and analyse Manitoba Hydro’s revenue requirement, cost of service, rate design, system planning, load forecast, financial targets, depreciation, economic conditions and effects and financial analysis matters. Assist industrial power users with respect to assessing alternative rate structures and surplus energy rates. Analytical and strategic support for expert and legal services in the 2013 Needs For and Alternatives To (NFAT) review before Manitoba Public Utilities Board representing large industrial energy users in review of \$20 billion+ long-term utility resource capital plans. Role for the NFAT included multi-forum stakeholder engagement with Manitoba businesses and industry to identify and report on energy requirements and resourcing perspectives from this market segment. Provides ongoing project management to the group, with regular reporting, stakeholder engagement and planning for member meetings and supporting group energy-related initiatives. Undertakes economic impact assessment of the group, including the 2012 and 2015 MIPUG Economic Impact Assessment reports, which surveyed members and reported on the local and regional economic benefits of energy intensive industry in Manitoba, both quantitative and qualitative.
- **For the Industrial Gas Users, Manitoba (2018 – 2020):** Project management and ongoing stakeholder engagement for industrial customers and the group in their intervention in the Centra Gas 2019 General Rate Application in Manitoba. Support to legal counsel in case strategy and argument development and ongoing technical support for expert witnesses in development of evidence and testimony in the proceeding. Technical analysis includes in revenue requirement, implementation of capital expenditures, cost of service methodology and rate design.
- **For Saskatchewan Rate Review Panel (2013 – 2019):** Provides support in regulatory, economic and financial analysis and reporting to provide advice to the Saskatchewan Rate Review Panel on commodity and delivery rate applications submitted by SaskEnergy and general rate applications SaskPower, specializing in review of cost of service, rate design, depreciation methods, financial forecast evaluation (including financial targets), and load forecast.
- **For Northwest Territories Power Corporation (2010 – 2019):** Provides technical support in the regards to the filing of General Rate Applications, including the 2012 and 2017 Applications. This includes modeling and development of community specific and territory wide load forecast, cost of service study and rate design options for residential, general service and wholesale customers. Provided technical support in the 2010 application to Implement Electricity Rate Policy Guidelines application. Undertakes research, writing, and development for economic, financial and regulatory policy assessment and strategy.
- **For the City of St. John’s, Newfoundland (2018-2019):** Subcontracted to Forkast Consulting Services to provide an expert report and recommendations regarding the continuation of a water rental rate structure for the City’s legislated waterways to Newfoundland Power for use in hydroelectric generation. Research and analysis included a review of relevant Newfoundland

legislature, review of Newfoundland Power financial structure and hydroelectric assets, a comparison of other utility rate structures and provincial legislature regarding water rentals and alternative considerations including asset pricing and acquisition considerations. Ultimately the report provided detailed recommendations on the type of rate structure, the amounts to be collected, the length of agreement and supporting rationale for consideration by City and Council.

- **For the Hualapai Tribal Utility Authority (HTUA) (2017 – 2018):** Provided financial analysis to complete a feasibility study and Cost of Service analysis (including financial model) for the development of a municipally owned distribution utility, including power purchase and transmission, asset purchase (acquisition value) and replacement costs, and ongoing operation and maintenance costs. The assignment included a review of comparable jurisdiction cost and rate structures, building a financial model with input cost variables, reporting and presenting in HTUA Board meetings.
- **For City of Penticton (2017):** Stormwater utility rate review, including development of long-term revenue requirement, development of different rate structure options and phase-in and review of other stormwater utilities in Canadian jurisdictions for comparison of rate options.
- **For Tolko Industries, Huidbay Minerals and Manitoba Hydro (2015-2016):** Provided support for a concept study assessing natural gas fuel alternatives (LNG and CNG) for northern Manitoba including long-term pricing models and logistical considerations.
- **For the Forks North Portage Corporation (2016, 2018):** Prepared economic profile assessing the economic impacts of tourist destination The Forks including quantitative analysis of direct and indirect benefits for Manitoba. Updated economic impact assessment in 2018 following increased development and resulting economic impact on the site.
- **For Industrial Customers of Newfoundland and Labrador Hydro (2010 – 2014):** Support in the preparation of technical analysis and evidence for Newfoundland Hydro GRA hearings and the rate stabilization plan application before Newfoundland Board of Commissioners of Public Utilities representing large industrial energy users..
- **For Minaki Cottagers Association (2013 – 2014):** Analyzed and reported on the possible socio-economic effects including economic consumption and supply capacity of evolving plans to redevelop the former Minaki Lodge site into condominium units with a focus on safety, recreational, cultural and heritage impacts on the existing customers and area. Reviewed past and comparative developments to establish benchmarks for sizing due to the unorganized territory status of Minaki.
- **For Tsay Keh Dene First Nation and Kwadacha First Nation (2011):** Prepared analysis on a comparison between existing rates and proposed changes. Technical support, research, writing and development of Community Energy Study. Assisted in research, analysis and writing for Tsay Keh Dene and Kwadacha First Nations in British Columbia regarding the consultation process of the potential Site C Clean Energy Project.
- **For Manitoba Hydro, Keeyask Generation Project (2010 – 2012):** Provided technical analysis and support for the Keeyask Generation Project economic employment model, assisting with analysis of the economic and socio-economic consequences of the Project. Provide support and research to the Environmental Impact Statement Core document management and executive summary. Assisted in development of a stakeholder socio-economic assessment including cost-benefit analysis and economic evaluation regarding the potential listing of lake sturgeon as an endangered species in Manitoba under Section 1 of the Species at Risk Act.

Melissa Davies Utility Regulation Experience 2010 - Present

Utility Regulation Expert Evidence & Testimony					
Utility	Proceeding	Before	Client	Year	Oral Testimony
BC Hydro	2020-2021 Revenue Requirement Application	British Columbia Utilities Commission (BCUC)	Association of Major Power Customers	2019 - 2020	Yes
ATCO Gas	2020 General Rate Application Phase II	Alberta Utilities Commission (AUC)	Alberta Utilities Consumer Advocate (UCA)	2019 - 2020	No
Kinder Morgan	2019 Jet Fuel Tariff Application	BCUC	Vancouver Airport Fuel Facilities Corporation	Ongoing	

Utility Regulation - Support Work (including Analysis and support in preparation of Evidence and Oral Testimony)				
Utility	Proceeding	Before	Client	Year
Northwest Territories Power Corporation (NTPC)	2010 Rate Rebalancing Application	Northwest Territories Public Utilities Board (NWT PUB)	NTPC	2010
Manitoba Hydro	2010/11 & 2011/12 General Rate Application	Manitoba Public Utilities Board (MPUB)	MIPUG	2010
Newfoundland Hydro	Rate Stabilization Plan (RSP) Finalization of Rates for Industrial Customers	Board of Commissioners of Public Utilities of Newfoundland and Labrador (NLPUB)	Newfoundland Island Industrial Customers	2010
NTPC	2012/13 & 2013/14 General Rate Application	NWT PUB	NTPC	2012
Manitoba Hydro	2012/13 and 2013/14 General Rate Application	MPUB	MIPUG	2013
SaskEnergy	2013/14 and 2014/15 Natural Gas Delivery Rate Application	Saskatchewan Rate Review Panel (SRRP)	SRRP	2013
Manitoba Hydro	Needs For and Alternatives To Investigation	MPUB	MIPUG	2014
SaskEnergy	2015/16 Natural Gas Delivery and Commodity Rate Application	Saskatchewan Rate Review Panel (SRRP)	SRRP	2015
Manitoba Hydro	2014/15 and 2015/16 General Rate Application	MPUB	MIPUG	2015
SaskPower	2016 and 2017 Rate Application	SRRP	SRRP	2016
Manitoba Hydro	2016 Cost of Service Review	MPUB	MIPUG	2016
Altalink Management Limited	2017-2018 General Tariff Application	AUC	UCA	2016-17
NTPC	2017/18 and 2018/19 Phase I & II General Rate Application	NWT PUB	NTPC	2016-17
ATCO Pipelines	2017-2018 General Rate Application	AUC	UCA	2016-17
SaskPower	2018 Rate Application	SRRP	SRRP	2017
Manitoba Hydro	2017/18 and 2018/19 General Rate Application	MPUB	MIPUG	2017-18
ATCO Pipelines	2019-2020 General Rate Application	AUC	UCA	2018-2019
ATCO Pipelines	Pembina-Keephills Transmission Pipeline Project	AUC	UCA	2018-2019
Manitoba Hydro	2019/20 Electric Rate Application	MPUB	MIPUG	2018-2019
CentraGas	2019/20 General Rate Application	MPUB	Industrial Gas Users	2019
ATCO Electric	2018 Depreciation Application	AUC	UCA	2019
AltaGas	2018 Depreciation Application	AUC	UCA	2019-2020
Altalink Management Limited	2019-20 General Tariff Application	AUC	UCA	2019 - 2020
Efficiency Manitoba	2020/21 - 2022/23 Efficiency Plan	MPUB	MIPUG	2019-2020
ATCO Gas	2018 Depreciation Application	AUC	UCA	2019 - 2020

PATRICIA S. LEE
CURRICULUM VITAE

QUALIFIED BY

Over 40 years of experience in reviewing and analyzing the assets of public utility companies in the electric, gas, telecommunications, and water and wastewater industries. Technical understanding of plant and equipment of telecommunications, electric, gas, and water and wastewater industries coupled with valuation, depreciation, and accounting knowledge of federal regulatory procedures and regulations.

PROFESSIONAL EXPERIENCE

03/2012 – Present

BCRI Inc. and Self

- Responsibilities include reviewing depreciation studies and basic data, and advising clients concerning recommended depreciation lives, net salvage values, resultant depreciation rates, reserve imbalances, and depreciation methods, procedures, and techniques.
- Specific regulatory experience providing expert testimony on depreciation matters includes:
 - For Industrial Customers of Newfoundland and Labrador Hydro in the 2012 Newfoundland and Labrador Hydro Depreciation Methodology Review providing written testimony and support in the negotiated agreement.
 - For the Florida Public Utilities Electric Division, provided expert consultation and support preparing the company's depreciation study filed with the Florida Public Service Commission in 2015 and 2019, including in the agreement on appropriate life and salvage parameters, reserve position, and resultant depreciation rates.
 - For the Manitoba Industrial Power Users Group in the 2015 – 2016 Manitoba Hydro General Rate Application providing written and oral testimony.
 - For the Office of the Utilities Consumer Advocate of Alberta in the Altalink Management Ltd. 2017 – 2018 General Tariff Application providing analysis, issue identification and support in negotiated settlement process. In the ATCO Pipelines 2017 – 2018 General Rate Application provided written evidence. For the Office of the Utilities Consumer Advocate of Alberta in the Altalink Management Ltd. 2019 – 2021 General Tariff Application providing written evidence and oral testimony.
 - For the Florida Public Utilities Consolidated Gas Divisions, provided expert consultation and support preparing the company's 2018 depreciation study filed with the Florida Public Service Commission.

11/78 – 09/2011

FLORIDA PUBLIC SERVICE COMMISSION, Tallahassee, FL

Proficient in the application of principles of statistics, probability, engineering finance as related to the design of depreciation rates for utilities. Responsibilities included:

Technical

- Reviewed and analyzed depreciation rates and the capital recovery positions of Florida regulated utilities.
- Reviewed and analyzed the valuation of assets in a competitive market.
- Investigated and evaluated various valuation and depreciation methods and concepts, for example, age life, Equal Life Group, Fisher-Pry, net plant weighting, amortizations and capital recovery schedules.
- Developed use of engineering planning (short-term and long-range) as a tool in the determination of remaining life and/or capital recovery schedules.
- Determined the prudence of technologically driven change-outs of public utility assets.
- Assisted in the development of Commission rules regarding depreciation study requirements and review cycles for electric, gas, telecommunications and water and wastewater utilities.
- Investigated and developed Commission staff advisory guidelines regarding the allocation of overhead costs between capital and expense.
- Assisted in the development of Commission rules regarding stratification of depreciable plant for determination of life and salvage for gas, electric, and telecommunications companies.
- Assisted in the determination of the appropriate treatment for removal and disposal costs associated with gas service lines, nuclear decommissioning and dismantlement of fossil-fueled generating plants.
- Participated on the Tangible Personal Property Guidelines Industry/Government Task Force (Florida

Exhibit PSL-1

- Department of Revenue), specifically with the development of the Life Expectancy Guidelines.
- Investigated issues arising with increasing competition in telecommunications and electric generation companies.
- Reviewed and analyzed cost studies for the purpose of determining unbundled network element prices and universal service cost levels for telecommunications companies as well as the appropriate nuclear decommissioning and fossil dismantlement annual accrual levels for electric companies.

Communication

- Prepared and presented oral and written Commission staff recommendations involving valuation and capital recovery matters in Commission depreciation and revenue rate proceedings.
- Served as Commission staff expert witness involving capital recovery matters.
- Served as member of the Comment Committee for the National Association of Regulatory Utility Commissioners (NARUC) Staff Subcommittee on Depreciation. Prepared comments for NARUC regarding various reports and orders issued by the Federal Communications Commission in the matter of simplification of the depreciation prescription process for telecommunications companies.
- Interfaced with staff of Federal agencies and other State Commissions, consulting firms, regulated and non-regulated companies and municipalities, and within the Commission.
- Presented depreciation accounting training at the 1993 - 1998 NARUC Annual Regulatory Studies Program - Michigan State University.
- Conducted depositions and cross examination of depreciation witnesses as a Class B Practitioner.
- Made oral presentations to the Society of Depreciation Professionals and the United States Telephone Association regarding various telecommunications, electric, and gas issues.
- Co-authored Public Utility Depreciation Practices, published August, 1996.
- Co-authored Florida Commission staff depreciation training manual.
- Conducted Commission in-house depreciation training.

EDUCATION

B.S., Mathematics, APPALACHIAN STATE UNIVERSITY - Boone, North Carolina, 1970

AFFILIATIONS

Society of Depreciation Professionals member

Chair and Vice Chairperson - NARUC Staff Subcommittee on Depreciation

1998 Chair of Ethics & Standards Committee, 1997 Past President, 1996 President, 1995 Vice President, 1994 Treasurer - Society of Depreciation Professionals

Faculty Member - NARUC Annual Regulatory Studies Program; 1993-1998

President, National Conference of Regulatory Utility Commission Engineers

**ANNEX A: FILINGS SUPPORTING TRANS MOUNTAIN
2009 TOLL (TARIFF 38)**



Suite 2700, 300 – 5th Avenue SW
Calgary, AB Canada T2P 5J2
Tel: (403) 514-6400
Fax: (403) 514-6622
Toll Free: 1 (800) 535-7219
www.kindermorgan.com

December 30, 2008
British Columbia Utilities Commission
6th Floor, 900 Howe Street, Box 250
Vancouver, B.C. V6Z 2N3

Attention: Erica M. Hamilton
The Commission Secretary

Dear Ms Hamilton:

Re: Trans Mountain (Jet Fuel) Inc. 2009 Final Tariff Filing

Trans Mountain (Jet Fuel) Inc. (“TMJ”) hereby makes application to the British Columbia Utilities Commission (the “Commission” or “BCUC”) pursuant to the provisions of section 44 of the Pipeline Act, RSBC c. 364 (the “Act”) for an Order approving the adjustment of TMJ’s tolls for the transport of turbine fuel to Vancouver International Airport (“Airport”) and to the Burnaby Terminal of the Trans Mountain Pipeline L.P. (“TMPLP”), in the manner and the amounts specified in the materials filed herewith, such changes to be effective March 1, 2009.

