



Canada Energy
Regulator

Régie de l'énergie
du Canada

Canada Energy Regulator Reasons for Decision

TransCanada Keystone Pipeline GP Ltd.
RH-005-2020

Canada Energy Regulator Reasons for Decision

In the Matter of

TransCanada Keystone Pipeline GP Ltd.

Complaints by Phillips 66 Canada Ltd. and Cenovus Energy Inc. regarding Keystone's proposed 2020 and 2021 tolls (Phase 1) and Keystone's proposed 2022 tolls (Phase 2, if required)

Phase 1

RH-005-2020
December 2022

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TransCanada Keystone Pipeline
GP Ltd. RH-005-2020

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TransCanada Keystone Pipeline
GP Ltd. RH-005-2020

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Glossary of Terms and Abbreviations

CER	Canada Energy Regulator
CER Act	<i>Canadian Energy Regulator Act</i> , S.C. 2019, c. 28, s. 10
Cenovus	Cenovus Energy Inc.
Commission	The Commission of the Canada Energy Regulator, established pursuant to the <i>Canadian Energy Regulator Act</i>
Complainants	Cenovus and Phillips 66 Canada Ltd.
Complaint	The complaint filed regarding TransCanada Keystone Pipeline GP Ltd.'s 2020 Variable Toll, and amended to include 2021 and 2022 Variable Tolls.
Cushing Expansion	The Keystone project approved in the OH-1-2008 Reasons for Decision that increased the nominal capacity of the Keystone System by the installation of additional pumping facilities and changes to the facilities approved in the OH-1-2007 proceeding and Certificate OC-51.
DRA	Drag reducing agent
evidence	Reports, statements, photographs, and other material or information, as well as any cross-examination that participants submit as part of the record to support their position.
FERC	United States Federal Energy Regulatory Commission
Fixed Tolls	The fixed portion of Keystone's tolls that is levelized over the term the transportation service agreements.
Husky	Husky Oil Operations Limited
IR	Information request
Keystone	TransCanada Keystone Pipeline GP Ltd., as general partner on behalf of TransCanada Keystone Pipeline Limited Partnership
Keystone System	A pipeline system that provides transportation of crude oil within Canada from Hardisty, Alberta to the international boundary near Haskett, Manitoba for ultimate delivery to the United States at Wood River and Patoka, Illinois; Cushing, Oklahoma; Port Arthur and Houston, Texas.
Keystone XL	The Keystone XL Pipeline Project which would have been an addition to the Keystone System, which TC Energy terminated in June 2021.
CER Tariff No. 44	The tariff filed on 29 November 2019 by Keystone to amend the toll schedule for the CER Tariff for 2020.

CER Tariff No. 50	The tariff filed on 1 December 2020 by Keystone to amend the toll schedule for the CER Tariff for 2021.
CER Tariff No. 54	The tariff filed on 1 December 2021 by Keystone to amend the toll schedule for the CER Tariff for 2022.
List of Issues	See Appendix I.
MFN	Most Favoured Nation
NEB	National Energy Board
NEB Act	<i>National Energy Board Act, R.S.C., 1985, c. N-7, Repealed, 2019, c.28, s.44</i>
Non-NRA Capital	Capitalized costs that Keystone included in Variable Tolls, which were not treated as non-routine adjustments.
NRA	non-routine adjustment
NRA Capital	Capitalized costs that Keystone included in Variable Tolls, which were treated as non-routine adjustments.
OM&A	Operating, maintenance and administration
Original TSAs	The Canadian Patoka Transportation Service Agreement and the Canadian Cushing Transportation Service Agreement. The term “Original TSAs” is used in the overview and introductory sections of this Decision, as well as in the “Commission analysis and findings” sections.
PCVs	Pressure control valves
Phillips Canada	Phillips 66 Canada Ltd.
PHMSA	United States Department of Transportation – Pipeline and Hazardous Materials Safety Administration
Rules	The <i>National Energy Board Rules of Practice and Procedure, 1995</i> provides guidance on the CER’s procedures. The Rules can be accessed on the CER’s website.
Sattva	<i>Sattva Capital Corp. v. Creston Moly Corp.</i> , 2014 SCC 53
TSA	Transportation Service Agreement
Variable Tolls	The variable portion of Keystone’s tolls that flow-through operating, maintenance and administration costs and expenses.