In support of this application, TMJ states:

- I. TMJ owns and operates a pipeline for the transportation of turbine fuel from connected refineries, storage facilities and marketing terminals in Metro Vancouver to the Airport and to the Burnaby Terminal of TMPLP.
- II. TMJ transports turbine fuel at rates, and subject to the rules and regulations, contained in Tariff No. 36 as approved by the Commission by Orders P-3-08 and Reasons for Decision and Order P-5-08 dated April 28, 2008.
- III. TMJ has undertaken a review with its shippers and provides the following chronology of events that lead to approval of Tariff No. 37, and revised rules and regulations, approved by Order P-9-08, and to be effective on an interim basis January 1, 2009.
 - a. On November 13, 2008, TMJ provided to shippers a draft proposal for 2009 final tolls. The proposal contain 1997 Actual, 2008 Allowed, 2008 updated estimate and 2009 forecast of all amounts required to forecast the 2009 Revenue Requirement and tolls.

- b. In the draft proposal, TMJ had forecast that the 2008 tolls would be made interim as of January 1, 2009 and the 2009 final tolls would be made effective March 1, 2009. TMJ believed that this process and timing would meet the requirements for both shippers and the Commission.
- c. On December 2, 2008, TMJ and its two major shippers met to review and discuss the contents of the proposal for 2009 final tolls. At the request of shippers, TMJ reviewed:
 - i. the draft proposal (depreciation rate calculation, collection of abandonment funds, primary reasons for increasing costs, 2009 toll prediction and minor changes to the Tariff Rules and Regulations);
 - ii. system configuration/metric changes between 2000 and 2008/2009;
 - iii. annual, monthly and selected peak volumes transported between 1997 and 2008;
 - iv. major maintenance programs (pipeline protection activities, the 2007 In Line Inspection remediation program, major capital projects and quality assurance); and
 - v. very briefly, future expansion opportunities.
- d. At the conclusion of this meeting, shippers requested time to review the materials and provide feedback prior to TMJ proceeding with the final 2009 toll filing.
- e. Before receiving feedback from shippers, TMJ notified shippers of two (some what material) changes: i) the volume used to forecast 2009 tolls would be adjusted downward to reflect actual volumes for November 2008 and ii) receipt of National Energy Board (“NEB”) allowed Return on Equity for 2009 (minor increase of 0.07% from that predicted by TMJ).
- f. On December 12, shippers provided feedback to TMJ to proceed with the Tariff filing and a request that the implementation date for the new tolls be advanced to January 1, 2009. Both shippers indicated they would provide and/or file letters to support the filing.
- g. On this basis, TMJ filed for new, interim tolls and revised Rules and Regulations to be effective January 1, 2009 as contained in Tariff No. 37 dated December 17, 2009 (“Dec. 17”).
- h. As the request did not permit sufficient time to i) adequately modify and finalize the transmittal letter and the supporting documentation for other changes (detailed below), and ii) to provide sufficient time for

Commission staff to review the filed materials, no supporting documentation was filed with the Dec. 17 application. In the Dec. 17 transmittal letter TMJ indicated that the application for 2009 final tolls and supporting documentation would be filled before December 31, 2008. TMJ also notes that most of the preceding process was outlined in the Dec. 17 transmittal letter.

- i. On December 19, 2008, the Commission approved the 2009 Interim Tariff as filed.
- IV. TMJ is now filing for 2009 final tolls which have been calculated in accordance with directives set out previously by the Commission (with respect to amortization of the In Line Inspection and Rate Case Costs, and use of the NEB rate of return / rate base methodology) along with updates to the 2008 estimated amounts and the forecast for 2009 amounts.
- V. The materials enclosed for filing are:
- a. Proposed Tariff No. 38; and
 - b. Supporting documentation for the derivation of the final 2009 tolls.
- VI. The supporting documentation is in the same format provided to the shippers on November 13, 2008 ("Nov. 13") and used in the derivation of the 2009 interim tolls. The schedules are:
- a. Executive Summary comparing 2008 Approved amounts, 2008 Estimates and 2009 Forecast for rate base, revenue requirement, and throughput;
 - b. Rate Base for 2007 Actual, 2008 Estimate and 2009 Forecast of fixed assets and project information;
 - c. Projection of the Return on Rate Base, Income Tax Rates and Provision, Capital Cost Allowance and Working Capital;
 - d. Summary of the Revenue Requirement and Operating Costs for 2007 Actual, 2008 Estimate and 2009 Forecast;
 - e. Forecast volumes for 2008 (with comparatives to the approved forecast used for setting tolls) and 2009; and
 - f. Calculation of the 2009 tolls on a prospective basis to be effective March 1, 2009.
- VII. Additional supporting materials are included for:
- a. 2009 Depreciation rates: derivation of;

- b. 2008 and 2009 Throughput forecasts: updated with 2008 actual volumes to November and shipper forecasts;
- c. 2008 Revenue Shortfall: review 2008 volumes and impact on 2008 revenue collection; and
- d. Collection of abandonment costs: review and need for.

VIII. The details of the application and the toll calculation are provided in supporting documentation and the key criteria are summarized in the following table:

	2007 <u>Actual</u>	2008 <u>Approved</u>	2008 <u>Estimate</u>	2009 <u>Proposed</u>
Rate Base (\$000)	10,101	9,784	9,944	9,775
Rate of Return <i>weighted average</i>	7.29%	7.36%	7.77%	7.71%
<i>Debt</i> 55%	6.32%	6.32%	7.00%	7.00%
<i>Equity</i> 45%	8.46%	8.71%	8.71%	8.57%
Average Depreciation rate	2.56%	2.55%	2.55%	3.28%
Revenue Requirement (\$000) ^[1]	3,215	3,423	3,433	3,973
Throughput (m³/day)				
Mainline	2,800	2,860	2,759	2,733
Gathering System	56	37	27	38
Total	<u>2,856</u>	<u>2,897</u>	<u>2,786</u>	<u>2,771</u>
Tolls (\$/m³) / Tariff No.	No. 31/32	No. 36	No. 36	No. 38
Mainline	2.3450	2.3965	2.3965	2.9398
Gathering System	0.8430	0.8932	0.8932	1.0294
2005 & 2006 Surcharges ^[2]	0.3850			
Total	<u>3.5730</u>	<u>3.2897</u>	<u>3.2897</u>	<u>3.9692</u>
Change in Total Toll		-7.9%		20.7%

Notes:

[1] No provision for Abandonment is included in the Revenue Requirements.

[2] Surcharges approved to recover prior year revenue shortfalls.

IX. To provide the shippers and the Commission with an indication of the impact of the changes between the Nov. 13 draft proposal, the amounts used for 2009 interim tolls and this application, the following high level summary highlights the most significant changes:

- a. The 2008 and 2009 Plant in Service has been updated to reflect a reforecast of capital additions and retirements for 2008. This change has resulted in minor updates to the 2009 Rate Base, 2009 Proposed Plant in Service, Depreciation Expense, Capital Cost Allowance, and Provision for Income Taxes. The magnitude of the change is demonstrated by comparing the Rate Bases as

- i. reported Nov. 13 \$9,787,000,
 - ii. used for Interim tolls \$9,784,000, and
 - iii. revised for this application \$9,775,000.
 - b. Updating the Rate of Return on Rate Base for 2009 to reflect the 2009 NEB approved rate of return on common equity dated December 4, 2008 has the following impact on Return on capital as
 - i. reported on Nov. 13 \$751,000,
 - ii. used for interim tolls \$754,000, and
 - iii. revised for this application \$753,000.
 - c. Combining all the modifications results in the total 2009 Revenue Requirement changing from the amount
 - i. report on Nov. 13 \$3,970,000, to that
 - ii. used for interim tolls \$3,975,000, to that
 - iii. revised for this application \$3,973,000.
 - d. The Throughput Forecast has been updated with volume forecasts provided by all known shippers / users of the system. The Mainline volumes have been updated to include the November actual amounts invoiced, and as
 - i. reported on Nov. 13 2,737 m³/day,
 - ii. used for Interim tolls 2,733 m³/day, and
 - iii. revised for this application 2,733 m³/day
- X. The 2009 proposed tolls are forecast to be:
 - a. Higher than 2008 approved tolls by \$0.68 / m³ for a 20.7% increase (Tariff No. 36); and
 - b. Slightly lower than 2009 interim tolls by \$0.002 / m³ or 0.05% (Tariff No. 37).
- XI. TMJ requests that proposed Tariff No. 38 be approved with an effective date of March 1, 2009. On approval of Tariff No. 38, TMJ also requests that interim Tariff No. 37 be approved as final.
- XII. A copy of this letter with the enclosed documents will be served on all the shippers on the TMJ system immediately.

Yours Truly



Brenda McClellan
Director, Regulatory Affairs

cc: Shippers and Interested Parties

Trans Mountain (Jet Fuel) Inc.
Application for Tolls Effective January 1, 2009
Toll Calculations and Supporting Material
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Application for Tolls

Executive Summary

TMJ owns a pipeline that transports jet fuel from connected facilities in Metro Vancouver to the Vancouver International Airport and to the Burnaby Terminal of Trans Mountain Pipeline LP ("TMPLP").

The tolls are calculated using the Rate Base / Rate of Return methodology and a Rate of Return on Rate Base identical to that utilized by the National Energy Board ("NEB"). With the concurrence of the shippers and the Commission, this methodology and these rates have been employed to determine the 2009 Tolls to be effective January 1, 2009.

The Revenue Requirement includes the cost of operating the pipeline, amortizing the plant in service and earning the allowed returns. The filing includes the 2007 Actual, the 2008 Approved, a 2008 Estimate (inclusive of actual amounts to October 2008) and the 2009 Proposed amounts. The Final Revenue Requirement as approved for 2008 and as proposed for 2009 is summarized below. Further details of this filing and the 2008 Approved amounts are provided on the following page.

<u>A. Summary of Application</u>	2008	2009	Sch.
	<u>Approved</u>	<u>Proposed</u>	<u>No.</u>
Rate Base	9,784	9,775	1
Rate of Return	7.36%	7.71%	9
Revenue Requirement			15
Operating Expenses plus In Line Inspection & Rate Case costs	2,084	2,413	
Return on Capital	720	753	
Return of Capital	415	546	
Provision for Income Taxes	219	265	
Refunds	(15)	(3)	
	<u>3,423</u>	<u>3,973</u>	
Percentage change		16.1%	
Throughput			21
Mainline	2,860	2,733	
Gathering Facilities	37	38	
Total	<u>2,897</u>	<u>2,771</u>	
Percentage change		-4.4%	
Tolls ^[1]			
Mainline	2.3965	2.9398	23
Gathering Facilities	0.8932	1.0294	23
Total	<u>3.2897</u>	<u>3.9692</u>	
Percentage change in tolls		20.7%	
Mainline		22.7%	
Gathering Facilities		15.2%	

Note:

[1] The 2008 tolls were approved by Commission Orders P-3-08 and P-5-08 and were made effective May 1, 2008.

B. Summary of 2008 Amounts and Proposed 2009 Amounts

	<u>2008</u> <u>Approved</u>	<u>2008</u> <u>Estimate</u>	<u>2009</u> <u>Proposed</u>	<u>Variance</u>	<u>Notes</u>
Applicable Dates	May-08	Oct-08	Dec-08	09 - Approved	
Rate Base	9,784	9,944	9,775		
Rate of Return	7.36%	7.77%	7.71%		
<i>Debt</i>	55%	3.44%	3.85%	3.85%	
<i>Equity</i>	45%	3.92%	3.92%	3.86%	
Revenue Requirement					
Operating Expenses					
Total Staff Costs, Expenses and Charges	973	1,149	1,280	307	[1]
Fuel and Power	147	165	168	21	[2]
Property Taxes	195	150	158	(37)	
Direct Operations, Head Office & Business Expenses	704	515	735	31	
Amortization of In-Line Inspection & Rate Case costs	65	65	72	7	[3]
Sub-total Expenses	<u>2,084</u>	<u>2,043</u>	<u>2,413</u>	<u>329</u>	
Return on Capital	720	773	753	33	
Return of Capital	415	414	546	131	[4]
Provision for Income Taxes	219	218	265	46	
Refunds	(15)	(15)	(3)	12	[5]
Total	<u>3,423</u>	<u>3,433</u>	<u>3,973</u>	<u>551</u>	[6]
Throughput					
Mainline	2,860	2,759	2,733		
Gathering System	37	27	38		
Total	<u>2,897</u>	<u>2,786</u>	<u>2,771</u>	<u>(126)</u>	[7]

Notes:

- [1] Increase in staff costs is a function of increased time and cost of employees assigned to work on TMJ activities. KMC underwent a complete restructuring and review of responsibilities and activities for field operations in 2007 and this was completed in 2008. Third-party activities are becoming an increasing concern to the safe and reliable operation of underground pipelines. As a result field operations are responsible for an increased intensity of pipeline protection activities and TMJ is now seeing charging of this time and cost in 2008 and again in 2009. Additionally, a new operations staff member is being added to oversee TMJ's pipeline protection activities. This work was previously dispersed between various departments and to large extent may or may not have been charged to TMJ. Based on 2008 estimated charges for the year, the increase from 2008 Estimate to 2009 Proposal is 11%. The original 2008 Allowed amount did not take into account the restructuring.
- [2] The increase in 2008 fuel and power is simply an omission in the 2008 Allowed amount which did not include the power costs for TMJ pumps installed at connected facilities (i.e. Marketing Terminals). 2009 reflects a 2% increase.
- [3] Amortization of ILI and Rate Case costs using approved costs, 5 year amortization and applicable carrying charges.
- [4] Depreciation expense reflects change in depreciation rates for 2009 as described on Schedule 8.
- [5] TMJ proposes to reimburse shippers for rental of mothballed Gathering Line between the Esso and Shell Terminals.
- [6] TMJ has updated the 2008 Revenue Requirement with revised estimates for the rate base and cost of service. The update is summarized on Schedule 15 and provided throughout this document. Below is a comparison of this update to the 2008 Revenues expected to be collected.

Updated 2008 Estimate of the Revenue Requirement	3,433
Forecast 2008 Revenues to be collected (tolls times volumes)	<u>3,297</u>
Shortfall	<u>136</u>

TMJ notes that the updated 2008 Revenue Requirement is approximately the same as originally forecast and approved. In contrast, the throughput is approximately 111 m³/day lower than that used to set the approved 2008 tolls which results in an under collection of revenues by approximately \$136K. This results in TMJ facing under collection due to declining volumes. TMJ's performance is tracked monthly and the observed shortfall was first identified in September and then substantiated with October business and updated shipper forecasts.

- [7] Throughput: reflects actual volumes through November, 2008 and revised expectations for 2009.
- [8] The above numbers have not been rounded or altered and are mathematically correct.

Application for Tolls

Schedule 1

Rate Base Introduction and 2009 Rate Base

A. Introduction

This section of the application provides documentation on the capital invested in the pipeline for which TMJ earns a return. The schedules in this section provide closing balances as updated for actual/estimate 2008 costs and explanations of 2009 forecast adjustments used to forecast the 2009 Rate Base.

i) Calculation of Forecast Plant Rate Base

The 2009 plant in service portion of the rate base is calculated on the basis of a simple half year average. The closing balances for original cost and accumulated depreciation are forecast based on actual/estimate 2008 closing balances, 2008 projects carrying over into 2009 and new 2009 projects and the proposed depreciation rates.

ii) Additions to Rate Base

For rate base purposes, the estimated costs of each capital project are analyzed as follows:

- 1 By plant account for purposes of forecasting depreciation expense; and
- 2 By capital cost allowance class for purposes of forecasting the provision for income taxes payable.

iii) Depreciation Expense Forecast

Depreciation expense is forecast by multiplying the opening plant account balances by the appropriate depreciation rate. Separate depreciation rates were established for each plant account for groupings of similar assets. The 2008 depreciation rates conform with rates agreed to by Shippers in previous toll discussions and filings. The 2008 Depreciation expense is also separately calculated on Schedule 8 which shows the calculation of the remaining life for each asset class. The remaining life will differ by class as a result of several factors, including the net plant balance used when the rates were established (on or about 1994), capital additions, retirements and depreciation booked since the date the rates were approved (on or about 1995).

Based on the calculations provided on Schedule 8 for 2008 and the result that two asset classes' remaining life extends well beyond the expected remaining life assumptions that were previously agreed upon, TMJ proposes to reset the depreciation rates for 2009. The depreciation rates are proposed to be reset using a 20 year life for most assets with a few noted exceptions. Those being for the short lived assets, such as communications equipment, work equipment, including computer software and hardware, and a modestly shortened life for pumping equipment based on pump manufacturers specifications. The proposed overall average depreciation rate is 3.33% or approximately an average 30 year useful life.

iv) Provision for Negative Salvage

TMJ has not included a provision for negative salvage in this application. As stated previously, TMJ is concerned that there is no provision being collected for the eventual dismantling of the pipeline. Shipper motivation and behaviour can be debated, however, TMJ believes that this is irrelevant, the final objective is to ensure that a fund is being set aside for the eventual dismantling of the pipeline. The current return, structure, depreciation expense and NEB allowed process under which TMJ recovers its costs of operation does not take into account the ultimate retirement of this system. Currently there is a proceeding in front of the NEB that contemplates resolution of this issue. TMJ notes that this issue was first investigated at length by the NEB in the mid-1980's with final determination to be dealt with on a case by case basis by the individual pipelines. TMJ is aware that the BCUC is an interested party in the current proceeding.

At the shippers meeting, TMJ briefly discussed collection of Negative Salvage with the Shippers. It was decided to continue discussions in 2009 and not pursue collection at this time. The discussion materials are provided in Appendix 1 and are for informational purposes only.

B. Average Rate Base (\$000)

	<u>2007</u> <u>Actual</u>	<u>2008</u> <u>Estimate</u>	<u>2009</u> <u>Proposed</u>	<u>Sch.</u> <u>No.</u>
Average plant in service	16,125	16,314	16,575	2/4/6
Average accumulated depreciation for Plant in Service	<u>(5,530)</u>	<u>(5,941)</u>	<u>(6,418)</u>	2/4/6
Average net book value of plant in service	10,595	10,373	10,157	
Deferred income taxes as at December 31, 1993 ^[1] (575)				
Average deferred income taxes	(575)	(575)	(575)	
Average working capital requirement	<u>81</u>	<u>146</u>	<u>193</u>	11
Average Rate Base	<u>10,101</u>	<u>9,944</u>	<u>9,775</u>	

Note:

- [1] As a result of the Commission approving use of the flow through method for calculation of the income tax provision, the Deferred income tax balance was frozen in 1993 at the amount shown above.

Application for Tolls

Schedule 2

2007 Plant in Service

A. Forecast Plant Balances (\$)

30	Account Description	Dprn Rate	FA Opening 12/31/2006	Disallowed Plant	REGULATED 12/31/2006	Additions	Retirement	Transfers	REGULATED 12/31/2007
152	Land Rights	1.84%	98,683.73		98,683.73				98,683.73
153	Line Pipe	1.96%	4,228,197.54		4,228,197.54	0.00	0.00		4,228,197.54
156	Buildings	2.58%	364,788.28	(8,604.00)	356,184.28				356,184.28
158	Pumping Equipment	3.43%	1,131,243.45		1,131,243.45				1,131,243.45
159	Station Lines	2.94%	2,092,011.24	(59,569.00)	2,032,442.24				2,032,442.24
160	Other Station Equipment	1.31%	2,819,994.78	(25,877.00)	2,794,117.78				2,794,117.78
160C	Central Pipeline Control	10.00%	251,760.97		251,760.97				251,760.97
161	Storage Tanks	1.13%	1,276,059.49		1,276,059.49	0.00			1,276,059.49
163	Communications	10.00%	184,065.90		184,065.90				184,065.90
185WE	Work Equipment	20.00%	45,348.87		45,348.87	0.00			45,348.87
186HW	Computer Hardware	20.00%	3,789.43		3,789.43				3,789.43
186SW	Computer Software	15.60%	8,625.11		8,625.11				8,625.11
189D	AFUDC (INTEREST)	3.80%	181,894.07		181,894.07				181,894.07
189E	AFUDC (EQUITY)	3.80%	179,889.22		179,889.22				179,889.22
190	Construction Overhead	3.65%	3,377,045.14	(23,929.00)	3,353,116.14	0.00			3,353,116.14
Fixed Assets Balances			16,243,397.22	(117,979.00)	16,125,418.22	0.00	0.00	0.00	16,125,418.22
Plus WIP			0.00		50,257.64	0.00		0.00	50,257.64
Total Regulated Assets			16,243,397.22		16,175,675.86	0.00	0.00	0.00	16,175,675.86

B. Forecast Depreciation Expense (\$)

30	Account Description	Dprn Rate	FA Opening 12/31/2006	Dprn Expense	Adjustments	Deprn Expense	Average Rate
152	Land Rights	1.84%	98,683.73	1,815.78	-	1,815.78	
153	Line Pipe	1.96%	4,228,197.54	82,872.67	-	82,872.67	
156	Buildings	2.58%	364,788.28	9,411.54	-	9,411.54	
158	Pumping Equipment	3.43%	1,131,243.45	38,801.65	-	38,801.65	
159	Station Lines	2.94%	2,092,011.24	61,505.13	0.01	61,505.14	
160	Other Station Equipment	1.31%	2,819,994.78	36,941.93		36,941.93	
160C	Central Pipeline Control	10.00%	251,760.97	25,176.10	(10,296.06)	14,880.04	
161	Storage Tanks	1.13%	1,276,059.49	14,419.47	(0.00)	14,419.47	
163	Communications	10.00%	184,065.90	18,406.59	(900.04)	17,506.55	
185WE	Work Equipment	20.00%	45,348.87	776.00	(388.00)	388.00	
186HW	Computer Hardware	20.00%	3,789.43	0.00	-	0.00	
186SW	Computer Software	15.60%	8,625.11	0.00	-	0.00	
189D	AFUDC (INTEREST)	3.80%	181,894.07	6,911.97		6,911.97	
189E	AFUDC (EQUITY)	3.80%	179,889.22	6,835.79		6,835.79	
190	Construction Overhead	3.65%	3,377,045.14	123,262.15	0.00	123,262.15	
			16,243,397.22	427,136.77	(11,584.09)	415,552.68	2.56%

C. Forecast Accumulated Depreciation Balances (\$)

30	Account Description	Dprn Rate	Open AccDep 12/31/2006	Disallowed AccDep	REGULATED 12/31/2006	Retirements Org. Cost	Prctds/(Csts)	Disallowed Expense	REGULATED 12/31/2007
152	Land Rights	1.84%	71,216.56		71,216.56	0.00			73,032.34
153	Line Pipe	1.96%	1,384,282.26		1,384,282.26	0.00			1,467,154.93
156	Buildings	2.58%	146,519.27	(3,126.25)	143,393.02	0.00		(221.98)	152,582.57
158	Pumping Equipment	3.43%	328,250.28		328,250.28	0.00			367,051.93
159	Station Lines	2.94%	776,172.11	(24,664.54)	751,507.57	0.00		(1,751.33)	811,261.38
160	Other Station Equipment	1.31%	534,614.30	(4,774.09)	529,840.21	0.00		(338.99)	566,443.15
160C	Central Pipeline Control	10.00%	223,774.82		223,774.82	0.00			238,654.86
161	Storage Tanks	1.13%	415,810.95		415,810.95	0.00			430,230.42
163	Communications	10.00%	44,013.51		44,013.51	0.00			61,520.06
185WE	Work Equipment	20.00%	44,572.87		44,572.87	0.00			44,960.87
186HW	Computer Hardware	20.00%	3,789.43		3,789.43	0.00			3,789.43
186SW	Computer Software	15.60%	8,625.11		8,625.11	0.00			8,625.11
189D	AFUDC (INTEREST)	3.80%	87,655.42		87,655.42	0.00			94,567.39
189E	AFUDC (EQUITY)	3.80%	82,888.31		82,888.31	0.00			89,724.10
190	Construction Overhead	3.65%	1,275,163.64	(12,300.50)	1,262,863.14	0.00		(873.41)	1,385,251.88
BS	Cost of Removal		(58,669.41)		(58,669.41)				(58,669.41)
			5,368,679.43	(44,865.40)	5,323,814.03	0.00	0.00	(3,185.71)	5,736,181.00

Application for Tolls
Schedule 2
 2007 Plant in Service

D. Forecast Plant Balances (\$)

30	Account Description	TOTAL Closing Plant (Including Disallowed)		
		Plant	Accum Dep	NBV
152	Land Rights	98,683.73	73,032.34	25,651.39
153	Line Pipe	4,228,197.54	1,467,154.93	2,761,042.61
156	Buildings	364,788.28	155,930.81	208,857.47
158	Pumping Equipment	1,131,243.45	367,051.93	764,191.52
159	Station Lines	2,092,011.24	837,677.25	1,254,333.99
160	Other Station Equipment	2,819,994.78	571,556.23	2,248,438.55
160C	Central Pipeline Control	251,760.97	238,654.86	13,106.11
161	Storage Tanks	1,276,059.49	430,230.42	845,829.07
163	Communications	184,065.90	61,520.06	122,545.84
185WE	Work Equipment	45,348.87	44,960.87	388.00
186HW	Computer Hardware (FD)	3,789.43	3,789.43	0.00
186SW	Computer Software	8,625.11	8,625.11	0.00
189D	AFUDC (INTEREST)	181,894.07	94,567.39	87,326.68
189E	AFUDC (EQUITY)	179,889.22	89,724.10	90,165.12
190	Construction Overhead	3,377,045.14	1,398,425.79	1,978,619.35
BS	Cost of Removal	0.00	(58,669.41)	58,669.41
Total Plant Accounts		16,243,397.22	5,784,232.11	10,459,165.11
		(117,979.00)	(48,051.11)	(69,927.90)
Total Regulated Assets		16,125,418.22	5,736,181.00	10,389,237.22

E. Depreciation Disallowed for Rate Base [1]

30	Account Description	Dep Rate	Open Plant	Dprn Expense	2007 Open Accum. Dep	2007 Close Accum Dep	2007 Net Plant
156	Buildings	2.58%	8,604.00	221.98	3,126.25	3,348.24	5,255.76
159	Station Lines	2.94%	59,569.00	1,751.33	24,664.54	26,415.87	33,153.13
160	Other Station Equipment	1.31%	25,877.00	338.99	4,774.09	5,113.08	20,763.92
190	Construction Overhead	3.65%	23,929.00	873.41	12,300.50	13,173.91	10,755.09
Total Disallowed			117,979.00	3,185.71	44,865.40	48,051.11	69,927.90

Note:

[1] In 1993, the Commission directed that the cost for the jet fuel clay treatment system for rate base purposes shall be the amount of \$811,921. Any amount greater than this was disallowed. TMJ was directed to capitalize this amount, depreciate it at its normal rates for the facility and include the annual depreciation in the revenue requirement. The net effect is that the return on the disallowed plant was not to be paid for by the Shippers.

Application for Tolls
Schedule 3
 2007 Project Descriptions
 (\$)

	<u>Amount</u>	<u>Plant Accounts</u>			
		153	161	185	190
A. Completed Projects Transferred to Plant in Service					
<i>2007 Projects</i>					
Projects to be completed in 2008 (see Section B. i. Capital Projects below)					
	0				
Actual Close Outs	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
B. Work in Progress					
i. Capital Projects					
04-40056 Expansion Joint Replacement (Airport)	49,673				
04-41010 Cathodic Groundbeds	585				
Closing Capital WIP	<u>50,258</u>				
ii. Operating costs					
1 In Line Inspection ("ILI") Costs	139,256	Approved			
2 Rate Case Costs ("RCC")	147,690	Approved			
3 Total cost w/o carrying charges ("cc's")	286,946	= [Line B1 + Line B2]			
4 Expensed in 2007					
5 2007 Amortization w/o cc's	(57,389)	= [line B3 / 5]			
6 Balance net of 2007 amortization	229,557	= [Line B3 + Line B5]			
7 Carrying Charges	7,174	= [Line B6 times 50% times 6.25%]			
8 Closing Operating balance	<u>236,730</u>	= [Line B6 + Line B7]			

C. Project Descriptions

2007 Projects

04-40056 Expansion Joint Replacement

To be completed in 2008.

In Line Inspection

Operating Expense, amortized over 5 years

The Mainline (NPS 6 Chevron to Airport) was in-line inspected with a state-of-the-art ultrasonic in-line inspection device (3rd party contractor). The device detects and sizes pipeline anomalies and reports them for analysis to KMC. An engineering analysis is conducted for each anomaly to determine whether or not it should be investigated. Based on this analysis, certain anomalies are excavated, assessed and repaired if required to ensure pipeline safety. The assessment and repair decisions are made based on detailed engineering procedures that are governed by CSA codes, regulations and best practices. Investigations resulting in no major repairs are expensed under the cost definition of "Anomaly inspections" and anomalies that are determined to require pipe replacements will be capitalized. These investigations and repairs are under taken in subsequent years, as detailed in 2008 and 2009 capital projects and operating costs.

Rate Case costs

Operating Expense, amortized over 5 years

The RCC were reviewed and approved by the Commission.

Amortization and applicable carrying charges for In Line Inspection & Rate Case Costs

Both the ILI and RCC are being amortized over 5 years. Carrying charges are added each year at the cost of debt. For 2007, carrying charges were applied on the average outstanding balance as noted above.