Symbols, Formulas and Units

\$	dollars (CAD)
%	per cent
bpd	barrels per day
cSt	centistokes

1 Tariff filings, complaints, disposition and summary

1.1 Tariff filings and complaints

On 29 November 2019, TransCanada Keystone Pipeline GP Ltd. (**Keystone**) filed Canada Energy Regulator (**CER**) Tariff No. 44 with the CER to amend the toll schedule for the tariff for 2020 on the Keystone Canada Pipeline System (**Keystone System**). On 20 December 2019, Phillips 66 Canada Ltd. (**Phillips Canada**) filed a complaint regarding CER Tariff No. 44 (**Complaint**) which included concerns about the variable toll component of the tariff (**Variable Tolls**).

Phillips Canada requested that the Commission of the Canada Energy Regulator (**Commission**):

- a) establish a public proceeding, pursuant to sections 32, 226, 230, and 231 of the *Canadian Energy Regulator Act* (**CER Act**), to examine and consider whether the rates or tolls proposed to be charged through CER Tariff No. 44 are just and reasonable;
- b) immediately order the suspension of CER Tariff No. 44, pursuant to section 234 of the CER Act, pending the disposition of the public proceeding;
- c) immediately order, pursuant to subsection 76(4) and section 226 of the CER Act, that the then-current Keystone Canada tariff, CER Tariff No. 34, continue to have effect, on an interim basis, pending the disposition of the public proceeding; and
- d) such further and other relief as the Commission may consider appropriate.

The regulatory process commenced in December 2019 and was suspended on 17 January 2020 after the Commission received a request for a suspension to allow parties to enter into commercial settlement discussions. The regulatory process resumed in the latter half of 2020.

On 29 December 2020, Phillips Canada amended and updated the Complaint to include reference to CER Tariff No. 50, filed by Keystone on 1 December 2020. Husky Oil Operations Limited (**Husky**) joined the proceeding as a co-complainant. On 14 January 2022, Phillips Canada and Cenovus Energy Inc. (**Cenovus**) (formerly Husky)¹ further amended and updated the Complaint to include reference to CER Tariff No. 54 filed (containing proposed 2022 tolls) by Keystone on 1 December 2021.

The hearing process has two phases. The complaints about CER Tariff Nos. 44 and 50 were considered in Phase 1 and those complaints are the subject of these Reasons for Decision. The complaint about CER Tariff No. 54 will be considered, if further process is needed, in Phase 2.

¹ On December 30, 2021, Husky Oil Operations Limited amalgamated with Cenovus Energy Inc., with the amalgamated entity using the Cenovus name. Cenovus participated in the proceeding as the corporate successor of Husky.

1.2 Overview of decision

Cenovus and Phillips Canada (the **Complainants**) took issue with certain costs that Keystone included in its Variable Tolls, notably drag reducing agent (**DRA**) expense and, generally, any capital costs. The Complainants were of the view that the inclusion of those costs in the Variable Tolls is inconsistent with the terms of the applicable Transportation Service Agreements (**TSAs**), violates the CER Act and Commission precedent, and leads to committed tolls being unjust and unreasonable.

The Canadian Patoka and Canadian Cushing TSAs (collectively, the **Original TSAs**) set out the tolling methodology that was agreed to between committed shippers and Keystone and approved by the National Energy Board (**NEB**) in the OH-1-2007 and OH-1-2008 Reasons for Decisions. **Chapter 2** provides an overview of Keystone's tolling methodology and the Original TSAs, and summarizes the hearing process. **Chapter 3** outlines the legal framework that applies and the modern principles of contractual interpretation.

The Commission finds that, as described below, proper interpretation of the Original TSAs requires Keystone to remove certain costs from its 2020 and 2021 applied-for tolls. Further, the Commission finds that the evidence does not demonstrate that a departure from the Original TSAs is warranted in this case and the Commission finds that the tolls resulting from the proper interpretation of these TSAs will be just and reasonable.

Chapter 4 discusses whether the Original TSAs allow Keystone to recover DRA expenses from committed shippers in the 2020 and 2021 Variable Tolls. DRAs are chemicals that can be injected into a pipeline's product stream and can be used to increase the volumes of oil that can be transported on a pipeline system. The Commission finds that DRA commodity expense (i.e., the costs of the DRA chemical), in certain uses, can be considered as a cost of expanding or increasing the Keystone System's nominal capacity. Under the Original TSAs, the Commission finds that not all DRA commodity expense can be recovered in the Variable Tolls, specifically where DRA has been used in 2020 and 2021 to increase nominal capacity to provide for the approximately 590,000 barrels per day (**bpd**) of nominal capacity that was anticipated from the Cushing Expansion. Rather, the costs of expanding the Keystone System's capacity properly fall within the Fixed Toll component.

In addition, the Commission finds that certain other DRA expenses are recoverable in the Variable Toll component, specifically in instances where DRA has been used to mitigate the capacity impacts of pressure restrictions, maintenance activities, and unplanned outages. The costs of DRA commodity used in those instances are properly categorized as operating expenses, and therefore fall within the operating, maintenance, and administration (**OM&A**) costs allowed to be recovered in the Variable Tolls.

Chapter 5 discusses whether the Original TSAs allow Keystone to recover any capital costs in the Variable Tolls, such as maintenance capital. The Commission finds that the Original TSAs allow flow through of OM&A capital costs in the Variable Toll, and that the language in the TSAs is clear in this regard. The Commission assessed whether two specific groups of capital costs were properly included within Variable Tolls. The Commission finds that the capital-related costs associated with the pump stations improvement project are appropriately included within Variable Tolls, while those for the upgraded pressure control valves (**PCVs**) program are not. The capital-related costs of the upgraded PCVs properly fit within the initial development, construction and acquisition costs that are within the scope of the Fixed Toll under the Original TSAs.

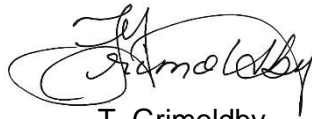
Chapter 6 discusses other issues, including a rate of return being applied to non-routine adjustments (**NRA**), a rate of return being applied to capitalized costs that Keystone included in Variable Tolls but did not classify as an NRA (**Non-NRA Capital**), the “most favoured nation” (**MFN**) provision, and a minor cost discrepancy. The Commission finds that carrying charges on NRA amounts (whether expense or capital-related) are recoverable in the Variable Toll, but that the carrying charges on Non-NRA Capital are not. The Commission finds that the MFN provision should be applied based upon the as-charged interim Canadian tolls in 2020 and 2021, with no adjustments for either finalized or final tolls. The Commission also finds that the minor discrepancies identified by Dr. Arthur resulted from an inadvertent omission by Keystone, and that the related costs Keystone included in the Variable Tolls were correct.

As a result of the Commission’s decisions, Keystone must recalculate and refile 2020 and 2021 tolls to remove certain costs from the Variable Tolls, as outlined in Order TO-005-2022. In **Chapter 7**, the Commission outlines the direction to Keystone in Order TO-005-2022 and addresses the next steps. The costs that must be removed are expenses of DRA used to provide capacity due to higher flowing viscosities than assumed in the design of the system, expenses of DRA used to address the lower pump station discharge pressures, capital-related costs associated with the upgraded PCVs, and carrying charges associated with Non-NRA Capital. The order applies to tolls as they pertain to the Original TSAs, and there was insufficient evidence for the Commission to make findings regarding subsequent TSAs. The Commission expects Keystone to consider how these directions may apply to other TSAs.

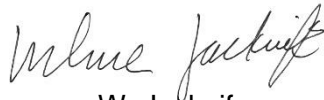
In order to remove certain DRA expenses from the Variable Tolls, Keystone will need to allocate DRA expense to different categories of use. If Keystone is unable to achieve unanimous support from its shippers for the DRA expense allocation methodology to be used, it must include the detailed methodology in its toll filing with the CER and demonstrate clearly how DRA expense amounts were specifically allocated to different uses.