Application for Tolls
Schedule 4
2008 Plant in Service

A. Forecast Plant Balances (\$)

30	Account Description	Dprn Rate	FA Opening 12/31/2007	Disallowed Plant	REGULATED 12/31/2007	Additions	Retirement	Transfers	REGULATED 12/31/2008
152	Land Rights	1.84%	98,683.73		98,683.73				98,683.73
153	Line Pipe	1.96%	4,228,197.54		4,228,197.54	378,154.81			4,606,352.35
156	Buildings	2.58%	364,788.28	(8,604.00)	356,184.28				356,184.28
158	Pumping Equipment	3.43%	1,131,243.45		1,131,243.45				1,131,243.45
159	Station Lines	2.94%	2,092,011.24	(59,569.00)	2,032,442.24				2,032,442.24
160	Other Station Equipment	1.31%	2,819,994.78	(25,877.00)	2,794,117.78				2,794,117.78
160C	Central Pipeline Control	10.00%	251,760.97		251,760.97				251,760.97
161	Storage Tanks	1.13%	1,276,059.49		1,276,059.49	0.00			1,276,059.49
163	Communications	10.00%	184,065.90		184,065.90				184,065.90
185WE	Work Equipment	20.00%	45,348.87		45,348.87	0.00			45,348.87
186HW	Computer Hardware	20.00%	3,789.43		3,789.43				3,789.43
186SW	Computer Software	15.60%	8,625.11		8,625.11				8,625.11
189D	AFUDC (INTEREST)	3.80%	181,894.07		181,894.07				181,894.07
189E	AFUDC (EQUITY)	3.80%	179,889.22		179,889.22				179,889.22
190	Construction Overhead	3.65%	3,377,045.14	(23,929.00)	3,353,116.14	0.00			3,353,116.14
Fixed Assets Balances			16,243,397.22	(117,979.00)	16,125,418.22	378,154.81	0.00	0.00	16,503,573.03
Plus WIP			50,257.64		50,257.64	3,630.80		(50,257.64)	3,630.80
Total Regulated Assets			16,293,654.86		16,175,675.86	381,785.61	0.00	(50,257.64)	16,507,203.83

B. Forecast Depreciation Expense (\$)

30	Account Description	Dprn Rate	FA Opening 12/31/2007	Dprn Expense	Adjustments	Deprn Expense	Average Rate
152	Land Rights	1.84%	98,683.73	1,815.78	-	1,815.78	
153	Line Pipe	1.96%	4,228,197.54	82,872.67	-	82,872.67	
156	Buildings	2.58%	364,788.28	9,411.54	-	9,411.54	
158	Pumping Equipment	3.43%	1,131,243.45	38,801.65	-	38,801.65	
159	Station Lines	2.94%	2,092,011.24	61,505.13	0.01	61,505.14	
160	Other Station Equipment	1.31%	2,819,994.78	36,941.93		36,941.93	
160C	Central Pipeline Control	10.00%	251,760.97	13,106.11	-	13,106.11	
161	Storage Tanks	1.13%	1,276,059.49	14,419.47	(0.00)	14,419.47	
163	Communications	10.00%	184,065.90	18,406.59	(900.04)	17,506.55	
185WE	Work Equipment	20.00%	45,348.87	388.00	-	388.00	
186HW	Computer Hardware	20.00%	3,789.43	0.00	-	0.00	
186SW	Computer Software	15.60%	8,625.11	0.00	-	0.00	
189D	AFUDC (INTEREST)	3.80%	181,894.07	6,911.97		6,911.97	
189E	AFUDC (EQUITY)	3.80%	179,889.22	6,835.79		6,835.79	
190	Construction Overhead	3.65%	3,377,045.14	123,262.15	0.00	123,262.15	
			16,243,397.22	414,678.78	(900.03)	413,778.75	2.55%

C. Forecast Accumulated Depreciation Balances (\$)

30	Account Description	Dprn Rate	Open AccDep 12/31/2007	Disallowed AccDep	REGULATED 12/31/2007	Retirements Org. Cost	Prctds/(Csts)	Disallowed Expense	REGULATED 12/31/2008
152	Land Rights	1.84%	73,032.34		73,032.34	0.00			74,848.12
153	Line Pipe	1.96%	1,467,154.93		1,467,154.93	0.00			1,550,027.60
156	Buildings	2.58%	155,930.81	(3,348.24)	152,582.57	0.00		(221.98)	161,772.13
158	Pumping Equipment	3.43%	367,051.93		367,051.93	0.00			405,853.58
159	Station Lines	2.94%	837,677.25	(26,415.87)	811,261.38	0.00		(1,751.33)	871,015.19
160	Other Station Equipment	1.31%	571,556.23	(5,113.08)	566,443.15	0.00		(338.99)	603,046.09
160C	Central Pipeline Control	10.00%	238,654.86		238,654.86	0.00			251,760.97
161	Storage Tanks	1.13%	430,230.42		430,230.42	0.00			444,649.89
163	Communications	10.00%	61,520.06		61,520.06	0.00			79,026.61
185WE	Work Equipment	20.00%	44,960.87		44,960.87	0.00			45,348.87
186HW	Computer Hardware	20.00%	3,789.43		3,789.43	0.00			3,789.43
186SW	Computer Software	15.60%	8,625.11		8,625.11	0.00			8,625.11
189D	AFUDC (INTEREST)	3.80%	94,567.39		94,567.39	0.00			101,479.36
189E	AFUDC (EQUITY)	3.80%	89,724.10		89,724.10	0.00			96,559.89
190	Construction Overhead	3.65%	1,398,425.79	(13,173.91)	1,385,251.88	0.00		(873.41)	1,507,640.62
BS	Cost of Removal		(58,669.41)		(58,669.41)				(58,669.41)
			5,784,232.11	(48,051.11)	5,736,181.00	0.00	0.00	(3,185.71)	6,146,774.05

Application for Tolls
Schedule 4
 2008 Plant in Service

D. Forecast Plant Balances (\$)

30	Account Description	TOTAL Closing Plant (Including Disallowed)		
		Plant	Accum Dep	NBV
152	Land Rights	98,683.73	74,848.12	23,835.61
153	Line Pipe	4,606,352.35	1,550,027.60	3,056,324.75
156	Buildings	364,788.28	165,342.35	199,445.93
158	Pumping Equipment	1,131,243.45	405,853.58	725,389.87
159	Station Lines	2,092,011.24	899,182.39	1,192,828.85
160	Other Station Equipment	2,819,994.78	608,498.16	2,211,496.62
160C	Central Pipeline Control	251,760.97	251,760.97	0.00
161	Storage Tanks	1,276,059.49	444,649.89	831,409.60
163	Communications	184,065.90	79,026.61	105,039.29
185WE	Work Equipment	45,348.87	45,348.87	0.00
186HW	Computer Hardware (FD)	3,789.43	3,789.43	0.00
186SW	Computer Software	8,625.11	8,625.11	0.00
189D	AFUDC (INTEREST)	181,894.07	101,479.36	80,414.71
189E	AFUDC (EQUITY)	179,889.22	96,559.89	83,329.33
190	Construction Overhead	3,377,045.14	1,521,687.94	1,855,357.20
BS	Cost of Removal	0.00	(58,669.41)	58,669.41
Total Plant Accounts		16,621,552.03	6,198,010.86	10,423,541.17
		(117,979.00)	(51,236.81)	(66,742.19)
Total Regulated Assets		16,503,573.03	6,146,774.05	10,356,798.98

E. Depreciation Disallowed for Rate Base ^[1]

30	Account Description	Dep Rate	Open Plant	Dprn Expense	2008 Open Accum. Dep	2008 Close Accum Dep	2008 Net Plant
156	Buildings	2.58%	8,604.00	221.98	3,348.24	3,570.22	5,033.78
159	Station Lines	2.94%	59,569.00	1,751.33	26,415.87	28,167.20	31,401.80
160	Other Station Equipment	1.31%	25,877.00	338.99	5,113.08	5,452.07	20,424.93
190	Construction Overhead	3.65%	23,929.00	873.41	13,173.91	14,047.32	9,881.68
Total Disallowed			117,979.00	3,185.71	48,051.11	51,236.81	66,742.19

Note:

[1] In 1993, the Commission directed that the cost for the jet fuel clay treatment system for rate base purposes shall be the amount of \$811,921. Any amount greater than this was disallowed. TMJ was directed to capitalize this amount, depreciate it at its normal rates for the facility and include the annual depreciation in the revenue requirement. The net effect is that the return on the disallowed plant was not to be paid for by the Shippers.

Application for Tolls
Schedule 5
 2008 Project Descriptions
 (\$)

	<u>Amount</u>	<u>Plant Accounts</u>			
		153	161	185	190
A. Completed Projects Transferred to Plant in Service					
<i>Carried Over from 2007</i>					
04-40056 Expansion Joint Replacement (Airport)	69,988	69,988			
04-41010 Cathodic Protection	35,668	35,668			
2008 Projects					
04-41018 Airport Tank Valve	6,056	6,056			
various Pipe Repairs	266,442	266,442			
Forecast Close Outs	378,155	378,155	0	0	0
B. Work in Progress					
i. Capital Projects					
04-40056 Expansion Joint Replacement (Airport)	49,673				
04-41010 Cathodic Groundbeds	585				
04-41025 Byrne Road Monitoring	3,631				
Projects closed out (40056 & 41010)	(50,258)				
Closing Capital WIP	3,631				
ii. Operating costs					
1 ILI and RCC Costs	229,557	from Schedule 3			
2 2007 Carrying Charges	7,174	from Schedule 3			
3 Total cost w/o carrying charges ("cc's")	236,730	= [Line B1 + Line B2]			
4 Expensed in 2008					
5 2008 Amortization w/o cc's	(64,563)	= [Line B1 / 3 + Line B2]			
6 Balance net of 2008 amortization	172,167	= [Line B3 + Line B5]			
7 Carrying Charges	14,311	= [(Line B3 + B5) / 2 times 2008 cost of debt]			
8 Closing Operating balance	186,479	= [Line B6 + Line B7]			

C. Project Descriptions

2008 Projects

04-40056 Expansion Joint Replacement

The project scope includes replacement of two expansion joints at TMJ's Airport Terminal. The joints were damaged during the installation of spectacle blinds on Tanks 4 and 5. Some piping modifications are required to allow for the new expansion joints.

04-41010 Cathodic Protection

Cathodic Protection is required to maintain adequate protection of the pipelines, tank bottoms and other pressure containing underground facilities to mitigate external corrosion. The anodes in existing cathodic protection groundbeds need to be replaced periodically (i.e. every 20 years) as the anodes are consumed while protecting pressure containing facilities. In some cases, additional anodes are required at existing groundbed locations to provide increased groundbed output. Groundbeds are powered by rectifiers. Rectifiers are electrical devices which need periodic replacement due to age or higher output requirements. As the underground pipelines and other facilities age, the coating deteriorates resulting in increased cathodic protection current needed to mitigate external corrosion. Some of this additional current must be supplied by new groundbeds (usually located between existing groundbeds). The addition of the new groundbeds helps to provide even current distribution and reduces coating damage caused by high localized cathodic current sources.

1. Replace rectifiers with new units complete with remote monitoring - one rectifier is 10 years old and the other three rectifiers are between 22 and 33 years old (these older units are due for replacement). Remote monitoring allows KMC to perform on/off cathodic survey.

Application for Tolls
Schedule 5
 2008 Project Descriptions
 (\$)

2. Enhance existing cathodic protection systems - investigate low potentials and install additional anodes as required.
3. The 2007 review identified the following locations for upgrades:

GROUND BEDS INFLUENCING JET FUEL LINE FROM CHEVRON TO AIRPORT

Location Name	GB#	KM along JET FUEL	AMPS [2000 CIS Survey]	APPROX. Average. AMPS Output (2006)	COMMENTS	
Westridge	17 **	Westridge, KM 4.2 Along Chevron To Airport	7	16	Rectifiers Replaced in 2004 with Larger Units	These Rectifiers are part of the TMPL System but benefit the Jet Fuel System
Burnaby	23 **	7.20	15	30		
	R-J1	26.09	2.6	2.25	Operating at Higher Output	New Rectifiers with remote monitoring units to be received in 2008
	R-J2	31.20	2.6	2.5		
	R-J3	35.20	3.2	6.5		

Note ** Assets owned by TMPLP (Trans Mountain Pipeline LP).

04-41018 Airport Tank Valve

Purchase one spare tank valve. A spare valve is required to ensure that as tank valve maintenance is performed, the down time required for the tank is minimized. If no tank valve is available and a tank valve needs repairs, the tank would be out of service for several weeks. With an exchange valve available the down time is reduced and provides the opportunity to interchange the tank valves.

various

Pipe Repairs

Repair defects identified through the anomaly investigation program. 14 dents were identified in the 2007 tool run. 6 of these are being repaired in 2008. 8 remaining dents all operate at lower stress levels and will be repaired in future years.

The location and cost of the pipe repairs was not and could not be included in the 2008 Allowed Rate Base until the results of the 2007 ILI were analyzed. Addition of the pipe repairs accounts for the increase in the 2008 Rate Base.

In Line Inspection and Rate Case costs

See description on Schedule 3, 2007 Project Descriptions.

Amortization and applicable carrying charges for Internal Line Inspection & Rate Case Costs

Both the ILI and RCC are being amortized over 5 years. For 2008, carrying charges were applied on the average outstanding balance as noted above.

Application for Tolls
Schedule 6
2009 Proposed Plant in Service

A. Forecast Plant Balances (\$)

30	Account Description	Dprn Rate	FA Opening 12/31/2008	Disallowed Plant	REGULATED 12/31/2008	Additions	Retirement	Transfers	REGULATED 12/31/2009
152	Land Rights	1.21%	98,683.73		98,683.73				98,683.73
153	Line Pipe	3.32%	4,606,352.35		4,606,352.35	143,000.00			4,749,352.35
156	Buildings	2.73%	364,788.28	(8,604.00)	356,184.28				356,184.28
158	Pumping Equipment	4.27%	1,131,243.45		1,131,243.45				1,131,243.45
159	Station Lines	2.85%	2,092,011.24	(59,569.00)	2,032,442.24				2,032,442.24
160	Other Station Equipment	3.92%	2,819,994.78	(25,877.00)	2,794,117.78				2,794,117.78
160C	Central Pipeline Control	0.00%	251,760.97		251,760.97				251,760.97
161	Storage Tanks	3.26%	1,276,059.49		1,276,059.49	0.00			1,276,059.49
163	Communications	10.00%	184,065.90		184,065.90				184,065.90
185WE	Work Equipment	20.00%	45,348.87		45,348.87	0.00			45,348.87
186HW	Computer Hardware	20.00%	3,789.43		3,789.43				3,789.43
186SW	Computer Software	20.00%	8,625.11		8,625.11				8,625.11
189D	AFUDC (INTEREST)	2.21%	181,894.07		181,894.07				181,894.07
189E	AFUDC (EQUITY)	2.32%	179,889.22		179,889.22				179,889.22
190	Construction Overhead	2.75%	3,377,045.14	(23,929.00)	3,353,116.14	0.00			3,353,116.14
Fixed Assets Balances			16,621,552.03	(117,979.00)	16,503,573.03	143,000.00	0.00	0.00	16,646,573.03
Plus WIP			3,630.80		3,630.80	0.00		(3,630.80)	0.00
Total Regulated Assets			16,625,182.83		16,507,203.83	143,000.00	0.00	(3,630.80)	16,646,573.03

B. Forecast Depreciation Expense (\$)

[1]

30	Account Description	Dprn Rate	FA Opening 12/31/2008	Dprn Expense	Adjustments	Deprn Expense	Average Rate
152	Land Rights	1.21%	98,683.73	1,191.78		1,191.78	
153	Line Pipe	3.32%	4,606,352.35	152,816.24		152,816.24	
156	Buildings	2.73%	364,788.28	9,972.30		9,972.30	
158	Pumping Equipment	4.27%	1,131,243.45	48,359.32		48,359.32	
159	Station Lines	2.85%	2,092,011.24	59,641.44		59,641.44	
160	Other Station Equipment	3.92%	2,819,994.78	110,574.83		110,574.83	
160C	Central Pipeline Control	0.00%	251,760.97	0.00		0.00	
161	Storage Tanks	3.26%	1,276,059.49	41,570.48		41,570.48	
163	Communications	10.00%	184,065.90	18,406.59	-900.04	17,506.55	
185WE	Work Equipment	20.00%	45,348.87	0.00		0.00	
186HW	Computer Hardware	20.00%	3,789.43	0.00		0.00	
186SW	Computer Software	20.00%	8,625.11	0.00		0.00	
189D	AFUDC (INTEREST)	2.21%	181,894.07	4,020.74		4,020.74	
189E	AFUDC (EQUITY)	2.32%	179,889.22	4,166.47		4,166.47	
190	Construction Overhead	2.75%	3,377,045.14	92,767.86		92,767.86	
BS	Cost of Removal	5.00%	0.00			2,933.47	
			16,621,552.03	543,488.04	(900.04)	545,521.48	3.28%