Keystone must take appropriate steps to ensure the long-term availability of uncommitted capacity on the Keystone System, consistent with Keystone's common carriage obligations and previous regulatory decisions. In order to help provide transparency in this regard, Keystone is directed to report to the CER the uncommitted volumes that have been transported on the Keystone System as part of all Guide BB – Financial Surveillance Reports starting Q1 2023.

Order TO-005-2022 gives effect to these decisions.



T. Grimoldby
Presiding Commissioner



W. Jacknife
Commissioner



S. Luciuk
Commissioner

Calgary, Alberta
December 2022

2 Background

2.1 Procedural summary

The Commission received a complaint about each of Keystone's CER Tariff Nos. 44, 50, and 54 which proposed to amend the Toll Schedule for the Keystone Canada Tariff for 2020, 2021, and 2022, respectively, on the Keystone System. The Commission considered the complaints about CER Tariff Nos. 44 and 50 in Phase 1 of the proceeding. The Commission will consider the complaint about CER Tariff No. 54, if further process is needed, in Phase 2.

Complaint about CER Tariff No. 44

On 29 November 2019, Keystone filed CER Tariff No. 44 to amend the toll schedule for the Keystone Canada tariff for 2020 on the Keystone System. Amongst other revisions, the proposed tolls would increase the Variable Tolls by approximately 22.5 per cent in Canada.

On 20 December 2019, Phillips Canada filed a complaint regarding CER Tariff No. 44 which included concerns about Keystone's 2020 Variable Tolls. The Commission received letters of support for the complaint from Husky dated 20 December 2019 and Coffeyville Resources Refining & Marketing, LLC dated 23 December 2019.²

Phillips Canada requested that CER Tariff No. 34 continue to have effect, on an interim basis, pending disposition of its complaint regarding CER Tariff No. 44. The Commission made existing tolls on the Keystone System, as set out in NEB Tariff No. 34, interim tolls on the Keystone System effective 1 January 2020.

On 17 January 2020, the Commission suspended the regulatory process associated with the CER Tariff No. 44 complaint, in response to Keystone's 13 January 2020 request for a suspension to allow parties to enter into commercial settlement discussions. The Commission's decision to suspend the regulatory process was made without prejudice to the right of any party to renew the complaint or raise any other concerns with the Commission.

The regulatory process resumed in the latter part of 2020. The Commission resumed the comment process that had been suspended. After hearing from participants, the Commission decided not to dismiss the complaint and decided to establish a proceeding. On 16 December 2020, the Commission issued Hearing Order RH-005-2020 ([C10464](#)) which set out the process steps and timetable of events to consider Phillips Canada's complaint regarding CER Tariff No. 44.

Amended and Updated Complaint to include CER Tariff No. 50

On 1 December 2020, Keystone filed CER Tariff No. 50 to amend the toll schedule for the Keystone Canada tariff for 2021. Keystone requested that CER Tariff No. 50 be set as interim pending the disposition of Phillips Canada's complaint about CER Tariff No. 44. The Commission established a process to receive comments from shippers and potential shippers. On 18 December 2020, the Commission denied Keystone's request regarding interim tolls.

² On 3 June 2022, Coffeyville Resources Refining & Marketing, LLC filed a letter advising the Commission of its intention to no longer participate as an intervenor in the proceeding.

The Commission ruled that tolls approved under Order TOI-001-2019 (CER Tariff No. 34) would remain in effect on an interim basis, pending a resolution of Phillips Canada's complaint about CER Tariff No. 44.

On 29 December 2020, Phillips Canada amended and updated the Complaint (about CER Tariff No. 44) to include reference to CER Tariff No. 50. Husky joined the proceeding as a co-complainant. Phillips Canada and Husky stated they had the same concerns regarding the 2021 proposed tolls in CER Tariff No. 50 that they previously expressed in the complaint about CER Tariff No. 44. Phillips Canada and Husky requested that the 2021 proposed tolls be considered in the same proceeding as the 2020 proposed tolls.

The Commission combined the consideration of the issues regarding CER Tariff No. 50 with consideration of the issues regarding CER Tariff No. 44. On 21 January 2021, the Commission amended Hearing Order RH-005-2022 to include the 2021 proposed tolls under CER Tariff No. 50 in AO-001-RH-005-2020 ([C11065](#)).