C. Forecast Accumulated Depreciation Balances (\$)

30	Account Description	Dprn Rate	Open AccDep 12/31/2008	Disallowed AccDep	REGULATED 12/31/2008	Retirements Org. Cost	Prcls/(Csts)	Disallowed Expense	REGULATED 12/31/2009
152	Land Rights	1.21%	74,848.12		74,848.12	0.00			76,039.90
153	Line Pipe	3.32%	1,550,027.60		1,550,027.60	0.00			1,702,843.84
156	Buildings	2.73%	165,342.35	(3,570.22)	161,772.13	0.00		(235.21)	171,509.22
158	Pumping Equipment	4.27%	405,853.58		405,853.58	0.00			454,212.90
159	Station Lines	2.85%	899,182.39	(28,167.20)	871,015.19	0.00		(1,698.26)	928,958.37
160	Other Station Equipment	3.92%	608,498.16	(5,452.07)	603,046.09	0.00		(1,014.66)	712,606.26
160C	Central Pipeline Control	0.00%	251,760.97		251,760.97	0.00			251,760.97
161	Storage Tanks	3.26%	444,649.89		444,649.89	0.00			486,220.37
163	Communications	10.00%	79,026.61		79,026.61	0.00			96,533.16
185WE	Work Equipment	20.00%	45,348.87		45,348.87	0.00			45,348.87
186HW	Computer Hardware	20.00%	3,789.43		3,789.43	0.00			3,789.43
186SW	Computer Software	20.00%	8,625.11		8,625.11	0.00			8,625.11
189D	AFUDC (INTEREST)	2.21%	101,479.36		101,479.36	0.00			105,500.10
189E	AFUDC (EQUITY)	2.32%	96,559.89		96,559.89	0.00			100,726.36
190	Construction Overhead	2.75%	1,521,687.94	(14,047.32)	1,507,640.62	0.00		(657.33)	1,599,751.15
BS	Cost of Removal	5.00%	(58,669.41)		(58,669.41)	0.00	0.00		(55,735.94)
			6,198,010.86	(51,236.81)	6,146,774.05	0.00	0.00	(3,605.47)	6,688,690.05

Application for Tolls
Schedule 6
 2009 Proposed Plant in Service

D. Forecast Plant Balances (\$)

30	Account Description	TOTAL Closing Plant (Including Disallowed)		
		Plant	Accum Dep	NBV
152	Land Rights	98,683.73	76,039.90	22,643.83
153	Line Pipe	4,749,352.35	1,702,843.84	3,046,508.51
156	Buildings	364,788.28	175,314.65	189,473.63
158	Pumping Equipment	1,131,243.45	454,212.90	677,030.55
159	Station Lines	2,092,011.24	958,823.83	1,133,187.41
160	Other Station Equipment	2,819,994.78	719,072.99	2,100,921.79
160C	Central Pipeline Control	251,760.97	251,760.97	0.00
161	Storage Tanks	1,276,059.49	486,220.37	789,839.12
163	Communications	184,065.90	96,533.16	87,532.74
185WE	Work Equipment	45,348.87	45,348.87	0.00
186HW	Computer Hardware (FD)	3,789.43	3,789.43	0.00
186SW	Computer Software	8,625.11	8,625.11	0.00
189D	AFUDC (INTEREST)	181,894.07	105,500.10	76,393.97
189E	AFUDC (EQUITY)	179,889.22	100,726.36	79,162.86
190	Construction Overhead	3,377,045.14	1,614,455.80	1,762,589.34
BS	Cost of Removal	0.00	(55,735.94)	55,735.94
Total Plant Accounts		16,764,552.03	6,743,532.33	10,021,019.70
		<i>(117,979.00)</i>	<i>(54,842.28)</i>	<i>(63,136.72)</i>
Total Regulated Assets		16,646,573.03	6,688,690.05	9,957,882.98

E. Depreciation Disallowed for Rate Base ^[2]

30	Account Description	Dep Rate	Open Plant	Dprn Expense	2009 Open Accum. Dep	2009 Close Accum Dep	2009 Net Plant
156	Buildings	2.73%	8,604.00	235.21	3,570.22	3,805.43	4,798.57
159	Station Lines	2.85%	59,569.00	1,698.26	28,167.20	29,865.46	29,703.54
160	Other Station Equipment	3.92%	25,877.00	1,014.66	5,452.07	6,466.74	19,410.26
190	Construction Overhead	2.75%	23,929.00	657.33	14,047.32	14,704.65	9,224.35
Total Disallowed			117,979.00	3,605.47	51,236.81	54,842.28	63,136.72

Note:

[1] Please refer to Schedule 8 for calculation of the proposed 2009 Depreciation rates.

[2] In 1993, the Commission directed that the cost for the jet fuel clay treatment system for rate base purposes shall be the amount of \$811,921. Any amount greater than this was disallowed. TMJ was directed to capitalize this amount, depreciate it at its normal rates for the facility and include the annual depreciation in the revenue requirement. The net effect is that the return on the disallowed plant was not to be paid for by the Shippers.

Application for Tolls

Schedule 7

2009 Project Descriptions

(\$)

	<u>Amount</u>	<u>Plant Accounts</u>			
		153	161	185	190
A. Completed Projects Transferred to Plant in Service					
2009 Projects					
04-41026 Stress Relieve Jet Line @ Byrne Road/Marine Way	75,000	75,000			
04-41025 Byrne Road Monitoring	8,000	8,000			
04-41016 Cathodic Groundbeds	40,000	40,000			
to be assigned General Sustaining Capital	20,000	20,000			
Forecast Close Outs	<u>143,000</u>	<u>143,000</u>	<u>0</u>	<u>0</u>	<u>0</u>
B. Work in Progress					
i. Capital Projects					
04-41025 Byrne Road Monitoring	3,631				
Project closed out (41025)	<u>(3,631)</u>				
Closing Capital WIP	<u>0</u>				
ii. Operating costs					
1 ILI and RCC Costs	172,167		from Schedule 5		
2 2008 Carrying Charges	<u>14,311</u>		from Schedule 5		
3 Total cost w/o carrying charges ("cc's")	186,479		= [Line B1 + Line B2]		
4 Expensed in 2009					
5 2009 Amortization w/o cc's	<u>(71,701)</u>		= [Line B1 / 3 + Line B2]		
6 Balance net of 2009 amortization	114,778		= [Line B3 + Line B5]		
7 Carrying Charges	<u>10,544</u>		= [(Line B3 + B5) / 2 times 2009 cost of debt]		
8 Closing Operating balance	<u>125,322</u>		= [Line B6 + Line B7]		
C. Project Descriptions					
2009 Projects					
04-41026 Stress Relieve Jet Line @ Byrne Road/Marine Way					
A recent change to the local traffic pattern has increased heavy truck traffic increasing stress on the pipeline and accelerating settling which may lead to premature failure. Stress relieving and rebedding the pipe should resolve this issue. The study for this project started in 2008 (see 04-41025).					
04-41025 Byrne Road Monitoring					
Implement mitigation strategy for stress relief of NPS6 Jet Line at road bridge along Byrne Road in South Burnaby. During routine inspections, KMC observed that the road bridge, which the jet fuel pipeline is affixed, was exhibiting signs of potential settlement at the approach to either end of the bridge. If the potential settlement is impacting the pipeline, it is important to determine to what extent and to develop a mitigation strategy (both short and long-term). A study was conducted in 2008 by an external consultant. Results of the study (late 2008) anticipate that the mitigation strategy will be excavation and rebedding of the pipeline.					
04-41016 Cathodic Groundbeds					
The Cathodic Protection program is required to maintain adequate cathodic protection potentials on pipelines, tank bottoms, and as more fully described for 2008 Projects on Schedule 5. Providing cathodic protection to our pipelines is a regulatory requirement. The scope of the 2009 program is to clear a shorted casing where the NPS 12 pipeline crosses Galardi Way in Burnaby. This casing is the cause of cathodic potentials which are below the accepted criteria.					
to be assigned General Sustaining Capital					
Provision for minor capital projects.					
In Line Inspection and Rate Case costs					
See description on Schedule 3, 2007 Project Descriptions.					
Amortization and applicable carrying charges for Internal Line Inspection & Rate Case Costs					
Both the ILI and RCC are being amortized over 5 years. For 2009, carrying charges were applied on the average outstanding balance as noted above.					

Application for Tolls Schedule 8

Depreciation Rates and Forecast Remaining Life Calculations (\$000)

Account Number & Description	Original Cost 'Dec 31, 2008	Accumulated Depreciation 'Dec 31, 2008	Net Service Value 'Dec 31, 2008	2008 Depreciation Expense	Existing Depreciation Rates (%)	Forecast Remaining Life	Proposed Recovery 20 years w exceptions	
(a)	(b)	(d)	(e)	(f)	(g)	(h) = [e / f]	(i)	(j) = [i / b]
152 Land Rights	98,684	74,848	23,836	1,816	1.84%	13.1	1,192	1.21%
153 Line Pipe	4,606,352	1,550,028	3,056,325	82,873	1.96%	36.9	152,816	3.32%
156 Buildings	364,788	165,342	199,446	9,412	2.58%	21.2	9,972	2.73%
158 Pumping Equipment	1,131,243	405,854	725,390	38,802	3.43%	18.7	48,359	4.27%
159 Station Lines	2,092,011	899,182	1,192,829	61,505	2.94%	19.4	59,641	2.85%
160 Other Station Equipment ^[1]	2,819,995	608,498	2,211,497	36,942	1.31%	59.9	110,575	3.92%
160C Central Pipeline Control	251,761	251,761	0	0	10.00%	0.0	0	0.00%
161 Storage Tanks ^[1]	1,276,059	444,650	831,410	14,419	1.13%	57.7	41,570	3.26%
163 Communications	184,066	79,027	105,039	17,507	10.00%	6.0	17,507	10.00%
185WE Work Equipment	45,349	45,349	0	388	20.00%	0.0	0	20.00%
186HW Computer Hardware	3,789	3,789	0	0	20.00%	0.0	0	20.00%
186SW Computer Software	8,625	8,625	0	0	15.60%	0.0	0	20.00%
189D AFUDC (Interest)	181,894	101,479	80,415	6,912	3.80%	11.6	4,021	2.21%
189E AFUDC (Equity)	179,889	96,560	83,329	6,836	3.80%	12.2	4,166	2.32%
190 Construction Overhead	3,377,045	1,521,688	1,855,357	123,262	3.65%	15.1	92,768	2.75%
BS Costs of Removal ^[2]		(58,669)	58,669	0	0.00%		2,933	5.00%
	16,621,552	6,198,011	10,423,541	400,673	2.41%	26.0	545,521	
Base for computed average ^[3]	16,312,028						542,588	3.33%

Summary of Depreciation Rates

	2008	2009
Depreciation Expense without Balance Sheet ("BS") Costs of Removal	400,673	542,588
Amortization of normal Costs of Removal (and retirements)	0	2,933
Total Provision for Pipeline	<u>400,673</u>	<u>545,521</u>

Note(s):

[1] The remaining life for Account 160 and 161 are beyond the average expected life when the original study was completed. This indicates that an adjustment to the depreciation rates is required. The average life for all assets was approximately 30 years when the rates currently in effect were agreed to with TMJ Shippers. TMJ is proposing that all rates except for the following are reset using 20 years:

Pumping Equipment	15 years	no change from original assumptions
Communications	10 years	no change from original assumptions
Work Equip., Computer (soft & hardware)	5 years	no balances to depreciate (rate considered appropriate)

The proposed reduction in useful life is largely based on the observed decline in number of shippers on the system. When the original study was completed, there were 5 active shippers on the pipeline, today there are 2 active shippers and 1 minor shipper or approximately 50% of the original shippers remain and 2 of them account for 99% of the volumes. This reduction reflects a potential risk to TMJ of unrecovery of the remaining asset costs if the depreciation rates are set on an extended life.

[2] There is no rate established to extinguish the current cost of normal asset retirements and removals. Due to changing fixed assets systems, the cost of current retirements and removals can no longer be recorded against accumulated depreciation. To maintain the financial data, this information is placed on the balance sheet, separate from the fixed asset system and plant records. As a result a separate amortization rate is required to extinguish this balance.

[3] Base for computed average (depreciation rate) excludes asset classes that are fully depreciated and amortization of cost of removal.

Application for Tolls**Schedule 9**

Rate of Return on Rate Base
units as noted

	<u>Capital Structure</u>	<u>Cost of Capital</u>			<u>Weighted Cost of Capital</u>			<u>Sch. No.</u>
		<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	
<u>Capitalization</u> ^[1]	%	%	%	%	%	%		
Debt ^[2]	55.00	6.32	7.00	7.00	3.48	3.85	3.85	
	<u>55.00</u>				<u>3.48</u>	<u>3.85</u>	<u>3.85</u>	
Common Equity ^[3]	45.00	8.46	8.71	8.57	3.81	3.92	3.86	
	<u>45.00</u>				<u>3.81</u>	<u>3.92</u>	<u>3.86</u>	
Total Capitalization	<u>100.00</u>							
Rate of Return on Rate Base					<u>7.29</u>	<u>7.77</u>	<u>7.71</u>	
Rate Base (\$000)					10,101	9,944	9,775	1
Return on Rate Base (\$000)					<u>736</u>	<u>773</u>	<u>753</u>	

Note(s):

[1] Based on the deemed capital structure, approved by the Commission.

[2] 2008 debt rate, the forecast is expected to remain the same despite upheaval in the US Markets.

[3] The rates are as approved by the National Energy Board ("NEB"). TMJ has used the NEB allowed rate as agreed to by Shippers in previous proceedings.

Application for Tolls
Schedule 10

Combined Provincial and Federal Tax Rates

	<u>2007</u> <u>Actual</u> %	<u>2008</u> <u>Estimate</u> %	<u>2009</u> <u>Proposed</u> %
Income Tax Rates			
1 Basic Federal Income Tax Rate	21.00	19.50	19.00
2 Corporate Surtax on Federal Income Tax (4%)	1.12	0.00	0.00
3 Sub-Total	<u>22.12</u>	<u>19.50</u>	<u>19.00</u>
4 Provincial Income Taxes	12.00	11.50	11.00
5 Effective Income Tax Rates	<u>34.12</u>	<u>31.00</u>	<u>30.00</u>

Application for Tolls
Schedule 11
Average Working Capital
(\$000)

	2007 <u>Actual</u>	2008 <u>Estimate</u>	2009 <u>Proposed</u>	Sch. <u>No.</u>
Cash Operating Expenses	1,936	1,979	2,342	15
Less: Prepaid Insurance	(23)	(43)	(100)	
Plus: Income Taxes Payable	46	151	185	12
Cash Cost of Service	<u>1,959</u>	<u>2,086</u>	<u>2,427</u>	
Provision for cash requirement ^[1]	81	86	100	
Provision for Average Prepays ^[2]		54	86	
Provision for Average Inventory ^[2]		7	7	
Allowance for Working Capital	<u>81</u>	<u>146</u>	<u>193</u>	

Note(s):

[1] Cash working capital is the average amount of capital required for day to day operations and bridges the gap between the time expenditures are required to provide service and the time revenues are received for that service.

TMJ uses a 15 day requirement for cash.

i.e., for 2008, $15/366 \times \text{Cash Cost of Service} = \text{Provision for cash requirement}$.

[2] Amounts shown reflect the balances as of October 2008 and predicted balances for 2009.

[3] For 2008 and 2009, the above statement has been modified to remove insurance expense from the Cash Operating Expenses and re-introduced these as prepaid expenses, consistent with past treatment of these costs.

Application for Tolls**Schedule 12**Provision for Income Taxes Payable
(\$000)

			2007	2008	2009
			<u>Actual</u>	<u>Estimate</u>	<u>Proposed</u>
Return on Rate Base	Rate Base * Rate				
	2007 (10,101 * 7.29%)		736		
	2008 (9,944 * 7.77%)			773	
	2009 (9,775 * 7.71%)				753
LESS: Deemed interest component					
	2007 (10,101 * 3.48%)		352		
	2008 (9,944 * 3.85%)			383	
	2009 (9,775 * 3.85%)				376
Return related to deemed equity			<u>384</u>	<u>390</u>	<u>377</u>
Adjustments for Permanent and Timing Differences:					
Depreciation expense on:					
i) plant costs not allowable for tax purposes			2	2	1
ii) Equity AFUDC			7	7	4
iii) all other plant accounts			415	411	540
Capital Cost Allowance			(428)	(403)	(376)
Interest AFUDC			0	0	0
Total 2007 ILI and RCC expensed for tax purposed			(287)		
Surcharge Revenue Refund			(15)	15	
2007 ILI and RCC recovered in tolls and reversed for tax			57	65	72
			<u>(249)</u>	<u>96</u>	<u>241</u>
Taxable Income - Income Tax Base			<u>135</u>	<u>486</u>	<u>618</u>
Provision for Income Taxes Payable					
<i>(Income Tax Base x tax rate / (1-tax rate))</i>					
	2007 135 * 34.12%		<u>70</u>		
	2008 486 * 31.00%			<u>218</u>	
	2009 618 * 30.00%				<u>265</u>
Provision for Cash Income Taxes					
<i>(Income Tax Base x tax rate)</i>					
	2007 135 34.12%		<u>46</u>		
	2008 486 31.00%			<u>151</u>	
	2009 618 30.00%				<u>185</u>

Application for Tolls
Schedule 13
Capital Cost Allowance
(\$)

	New		<u>Retirements Only</u>		Class 6	Class 8	New		Class 10	Class 17	TOTAL
	Class 1	Class 49	Class 2	Class 3			Class 7	Class 9			
	4.0%	8.0%	6.0%	5.0%	10.0%	20.0%	15.0%	25.0%	30.0%	8.0%	
UCC at Dec. 31, 2006	3,859,182	0	330,350	1,870	437,616	1,074,303	57,648	55	19	2,784	5,763,827
2007 Additions	0	0	0	0	0	0	0	0	0	0	0
2007 Net (Proceeds)/Costs											0
	3,859,182	0	330,350	1,870	437,616	1,074,303	57,648	55	19	2,784	5,763,827
For. CCA at Full Rates	154,367	0	19,821	93	43,762	214,861	8,647	14	6	223	441,793
Impact of two tax filings	(1,491)		(287)	(1)	(1,088)	(10,381)	(303)	(1)	(1)	(5)	(13,557)
LESS 50% on Additions	0	0	0	0	0	0	0	0	0	0	0
2007 CCA	152,876	0	19,534	92	42,674	204,480	8,344	13	5	218	428,236
UCC at Dec. 31, 2007	3,706,306	0	310,816	1,778	394,942	869,823	49,304	42	14	2,566	5,335,591
2008 Additions	0	378,155	0	0	0	0	0	0	0	0	378,155
2008 Net (Proceeds)/Costs											0
	3,706,306	378,155	310,816	1,778	394,942	869,823	49,304	42	14	2,566	5,713,746
For. CCA at Full Rates	148,252	30,252	18,649	89	39,494	173,965	7,396	11	4	205	418,317
LESS 50% on Additions	0	(15,126)	0	0	0	0	0	0	0	0	(15,126)
2008 CCA	148,252	15,126	18,649	89	39,494	173,965	7,396	11	4	205	403,191
UCC at Dec. 31, 2008	3,558,054	363,029	292,167	1,689	355,448	695,858	41,908	32	10	2,361	5,310,555
2009 Additions	0	143,000	0	0	0	0	0	0	0	0	143,000
2009 Net (Proceeds)/Costs											0
	3,558,054	506,029	292,167	1,689	355,448	695,858	41,908	32	10	2,361	5,453,555
For. CCA at Full Rates	142,322	40,482	17,530	84	35,545	139,172	6,286	8	3	189	381,621
LESS 50% on Additions	0	(5,720)	0	0	0	0	0	0	0	0	(5,720)
2009 CCA	142,322	34,762	17,530	84	35,545	139,172	6,286	8	3	189	375,901
UCC at Dec. 31, 2009	3,415,732	471,266	274,637	1,604	319,903	556,687	35,622	24	7	2,172	5,077,654

Application for Tolls**Schedule 14**

Revenue Requirement Overview

The 2007 Actuals reflect the actual operating expenses recorded in the financial books of TMJ. These are added to the cost components driven by the rate base, the allowed provisions for return on and of capital and income taxes payable.

The 2008 Estimate reflects the best available cost information that combines the last projection of the operating expenses (as of October 2008) along with updated timing of expenditures. These are then added to the cost components driven by the estimated rate base; the estimated allowed provisions for return on and of capital and income taxes payable to arrive at the total revenue requirement for the year.

Escalations used to forecast some of the 2009 operating costs are as follows:

Salaries	6.0%	
Property Taxes	5.0%	
All other expenses	0.0%	most are program related and justified on costs.
Power costs	2.0%	

Application for Tolls**Schedule 15****Overview and 2009 Revenue Requirement
(\$000)**

TMJ's forecast Revenue Requirement for 2009 includes all components of the cost of service using the Rate Base/Rate of Return Methodology. The calculation of the Rate Base, Rate of Return and Provision for Income Taxes is provided on the preceding pages. The following page provides a high level overview of the Operating Expenses by major component. The Operating Expenses are then added to the cost components driven by the forecast 2009 Rate Base plus any other agreed to adjustments to arrive at the total Revenue Requirement for the year.

	2007	2008	2009	Sch.
	<u>Actual</u>	<u>Estimate</u>	<u>Proposed</u>	<u>No.</u>
Rate Base	10,101	9,944	9,775	1
Rate of Return (%)	7.29%	7.77%	7.71%	9
Operating Expenses	1,936	1,979	2,342	16
Plant Depreciation and Amortization	416	414	546	2/4/6
Provision for Income Taxes Payable	70	218	265	12
Return on Rate Base ^[1]	736	773	753	12
Amortization of In Line Inspection & Rate Case costs ^[2]	57	65	72	3/5/7
Refund over collection of 2005 and 2006 Surcharges ^[3]		(15)		
Share of rental revenue ^[4]			(3)	
Revenue Requirement	<u>3,215</u>	<u>3,433</u> ^[5]	<u>3,973</u>	

Notes:

[1] Calculation of the Return on Rate Base is shown on the Provision for Income Taxes (see Schedule 12).

[2] Calculation of the amortization amount is provided with the Project Description schedules (as noted).

[3] Refund over collection of 2005 and 2006 Surcharges (\$)

Total Surcharge Revenues to be collected	a	<u>379,418</u>
Amount collected in December 2006	b	<u>32,802</u>
Amounts collected in 2007	c	<u>361,826</u>
Total Surcharge Revenues Collected	d = b + c	<u>394,629</u>
Refund included in 2008 Tolls	e = d - a	<u>15,211</u>

[4] Inactive Gathering System Rental Revenues

KMC has been working with a customer to rent a mothballed portion of the Gathering System between the Esso and Shell Terminals. As the asset is owned by TMJ, and is included in the rate base at an estimated value of (\$22K), TMJ is proposing to directly offset this cost for the duration of the contract (approx. 2 years). The deduction will be included once funds are collected and known (i.e. on a prospective basis). The amount shown above is calculated as follows:

Estimated costs included in Revenue Requirement (cost determined using Rate Base driven costs and Income Tax Provision)	Rate Base =	19	3
Proposed Revenue sharing to Shippers	plus carrying charges		<u>3</u>

[5] 2008 Revenues to be collected (tolls * volumes)	Tolls	Days	Volume	Revenue
Jan - Apr Mainline	3.1880	121	2,712	1,046
Gathering	0.8430	121	34	3
May - Dec Mainline	3.2897	245	2,782	2,243
Gathering	0.8932	245	23	5
Total estimated Revenues collected	366		<u>2,786</u>	<u>3,297</u>
Variance between Revenues collected & Revenue Requirement				<u>(136)</u>

Application for Tolls
Schedule 16
 Summary of Operating Expenses
 (\$000)

	<u>2007</u> <u>Actual</u> [a]	<u>2008</u> <u>Estimate</u> [b]	<u>2009</u> <u>Proposed</u> [c]	<u>Change</u> [c-b]/[b]	<u>Sch</u> <u>No.</u>
Total Staff Costs, Expenses and Charges	<u>1,095</u>	<u>1,149</u>	<u>1,280</u>	<u>11.4%</u>	17
Fuel and Power	<u>162</u>	<u>165</u>	<u>168</u>	<u>2.0%</u>	18
Property Taxes	<u>161</u>	<u>150</u>	<u>158</u>	<u>5.1%</u>	19
Direct Operations, Head Office & Business Expenses	<u>518</u>	<u>515</u>	<u>735</u>	<u>42.8%</u>	20
Total Operating Expenses for Cost of Service	<u><u>1,936</u></u>	<u><u>1,979</u></u>	<u><u>2,342</u></u>	<u><u>61.3%</u></u>	

Note:

[1] Operating Expenses reflect updated information for the years shown.

Application for Tolls
Schedule 17

Staff Costs, Expenses and Charges for Common Assets
(\$000)

<u>Account</u>	<u>2007</u> <u>Actual</u>	<u>Change</u>	<u>2008</u> <u>Estimate</u>	<u>Change</u>	<u>2009</u> <u>Proposed</u>	<u>Notes</u>
Staff - Direct time for shared staff	890	34	924	(81)	843	[a]
- Allocations						
Common Staff Charges	180	25	205	221	426	
Common Expenses	15	(3)	12	(1)	12	
Common Asset Usage fees	10	(2)	7	(7)	0	
Total Allocations	205	19	225	212	437	
Total Staff Costs, Expenses and Charges	<u>1,095</u>	<u>54</u>	<u>1,149</u>	<u>132</u>	<u>1,280</u>	

General Definitions

Staff Costs:

KMC employs approximately 5.0 full time equivalent ("FTE") operations staff for TMJ, including 1 shared supervisor with TMPLP operations. Direct time for shared staff include payments for basic wages, overtime, shift differential, vacation payouts plus any directly assigned operating costs such as training, vehicles, travel, etc. The calculation of staff costs and cost allocation procedures follows TMPLP Cost Allocation Study as filed with the NEB in 2002. This study has been applied to TMJ operations since its inception. Directly shared activity centres typically include Quality Control, Burnaby District (Operations, Mechanical, Instrumentation and Electrical Technicians), Burnaby Pipeline Protection, Lands and ROW, Control Centre Operations and Regulatory Affairs.

Allocations:

There are no Head Office staff directly employed by TMJ. KMC's staff are shared with TMJ and record their hours on time sheets which are then charged to accounts that enable KMC to distinguish between salaries related to directly charged staff and common or shared staff.

[a] Explanation of Changes

Salary and wage costs for 2009 are escalated at 6% over 2008 (administered in October 2008). In addition, KMC will be hiring 1 additional Pipeline Protection position to oversee all pipeline and pipeline integrity concerns for TMJ.

In summary, the direct time charged to TMJ for 2009 is equivalent to approximately 5.0 FTE's, and the common or allocated staff time is equivalent to approximately 2.5 FTE's for a total of 7.5 FTE's. Staff costs (allocated and direct) cover the time required for operating and maintaining the pipeline, providing scheduling and 24 hour pipeline control, surveillance and transportation services, and also includes managing all health, safety, environment, regulatory, engineering, pipeline integrity, financial, accounting and legal services required to operate the pipeline in an efficient and safe manner.

Application for Tolls**Schedule 18**

Fuel and Power

(\$000)

<u>Account</u>	<u>2007 Actual</u>	<u>Change</u>	<u>2008 Estimate</u>	<u>Change</u>	<u>2009 Proposed</u>
Total Costs	<u>162</u>	<u>3</u>	<u>165</u>	<u>3</u>	<u>168</u>

General Definitions

Fuel and power costs arise from pump and instrumentation power at the four originating sites, the Burnaby booster pumps, as well as operating the Airport Terminal and the Gilley Road remote valve. Power costs are directly billed by B.C. Hydro for the Airport and Gilley Road valve. Power is purchased from Chevron on a usage basis calculated from the volumes shipped. A portion of the total power costs of the Westridge and Burnaby Terminal sites is allocated based on the power demand of the equipment and hours of use. Electrical power is optimized as there are no throttling valves in the system and all new pumping equipment purchased has been specified as high efficiency.

Explanation of Changes

Power costs reflect a modest increase from 2007 to 2008. Powers costs for 2009 are forecast as 2% over 2008 Estimate (similar to 2008 increase over 2007).

Application for Tolls**Schedule 19**

Property Taxes

(\$000)

<u>Account</u>	<u>2007 Actual</u>	<u>Change</u>	<u>2008 Estimate</u>	<u>Change</u>	<u>2009 Proposed</u>
Total Costs	161	(10)	150	8	158
	<u>161</u>	<u>(10)</u>	<u>150</u>	<u>8</u>	<u>158</u>

General Definitions

Property taxes are paid by TMJ for its pipeline and facilities.

Explanation of Changes

The property tax amounts for 2008 are final and reflect the following:

- a) the assessment increased from 4.318M to 4.607M for an increase of 6.7%;
- b) the average mill rates decreased from \$37.2 to \$32.6 for a reduction of 12.3%; and
- c) the overall reduction in property taxes paid is from \$161K (2008) to \$150K (2009) for a reduction of 6.4%.

The 2009 Forecast includes a 5% combined overall increase for expected changes in mill rates and assessments.

Application for Tolls**Schedule 20**

Direct Operations, Head Office and Business Expenses

(\$000)

<u>Account</u>	<u>2007 Actual</u>	<u>Change</u>	<u>2008 Estimate</u>	<u>Change</u>	<u>2009 Proposed</u>	<u>Notes</u>
Direct Field Expenses						[a]
Station equipment maintenance	166	(34)	132	0	132	
Anomaly inspections	0	0	0	85	85	
Materials and supplies	25	(4)	21	11	32	
Pipeline outside services	56	(12)	43	51	94	
Helicopter patrol	21	(2)	19	7	26	
Special studies & services	0	0	0	0	0	
Tank Inspections	0	0	0	0	0	
Buildings, roads and grounds	12	3	15	(1)	14	
Other	3	5	8	4	12	
	<u>282</u>	<u>(44)</u>	<u>238</u>	<u>156</u>	<u>394</u>	
Head Office and Business Expenses						[b]
Rents	146	(15)	131	0	131	
Insurance	23	20	43	57	100	
Special studies & services	34	65	99	7	106	
Audit fees	20	(20)	0	0	0	
Terasen Inc Fees	8	(8)	0	0	0	
Other	3	(1)	2	0	2	
Cost of Regulator	3	(1)	2	(0)	2	
	<u>237</u>	<u>40</u>	<u>277</u>	<u>64</u>	<u>341</u>	
Total Expenses	<u>518</u>	<u>(3)</u>	<u>515</u>	<u>220</u>	<u>735</u>	

General Definitions - Operations and Maintenance**Direct Field Expenses**

All materials and supplies, outside services and other expenses including fire, safety and security costs are charged directly to TMJ via invoices. Outside Services provide for special study costs and outside contractors (backhoe services, welding, laboratory testing, etc.) for maintenance of the pipeline and right-of-way, tank farm (includes maintenance of tank mixers, meters, valves and firewalls), water treatment and jet fuel treatment facilities. All employee related costs are included under Staff costs.