Amendments to process to include CER Tariff No. 54

On 1 December 2021, Keystone filed CER Tariff No. 54 to amend the toll schedule for the Keystone Canada tariff for 2022. Keystone requested that the Commission allow CER Tariff No. 54 to become effective on 1 January 2022 on an interim basis. The Commission established a process to receive comments from shippers and potential shippers and reply from Keystone. On 28 January 2022, the Commission denied Keystone's request regarding interim tolls.

On 14 January 2022 ([C17217](#)), Phillips Canada and Cenovus Energy Inc. (formerly Husky) further amended and updated the Complaint (about CER Tariff Nos. 44 and 50) to include reference to CER Tariff No. 54. Phillips Canada and Cenovus proposed to include in the AO-001-RH-005-2020 proceeding their concerns related to the 2022 proposed tolls in CER Tariff No. 54. Phillips Canada and Cenovus suggested a two-phase hearing process.

On 8 April 2022, the Commission issued Ruling No. 17 ([C18499](#)) which established a two-phase hearing process. The Commission would continue to consider complaints regarding CER Tariff Nos. 44 and 50 in accordance with the steps in the AO-001-RH-005-2020 hearing process as Phase 1 of the hearing. After Phase 1, the Commission would assess the need for further process to address the complaint regarding 2022 proposed tolls in CER Tariff No. 54. Any further process would occur in Phase 2.

The AO-001-RH-005-2020 hearing process

The hearing process included an opportunity for parties to file written evidence and to ask written information requests (**IR**) of other participants. The Commission also asked written IRs of parties who filed written evidence. Keystone filed written reply evidence and parties had an opportunity to ask IRs about that reply evidence. Parties then had an opportunity to file written final argument and provide optional oral summary argument and oral reply.

2.2 Overview of tolling methodology and TSAs

This section provides an overview of Keystone's tolling methodology and TSAs relevant to the complaints about CER Tariff Nos. 44 and 50. Both the Canadian Patoka TSA³ and the Canadian Cushing TSA⁴ were filed on the record of this proceeding and discussed in detail by participants. These TSAs are referred to collectively as the Original TSAs in the overview and introductory sections of this Decision, as well as in the "Commission analysis and findings" sections.

Keystone provides service to shippers pursuant to the tolling methodology approved by the NEB in its decisions about the original Keystone project and the Cushing expansion project: respectively, OH-1-2007⁵ and OH-1-2008⁶. Keystone charges tolls for two types of transportation services: committed and uncommitted.

Committed shippers are required to pay the committed toll pursuant to the Original TSAs. The committed toll is divided into two components: the Fixed Toll and the Variable Toll. The committed toll is not based on a traditional cost of service methodology. Instead, Keystone and its shippers negotiated a tolling methodology that shares risks through the Fixed Toll and Variable Toll components.

Uncommitted tolls are equal to a maximum of 120 per cent of the applicable committed toll⁷, with Keystone having the ability to file discounted uncommitted tolls if market conditions render such tolls uncompetitive. If Keystone discounts uncommitted tolls below a certain threshold, the Original TSAs stipulate that committed tolls would be lowered if required in order to keep them below the uncommitted tolls.

The Fixed Toll component of the committed toll is paid on a take-or-pay basis. It is levelized during the term of the Original TSAs and was subject to capital variance adjustments once the final original Keystone and Cushing expansion project costs were determined. In order to minimize the impact of project capital cost changes, Keystone assumed 50 per cent of the capital variance.

³ TransCanada Keystone, Evidence - Pro-forma Canadian Patoka TSA, Filing ID [C11126-1](#) (22 January 2021) at PDF 85-107 of 135 [Keystone Evidence].

⁴ Phillips Canada and Cenovus, Written Evidence of Dr. Arthur - Attachment 7, Canadian Cushing TSA, Filing ID [C18422-4](#) (4 April 2022) at PDF 69-91 of 149 [Dr. Arthur Attach 7].

⁵ See NEB, *Reasons for Decision - TransCanada Keystone OH-1-2007*, Filing ID [A16511-1](#) (September 2007) at PDF 27-33 [OH-1-2007].