[a] Explanation of Changes**Direct Field Expenses**

2008 Station Maintenance equipment includes the costs for filter change outs (\$62K), electrical, instrumentation, meter and pump maintenance (\$45K) and other services for security, janitorial, and communications costs (\$24K). 2009 Budget anticipates the same level of expenditures.

Ongoing anomaly inspections occur on an annual basis. In 2007, the investigation program was not required as the pipeline was prepared for the 2007 ILI, in 2008 the results were analyzed and the corrosion dig program plan developed. 2009 forecasts a normal level of anomaly inspection activity by undertaking corrosion digs identified from the Probability of Exceedance calculations performed on the 2007 metal loss ILI run results.

Application for Tolls**Schedule 20**

Direct Operations, Head Office and Business Expenses

(\$000)

Explanation of Changes cont'd**Direct Field Expenses cont'd**

Pipeline outside services costs includes all costs for required studies plus general field costs for pipeline protection and maintenance. 2009 includes costs for

- (1) Natural Hazards (\$35K): Geohazard sites are periodically field checked to re-evaluate their risk for exposure. Maintenance may also be required at some sites to maintain adequate depth of cover.
- (2) Cathodic Protection (\$15K): Test lead survey completed annually as required by CSA-Z662 and OCC-1. This also includes close interval survey in areas of known corrosion growth.

TMJ operates in a highly populated area with ongoing third-party ground disturbance occurring, sometimes in proximity to our pipeline (high risk and high incident area). With increasing amounts of development in proximity to the pipeline, protecting the pipeline continues to be a high priority. These surveys are required to ensure pipeline protection and integrity.

Head Office and Business Costs

Expense items not covered by the Total Staff Costs, Expenses and Charges are directly charged to TMJ. These include legal expenses, regulatory expenses, printing costs for landowner announcements, audit fees, insurance, and rents paid on the airport facilities.

There are no administrative staff directly employed by TMJ. All administrative support activities such as managerial direction, accounting, payroll and financial support, scheduling and pipeline monitoring activities, regulatory and legal support, safety and environmental responsibilities, engineering and lands administration and human resource services are provided by KMC.

[b] Explanation of Changes**Head Office and Business Costs**

Insurance expenses have doubled as a result of increasing insurance costs experienced by KMC and along with TMJ being in an urban (high risk, high consequence) area of operation.

Special studies and services include specialized technical or business resources to address specific issues that arise from time to time on the system such as legal fees, specialized consultants, temporary assistance, and software support costs with minor increases in each forecast.

Application for Tolls Schedule 21

Throughput Forecast

Total jet fuel deliveries for 2008 are expected to average 2,786 m³ per day (combined total for the Gathering System and the Mainline). This reflects a decrease from the approved 2008 volumes (2,897 m³/day) of 111 m³ per day, or approximately -3.8% and 70 m³/day below 2007 volumes (2,856 m³/day).

TMJ received input from all current Shippers and has used this along with 2008 actual volumes (to November) to forecast the 2009 volumes shown below. The 2009 Proposed Mainline volumes are proposed to decrease by 27 m³/day. This includes a 4% decrease from the volumes proposed to be used for the forecast, which is considered to be consistent with 2008 performance. The Gathering System volumes were forecast to increase over the 2008 Actual/Estimate volumes by 11 m³/day. The Gathering System volumes are expected to return to pre-2008 levels.

	Days	2008 Actual/Estimate		Days	2009 Proposed		Variance		
		Gathering m ³ /day	Mainline m ³ /day		Gathering m ³ /day	Mainline m ³ /day	Mainline m ³ /day	%	
A. Annual Volume Forecast									
January	31	38	2,784 **	31	39	2,662	(122)	-4.4%	
February	29	47	2,678 **	28	39	2,531	(147)	-5.5%	
March	31	10	2,691 **	31	39	2,575	(116)	-4.3%	
April	30	43	2,694 **	30	38	2,656	(38)	-1.4%	
May	31	38	2,721 **	31	39	2,719	(2)	-0.1%	
June	30	33	3,097 **	30	38	2,996	(100)	-3.2%	
July	31	25	3,259 **	31	39	3,112	(147)	-4.5%	
August	31	29	3,191 **	31	39	3,047	(143)	-4.5%	
September	30	16	2,771 **	30	38	2,847	75	2.7%	
October	31	0	2,403 **	31	39	2,692	289	12.0%	
November	30	13	2,259 **	30	38	2,317	58	2.6%	
December	31	29	2,549	31	39	2,613	64	2.5%	
YEAR	366	27	2,759	365	38	2,733	(27)	-1.0%	

B. Measured variance in Mainline Volumes

(2008 Forecast / Approved vs 2008 actual/estimated volumes)

		Forecast ^[1]	Actual
January	31	2,784	2,784 **
February	29	2,678	2,678 **
March	31	2,691	2,691 **
April	30	2,490	2,694 **
May	31	2,797	2,721 **
June	30	3,123	3,097 **
July	31	3,503	3,259 **
August	31	3,568	3,191 **
September	30	2,877	2,771 **
October	31	2,545	2,403 **
November	30	2,523	2,259 **
December	31	2,713	2,549
YEAR	366	2,860	2,759

Volumes known at time of filing: January through March.	0.0%
	0.0%
	0.0%
Performance of volume forecast:	8.2%
Volumes predicted at time of filing: April through December.	-2.7%
	-0.8%
	-7.0%
Average reduction in volumes actually tendered for delivery to those forecast to be tendered for delivery:	-4.3%
	-10.6%
	-3.7%
	-5.6%
	-10.5%
	-6.1%
	-3.5%

C. Volumes for Partial Year Toll Calculations

	Days	2009 Volumes (m ³ /day)		2009 Volumes (m ³)	
		Gathering	Mainline	Gathering	Mainline
Jan to Feb	59	39	2,600	2,280	153,388
Mar to Dec	306	38	2,758	11,731	843,980
Total	365	38	2,733	14,011	997,368

Notes:

** Actual volumes moved and invoiced.

[1] Volumes included in filing for May 1, 2008 approved tolls.

[2] The bisecting lines shown above (after Apr., 2008 and Feb., 2009) depict the months the tolls change.

**Application for Tolls
Schedule 22**

Toll Design Introduction

TMJ's Tariff is comprised of two components, Mainline and Gathering System charges. The Mainline charge covers the service for all facilities from and including the Burnaby booster pump to the Airport Terminal and excluding the Petro-Canada tie-in. The Gathering System charge covers all facilities upstream of the Burnaby booster pump, plus the Petro-Canada gathering line, the Petro-Canada tie-in and the facilities at Westridge Terminal. A schematic showing the two segments is provided below.

The Gathering System charge was split off from the total toll to accommodate a request made by Chevron, to extract jet fuel to buffer high quality refined products between TMPLP to Chevron through their existing crude oil delivery system. The facilities to enable delivery of jet fuel to TMPLP's Burnaby Terminal help prevent contamination of jet fuel by crude oil or refined products. The connection facilities were installed and paid for by TMPLP and do not affect the cost of shipping jet fuel.

The capital costs, including additions, retirements and depreciation expense, are taken from TMJ's fixed assets records and were assigned to the two service components. 2008 capital cost impacts have been assigned to the Mainline and Gathering System segment based on the description of the assets. Capital projects and existing assets that span both segments, such as the leak detection system, control system upgrades or the original pipeline are allocated based on the ratio of pipeline kilometers for the two segments.

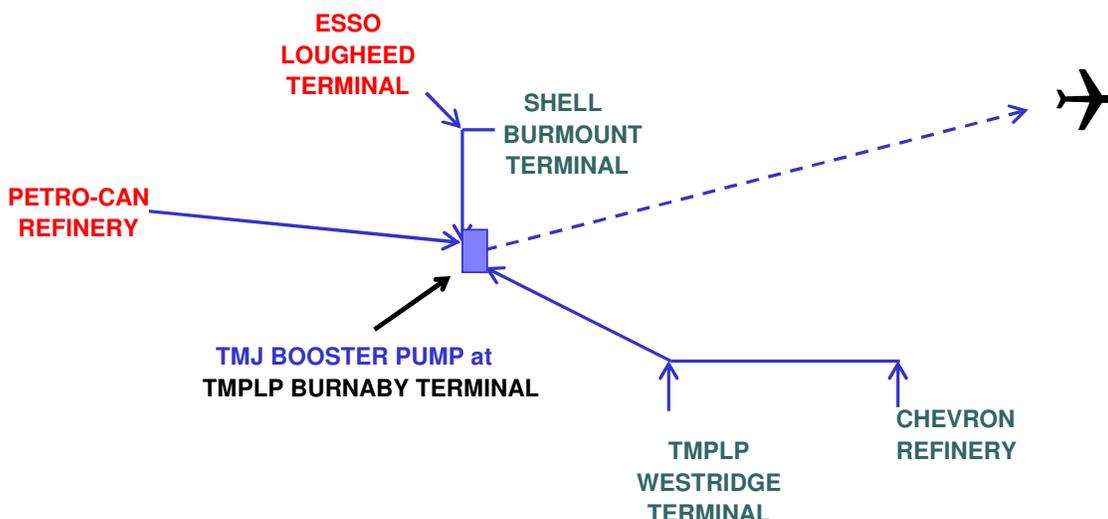
The Revenue Requirement for the Mainline and the Gathering System are then allocated based on the capital costs net of accumulated depreciation assigned to the two service components. At the close of 2008, the percentages for Mainline and Gathering System are 73.8% and 26.2% respectively. These percentages are then used for calculating the Proposed 2009 tolls.

Jet fuel volumes bound for the Vancouver Airport will be invoiced both the Mainline and Gathering System tolls. Jet fuel delivered from the Chevron refinery to TMPLP's Burnaby Terminal will be invoiced the Gathering System toll only.

Relevant Schematic Information:

Gathering System —————
Mainline - - - - -

	Km
Chevron Refinery to Burnaby Terminal	7.3
Westridge Terminal to Chevron-Burnaby Terminal line	1.3
Burnaby Terminal to Airport	28.0
Esso Lougheed to Shell Burmount *	0.9
Shell Burmount to Burnaby Terminal	1.2
Petro Can Refinery to Burnaby-Airport mainline	2.6
	41.3



Application for Tolls
Schedule 23

Calculation of Mainline Toll and Summary of Tolls
 Units as shown

	Comment	2009 Proposed	Sch No.
Toll Design Percentages			
Mainline Capital Assets		73.8%	
Gathering System Capital Assets	%	26.2%	
Revenue Requirement (\$000)			
RR		3,973	15
<i>Less:</i>			
Gathering System Annual Revenue Requirement (\$000)	= % * RR	(1,041)	
<i>(Revenue Requirement * Gathering System Capital Asset %)</i>			
Mainline Revenues collected between Jan. 1 and Feb. 28, 2009 (\$000)		<u>(451)</u>	note [1]
Annual Mainline Revenue Requirement (\$000)	PY RR	<u><u>2,481</u></u>	
Throughput			
Daily Volumes	m ³ /day	2,758	21
Annual Volumes	m ³	843,980	21
Mainline Toll and Summary of Tolls			
Mainline Toll (\$/m ³)	= PY RR / m ³	2.9398	
Plus: Gathering System Toll (\$/m ³)		<u>1.0294</u>	24
Total Toll (\$/m ³)		<u><u>3.9692</u></u>	
Note(s):			
[1] Calculation of Revenues collected for January to February 28:	2009 Interim Toll	Volumes	Revenues (\$000)
Mainline Revenues (Mainline Toll * Mainline Volumes)	2.9419	153,388	<u><u>451</u></u>

Application for Tolls**Schedule 24**

Calculation of Gathering System Toll

Units as shown

	<u>Comment</u>	<u>2009 Proposed</u>	<u>Sch No.</u>
Toll Design Percentages			
Mainline Capital Assets		73.8%	
Gathering System Capital Assets		26.2%	
Revenue Requirement (\$000)			
Less:			
Annual Mainline Revenue Requirement (\$000)		(2,481)	23
Revenues collected between Jan. 1 and Feb. 28, 2009 (\$000)		<u>(611)</u>	note [2]
Annual Gathering System Revenue Requirement (\$000)	PY RR	<u>881</u>	
Throughput ^[1]			
Daily Volumes	m ³ /day	2,796	21
Annual Volumes	m ³	855,710	21
Gathering System Toll			
Toll (\$/m ³)	= PY RR / m ³	<u>1.02940</u>	

Note(s):

[1] Includes shipments of jet fuel that are used as buffer material for Chevron Refined Product shipments.

[2] Calculation of Revenues collected for January to February 28:

	2009 Interim Toll	Volumes	Revenues (\$000)
Mainline Revenues (Mainline Toll * Mainline Volume)	2.9419	153,388	451
Gathering Facilities Volumes		<u>2,280</u>	
Gathering Facilities Revenues (Total Volumes * Gather Toll)	1.0289	<u>155,668</u>	<u>160</u>
Total Revenues for January 1 to February 28, 2009			<u><u>611</u></u>

Application for Tolls
Schedule 25
Proposed Tariff

TRANS MOUNTAIN (JET FUEL) INC. TURBINE FUEL TARIFF

THE RATES AND CHARGES IN THIS TARIFF ARE FOR THE
TRANSPORTATION OF TURBINE FUEL

Subject to the rules and regulations as defined herein:

FROM	TO	TOLL \$/m ³
ANNUAL TOLLS:		
Connected Refineries, Storage Facilities or Marketing Terminals in the Greater Vancouver Refinery Area	Carrier's Burnaby Terminal	1.0294
Carrier's Burnaby Terminal	Vancouver International Airport	2.9398

Issued by:

Jonathan Mackonka
Tariff Analyst, Regulatory Affairs
Kinder Morgan Canada Inc.
Suite 2700, 300 – 5th Avenue SW
Calgary, Alberta T2P 5J2
(403) 206-6922
Jonathan_Mackonka@kindermorgan.com

Accepted for filing:

Effective: March 01, 2009

Order No. _____

Per: _____

Secretary
B.C. UTILITIES COMMISSION

RULES AND REGULATIONS

5. DEFINITIONS

- (a) "carrier" means Trans Mountain (Jet Fuel) Inc.
- (b) "m³" means cubic metre at 15° Celsius.
- (c) "month" means calendar month.
- (d) "tender" means an offer by a shipper to carrier of a stated quantity of turbine fuel for transportation from a specified reception point or points to a specified destination point or points in accordance with these rules and regulations.
- (e) "turbine fuel" means aviation turbine fuels which fall within the definitions of treated turbine fuel or untreated turbine fuel.
- (f) "treated turbine fuel" means aviation turbine fuels conforming to the latest revisions of the Canadian General Standards Board, currently CAN/CGSB-3.23-2005 Aviation Turbine Fuel (Grades JET A and JET A-1).
- (g) "untreated turbine fuel" means aviation turbine fuels which meet the standards applicable to treated turbine fuel except for electrical conductivity.

10. DUTY OF CARRIER

Subject to any applicable government regulations carrier will accept tenders for transportation of turbine fuel in accordance with the terms of this Tariff if satisfactory evidence has been furnished by shipper that arrangements acceptable to carrier have been made to deliver such turbine fuel into carrier's pipe line system. Carrier will transport turbine fuel with reasonable diligence, considering the quantity of turbine fuel being transported, the distance of transportation, the safety of operation and other material factors. Carrier may refuse to accept turbine fuel for transportation unless satisfactory evidence is furnished that shipper or consignee has provided the necessary facilities for the prompt receiving of said turbine fuel at its destination. Carrier's terminal tanks are working tanks only and carrier does not furnish storage facilities.

15. TITLE

No turbine fuel will be accepted for transportation the title to which is in litigation or as to which a dispute of title exists or the title to which is encumbered by lien or charge of any kind, provided, however, that carrier may waive this requirement if satisfactory bond or other surety has been furnished by shipper or consignee.

20. SPECIFICATIONS AS TO QUALITY RECEIVED

No turbine fuel will be accepted for transportation except good merchantable turbine fuel which is readily transportable by carrier's facilities and no turbine fuel will be accepted the quality of which has been impaired through the character of storage in which it has been held, nor will turbine fuel be accepted which contains undissolved water, mineral acidity, sediment, or suspended matter or which has a nauseating or irritating odour. No substance of known dangerous toxicity under usual conditions of handling and use shall be present, except as permitted herein. No turbine fuel will be accepted unless, in the opinion of carrier, its characteristics are such that it will be readily transportable as a separate batch or in a commingled batch and will not materially affect the quality of other shipments or cause disadvantage to other shippers and/or carrier. No turbine fuel will be accepted for transportation until shipper has delivered to carrier a Certificate of Quality in a form satisfactory to carrier.

24. CONDUCTIVITY ADDITIVE AND CLAY FILTERING

Carrier's airport injection and filtering facilities are utilized as required to ensure that only treated turbine fuel is delivered by carrier in accordance with Rules 25 and 35. Carrier will operate its injection and filtering facilities, as requested by shipper, and will exercise reasonable care in so doing however, shipper is solely responsible for determining the steps to be taken to upgrade its untreated turbine fuel including the selection and supply of additives, the determination of volumes to be injected and the initiation and duration of filtering.

25. RESPONSIBILITY FOR QUALITY DELIVERED

Carrier will use reasonable efforts to deliver treated turbine fuel of a grade and density equivalent to that accepted from shipper, however, carrier shall be under no obligation to deliver the identical turbine fuel but may make delivery out of its common stock. Shipping specifications of Jet A-1 shall be such as to permit the blending of Jet A into Jet A-1 to the limit of 1% of Jet A-1 delivered to consignee. Within these limits revaluations deemed appropriate by reason of difference in grade and quality that may occur between receipt and delivery of turbine fuel by carrier shall be between and for the account of the shippers and consignees. Carrier shall have no responsibility in or for such revaluations or settlements other than to furnish data on quantities and densities of the turbine fuel so received and delivered.

30. BATCHING INFORMATION

Turbine fuel will be accepted for transportation in accordance with batching schedules to be issued monthly by carrier. Information for these batching schedules is to be supplied to carrier by shipper and/or consignee on or before the 21st day of the month preceding the month during which the turbine fuel is to be transported. Batches of turbine fuel will be transported in minimum quantities of not less than 800 m³ except that carrier may move smaller batches when, in the opinion of carrier, such movement is practical. The quantity delivered at destination must be a minimum of 800 m³ unless, in the opinion of carrier, the delivery of smaller quantities is practical. If total volume tendered for shipment during any one month exceeds the pipeline delivery capacity for such month, turbine fuel will be transported in such quantities and at such times to the limit of capacity so as to avoid discrimination among shippers.

35. DELIVERIES

At Vancouver International Airport, turbine fuel will be delivered into carrier's terminal tanks. On completion of delivery and any necessary additive injection or filtering, carrier will isolate tank or tanks utilized and will determine quality of treated turbine fuel delivered. Immediately tankage is so isolated, custody of treated turbine fuel therein is transferred from carrier to consignee. Deliveries of turbine fuel at carrier's Burnaby Terminal will be made by direct injection into the petroleum pipeline of carrier's parent, Trans Mountain Pipeline, Inc. as general partner for Trans Mountain Pipeline L.P.

40. GAUGING AND VOLUME CORRECTIONS

Prior to its acceptance by carrier and following its delivery, turbine fuel will be measured by representatives of carrier. At the option of carrier turbine fuel may be measured by metering or gauging. If tank gauges are used, quantities will be determined from regularly compiled 100% tank tables. Turbine fuel of required specification will be received and delivered with volume corrected from observed temperature to 15° Celsius.

45. DOCUMENTS

Turbine fuel received or delivered in each instance shall be evidenced by tickets showing either the metered total or opening and closing tank gauges, temperature and any other data essential to the determination of quantity. Shipper may have a representative present at the gauging, metering, and testing.

50. DESTINATION

Upon 24 hours notice by carrier, shipper or consignee shall accept and remove its shipment from carrier's delivery facilities. If shipment is not being removed in a reasonable manner after expiration of the 24 hours notice, a demurrage charge of \$0.025 per m³ per day or part thereof shall accrue on all turbine fuel not removed.

In the event shipper is unable to upgrade its untreated turbine fuel so that it will meet the standards of treated turbine fuel, shipper shall take immediate steps to remove the untreated turbine fuel in order to provide space in carrier's terminal tanks for the receipt of succeeding tenders, and any untreated turbine fuel not removed three days after notice is given may be disposed of by carrier at the expense of the responsible party or parties.

55. PAYMENT OF TARIFF CHARGES AND LIEN FOR UNPAID CHARGES

Shipper or consignee shall pay all applicable transportation charges, cargo rates, airport charges and other lawful charges accruing on turbine fuel delivered to and accepted by carrier for shipment, and, if required, shall pay the same before delivery at destination. Carrier shall have a lien on all turbine fuel in its possession belonging to shipper or consignee to secure the payment of any and all unpaid transportation or other lawful charges that are due to carrier, and may withhold such turbine fuel from delivery until all unpaid charges have been paid. If such charges remain unpaid 14 days after notice and demand therefore, or even in the absence of unpaid charges when there shall be a failure to take turbine fuel within 14 days after the expiration of notice of arrival at destination as provided in Rule 50, carrier shall have the right directly, or through an agent, to sell such turbine fuel at public auction, at carrier's office in Calgary, Alberta, Canada, on any day not a legal holiday, after three consecutive days' publication of notice of such sale in a daily newspaper of general circulation published in that city, stating the time and place of sale, and the quantity and location of turbine fuel to be sold. At such sale carrier shall have the right to bid and, if the highest bidder, to become the purchaser. From the proceeds of such sale carrier will pay itself the transportation and all other lawful charges, including reasonable storage charges pending sale and expenses incident to said sale, and the balance remaining, if any, shall be held for whomsoever may be lawfully entitled thereto.

60. LIABILITY OF CARRIER

Carrier while in possession of turbine fuel, shall not be liable for any loss thereof, damage thereto or delay caused by fire, storm, flood, epidemics, acts of God, riots, insurrection, rebellion, sabotage, strikes, labour disturbances, shortage of labour or breakdown of transportation or storage facilities, war or acts of the Queen's enemies, or from quarantine, or authority of law or from any order, requisition, interest or necessity of the Government of Canada or any province thereof, default of the owner, shipper or consignee, or from any cause whatsoever, whether enumerated herein or not, except by its own direct negligence or the negligence of its servants or agents. In case of the loss of turbine fuel from any cause other than the direct negligence of carrier, its servants or agents, shipper shall bear a loss in such proportion as the amount of its shipment, already delivered to carrier, bears to all the turbine fuel then in the custody of carrier, and shipper shall be entitled to have delivered only such portion of its shipment as may remain after deduction of its due proportion of such loss.

65. CLAIMS, SUITS AND TIME FOR FILING

As a condition precedent to recovery, claims for loss, damage, or delay in connection with the shipment of turbine fuel tendered for shipment under the terms of this tariff must be filed in writing with carrier within one month after delivery of the turbine fuel, or, in the case of failure to make delivery, then within three months after a reasonable time for delivery has elapsed; and suits arising out of such claims must be instituted against carrier within six months from the day when notice is given in writing by carrier to claimant that carrier has disallowed the claim or any part or parts thereof specified in the notice. In causing turbine fuel to be transported under this tariff, shipper and consignee agree to be bound by the provisions of this Rule and waive any rights which they or either of them might otherwise have, at common law or otherwise, to make a claim after the expiration of the said period of one month or the said period of three months as the case may be or to bring an action after the expiration of the said period of six months.

70. APPLICATION OF RATES AND CHARGES

Turbine fuel accepted for transportation shall be subject to the rates and charges in effect on the date of receipt thereof by carrier, irrespective of the date of tender. Such rates and charges will be assessed only on the net quantities of such turbine fuel delivered.

75. LICENCE

No turbine fuel will be accepted for transportation hereunder from any shipper conducting the business of selling turbine fuel and other aviation fuel and oil products at Vancouver International Airport until such shipper has provided evidence satisfactory to carrier that it has received the necessary authority to conduct such business from the Vancouver International Airport Authority and/or the Minister of Transport pursuant to the Public Lands Leasing and Licensing Regulations.

Application for Tolls

Appendix 1

Terminal Negative Salvage

TMJ continues to recommend the inclusion of a provision for abandonment costs in its tolls. In preparation of the 2009 toll filing, TMJ reviewed and observed that (1) the customer base over the years has declined from 5 major shippers to 2 major shippers with 1 minor or intermittent shipper, (2) pipeline volumes have declined from peak months being at or near to capacity to peak months now being within capacity of the pipeline and, (3) the net overall result of cost pressures to maintain the pipeline in a high incident, high risk locale continue to push the tolls higher over time which may encourage shippers to seek alternative transportation methods.

TMJ's Revenue Requirement is developed using the NEB methodology and to a large extent the BCUC methodology for setting tolls, that being the rate base / cost of service method. As TMJ has administered this methodology to be similar to that used for TMPLP, a close affiliate to TMJ, TMJ can definitely state that there is no provision for collection of terminal negative salvage within the tolls, neither in the return on or of capital or in any of the cost elements. As such and based on the past 10 years of operations, TMJ believes that it is prudent and in the best interest of the pipeline, the public and the municipalities within which TMJ operates to continue to pursue the collection of abandonment costs (or terminal negative salvage).

In 2008, the NEB initiated a proceeding (RH-2-2008) to assess the financial aspects of pipeline abandonment through a hearing process, identified as Stream 3 in its Land Management Consultation Initiative ("LMCI"). That process will proceed to hearing in 2009 with the hearing date set for January 20, 2009. The NEB specified expected outcomes related to abandonment costs as follows:

- a. Develop a set of principles to guide future decisions regarding financial matters related to pipeline abandonment;
- b. Identify preliminary mechanisms to set aside funds for abandonment costs;
- c. Identify technical assumptions to be used to estimate abandonment costs; and
- d. Develop an action plan to move forward on remaining financial issues including issues unique to each pipeline.

KMC is an active participant in this proceeding through the submission of evidence, responses to information requests and ongoing dialogue with industry participants. KMC is aware that this proceeding is not concluded, however, there is reasonable justification to consider the collection of abandonment costs when the parties agree that the following criteria provides evidence that the pipeline should be in collection mode:

- a. Landowners should be held harmless from the cost of pipeline abandonment;
- b. The cost of abandonment is a cost of operating the pipeline;
- c. Line of site is considered relatively short and is not a determining factor in the collection of an abandonment fund;
- d. Government should not be held responsible for cost of pipeline abandonment;
- e. Existing regulations enable the regulator to permit collection of abandonment costs, regardless of the mechanics for holding the funds.

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Appendix 1

Terminal Negative Salvage

The current proceeding initiated by the NEB for Stream 3 matters is somewhat encumbered by the process, as it requires the protocols of a formal hearing process be followed. TMJ understands that interested parties are reasonably aligned but further details require development which requires time. TMJ is aware that this is a federal proceeding and will address federal regulation, however, the issues are equally applicable to a provincially regulated pipeline. An added difficulty in the NEB proceeding is to have all parties agree given the competitive nature of gas and oil transportation. TMJ at this point is not subject to this same type of "regulated" competition but rather other forms of non-regulated competition.

KMC understands the reluctance to establish collection of the abandonment fund prior to resolution of the mechanics of holding the funds, trust or no trust and the tax treatment. While these two items are important, they are not within the control of the pipelines. The Federal Government is ultimately the arbiter of the treatment of the funds and the tax exempt status. Pipeline companies and other interested parties can advocate on behalf of favourable treatment for the funds, but it must be in the public interest to set up a tax exempt trust or "RRSP" type fund for pipelines. This will only be resolved through due government process.

In the short term, TMJ does not believe that it is prudent to wait for the federal government to resolve these issues and proposes that collection of an abandonment fund commence in the near future by using the following criteria:

- a. Collection period to be the same period as that the agreed to for depreciation life;
- b. The funds will be retained in TMJ until such time as the mechanics of a trust fund are part of regulation, at which time, the funds collected and interest earned will be placed into a pipeline trust fund subject to the allowed tax treatment;
- c. The funds will not form any part of rate base, either as a credit or debit;
- d. The funds will be deemed to earn a rate applicable to the average GIC or government bond rate that would be permitted for qualified environmental funds (TMJ understands that for the mining industry this would approximate the allowed investment strategy);
- e. The funds will not be tax exempt until such time as appropriate legislation is passed by the Federal Government, therefore, the fund will accumulate on an after tax basis;
- f. The provision and set aside of funds will be calculated using the previously provided amounts of \$3.0M. TMJ will undertake to refine this number over 2009;
- g. The abandonment fund, target costs, fund earnings rate and assumptions will be reviewed and adjusted periodically, similar to a pension fund, to ensure that the target cost will equal the "Close Funds" as noted below; and

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h. The estimated amount included would be calculated as follows:

Estimated Funds required for TNS (\$000)		3,025.00
Estimated annual collection (\$000)	90.21	
Estimated Funds TNS collected (\$000)		3,024.99
Shortfall in collection		<u>0.01</u>

Period	Payment	Open Funds	Earnings	Taxes	Close Funds
			4.0%	30.0%	
1	90.21	-	3.61	(28.14)	65.67
2	90.21	65.67	6.24	(28.93)	133.18
3	90.21	133.18	8.94	(29.74)	202.58
4	90.21	202.58	11.71	(30.58)	273.92
5	90.21	273.92	14.57	(31.43)	347.26
6	90.21	347.26	17.50	(32.31)	422.65
7	90.21	422.65	20.51	(33.22)	500.16
8	90.21	500.16	23.61	(34.15)	579.83
9	90.21	579.83	26.80	(35.10)	661.74
10	90.21	661.74	30.08	(36.09)	745.94
11	90.21	745.94	33.45	(37.10)	832.49
12	90.21	832.49	36.91	(38.13)	921.47
13	90.21	921.47	40.47	(39.20)	1,012.94
14	90.21	1,012.94	44.13	(40.30)	1,106.97
15	90.21	1,106.97	47.89	(41.43)	1,203.64
16	90.21	1,203.64	51.75	(42.59)	1,303.01
17	90.21	1,303.01	55.73	(43.78)	1,405.17
18	90.21	1,405.17	59.81	(45.01)	1,510.18
19	90.21	1,510.18	64.02	(46.27)	1,618.14
20	90.21	1,618.14	68.33	(47.56)	1,729.11
21	90.21	1,729.11	72.77	(48.89)	1,843.20
22	90.21	1,843.20	77.34	(50.26)	1,960.48
23	90.21	1,960.48	82.03	(51.67)	2,081.04
24	90.21	2,081.04	86.85	(53.12)	2,204.98
25	90.21	2,204.98	91.81	(54.60)	2,332.39
26	90.21	2,332.39	96.90	(56.13)	2,463.37
27	90.21	2,463.37	102.14	(57.70)	2,598.01
28	90.21	2,598.01	107.53	(59.32)	2,736.43
29	90.21	2,736.43	113.07	(60.98)	2,878.72
30	90.21	2,878.72	118.76	(62.69)	3,024.99