⁶ See NEB, *Reasons for Decision - TransCanada Keystone OH-1-2008*, Filing ID [A19308-1](#) (July 2008) at PDF 24-29 [OH-1-2008].

⁷ For Wood River/Patoka delivery points, the maximum Uncommitted Toll is equal to the **five** year Committed Toll to Patoka plus a 20 per cent premium. For Cushing, Port Arthur and Houston delivery points, the maximum Uncommitted Toll is equal to the **ten** year Committed Toll to Cushing plus a 20 percent premium.

The Variable Toll component of the committed toll is designed to recover OM&A costs and expenses. The Variable Toll is defined in the Original TSAs as:

$$\text{Variable Toll} = \frac{\text{Operating, Maintenance and Administration Costs for that Month}}{\text{Weighted Barrel Kilometres for that Month}}$$

The Variable Toll in respect of heavy crude is calculated as above, and the Variable Toll in respect of light crude is calculated by multiplying the equation by 0.70. The Variable Toll is adjusted annually and consists of two stages:

- 1) The first stage consists of Keystone estimating the OM&A costs for the upcoming year and allocating such costs over the estimated volumes to determine the Variable Toll for that year.
- 2) The second stage occurs after the end of the year where Keystone determines the actual OM&A costs incurred. These actual costs are allocated over the actual volumes tendered by all Term and Non-Term Shippers to determine the finalized Variable Toll.⁸ Keystone pays or credits the variance between the estimated Variable Toll and the finalized Variable Toll to Term Shippers and includes an interest carrying charge on the outstanding balance. The finalized variable toll adjustment that Keystone pays or credits to Term Shippers is not filed with the CER.

⁸ In this hearing, there were two distinct ways that the word “final” arose in connection with tolls. First, the Original TSAs refer to “final Variable Tolls” as distinct from “estimated Variable Tolls”; in this context, once a year’s actuals are available early in the following year, the estimated Variable Tolls from the prior year get updated to come up with the “final Variable Tolls” for that prior year. Second, there is the normal distinction in respect of tolls under the CER Act, which is that “final” tolls are those that are not “interim”. In order to avoid confusion, in this Decision, the Commission uses the word “finalized” when referring to the former, and “final” when referring to the latter. That is, “finalized Variable Tolls” will be those in the Original TSAs that are distinct from “estimated Variable Tolls”, and “final tolls” will be those that are not “interim tolls”.

3 Legal framework

Legislation

Part 1 of the CER Act provides the Commission with full and exclusive jurisdiction to determine matters within its mandate. In addition, the traffic, tolls, and tariffs provisions in Part 3 of the CER Act, particularly section 226, grant the Commission broad authority to make orders with respect to all matters relating to traffic, tolls, and tariffs.

Part 3 of the CER Act repeats the former *National Energy Board Act*, (**NEB Act**) Part IV provisions, apart from minor changes to modernize language. In considering the traffic, tolls, and tariffs provisions in Part IV of the former NEB Act, the Federal Court of Appeal has commented that they provided the NEB with “authority in the broadest possible terms to make orders with respect to all matters relating to [tolls and tariffs].” The court went on to state that the NEB’s power in respect of ensuring tolls are just and reasonable “is not trammelled or fettered by statutory rules or directions as to how that function is to be carried out or how the purpose is to be achieved.”⁹ There are no statutory rules which restrict the Commission’s authority to set just and reasonable tolls.

Tolls must be just and reasonable and not unjustly discriminatory. Section 230 of the CER Act provides:

230 All tolls must be just and reasonable, and must always, under substantially similar circumstances and conditions with respect to all traffic of the same description carried over the same route, be charged equally to all persons at the same rate.

In previous decisions,¹⁰ the NEB and CER articulated tolling principles that assist in the interpretation and application of statutory provisions in respect of traffic, tolls, and tariff matters. These fundamental tolling principles include cost-based/user-pay, economic efficiency, and no acquired rights.

Keystone's operation of its oil pipelines is also subject to subsection 239(1) of the CER Act, which is often referred to as the common carrier or common carriage obligation.

The NEB approved Keystone’s tolling methodology in the OH-1-2007 and OH-1-2008 Reasons for Decisions, concluding that the proposed committed toll methodology would produce tolls that are just and reasonable. The tolling methodology was negotiated and agreed to between Keystone and committed shippers within the associated Original TSAs. To determine whether the proposed Estimated 2020 and 2021 Variable Tolls are just and reasonable, both Keystone

⁹ British Columbia Hydro and Power Authority v Westcoast Transmission Co, [1981] 2 FC 646, 1981 CanLII 4683 (FCA) at 655-656.

¹⁰ A summary is found in the NEB, *Reasons for Decision – TransCanada PipeLines Limited Gros Cacouna Receipt Point, RH-1-2007*, Filing ID [A16010](#) (July 2007) at PDF 33-35; CER, *Letter Decision - NOVA Gas Transmission Ltd Transportation Temporary Service Protocol Extension*, Filing ID [C12183-1](#) (30 March 2021) at 8.

and the Complainants requested that the Commission focus on assessing whether tolls have been calculated in accordance with the TSAs.¹¹

Principles of Contractual Interpretation

The Commission heard submissions regarding the framework that should be applied to determine whether Keystone's proposed Variable Tolls are just and reasonable, including principles of contractual interpretation and how they should be applied. Since the tolling methodology has been approved and agreed to between Keystone and committed shippers as part of the Original TSAs, parties focused on how the Commission should properly interpret the terms of those TSAs.

Views of the Complainants

The Complainants' primary position was that the Commission does not need to depart from the terms of the TSAs in making its decision on the Complaint. Their alternative position was that if the Commission concludes that Keystone's proposed tolls have been calculated in accordance with the TSAs, the Commission should still determine the tolls to be unjust and unreasonable.

The Complainants argued that when dealing with an ordinary commercial contract, the overriding concern of contractual interpretation is to determine the intent of the parties and the scope of their understanding. This is concisely set out by the Supreme Court of Canada in *Sattva Capital Corp. v Creston Moly Corp.*¹² (**Sattva**):

[47] ...the interpretation of contracts has evolved towards a practical, common-sense approach not dominated by technical rules of construction. The overriding concern is to determine "the intent of the parties and the scope of their understanding" (*Jesuit Fathers of Upper Canada v. Guardian Insurance Co. of Canada*, [2006 SCC 21](#), [2006] 1 S.C.R. 744, at para. [27](#), per LeBel J.; see also *Tercon Contractors Ltd. v. British Columbia (Transportation and Highways)*, [2010 SCC 4](#), [2010] 1 S.C.R. 69, at paras. [64-65](#), per Cromwell J.). To do so, a decision-maker must read the contract as a whole, giving the words used their ordinary and grammatical meaning, consistent with the surrounding circumstances known to the parties at the time of formation of the contract. Consideration of the surrounding circumstances recognizes that ascertaining contractual intention can be difficult when looking at words on their own, because words alone do not have an immutable or absolute meaning:

No contracts are made in a vacuum: there is always a setting in which they have to be placed. . . . In a commercial contract it is certainly right that the court should know the commercial purpose of the contract and this in turn presupposes knowledge of the genesis of the transaction, the background, the context, the market in which the parties are operating.

(*Reardon Smith Line*, at p. 574, per Lord Wilberforce)

¹¹ The Complainants had an alternative position: if the Commission were to find that tolls have been calculated consistent with the TSAs, it should still find that tolls would be unjust and unreasonable.

¹² *Sattva Capital Corp v Creston Moly Corp*, 2014 SCC 53 [Sattva].

[48] The meaning of words is often derived from a number of contextual factors, including the purpose of the agreement and the nature of the relationship created by the agreement (see *Moore Realty Inc. v. Manitoba Motor League*, [2003 MBCA 71](#), 173 Man. R. (2d) 300, at para. 15, per Hamilton J.A.; see also Hall, at p. 22; and McCamus, at pp. 749-50). As stated by Lord Hoffmann in *Investors Compensation Scheme Ltd. v. West Bromwich Building Society*, [1998] 1 All E.R. 98 (H.L.):

The meaning which a document (or any other utterance) would convey to a reasonable man is not the same thing as the meaning of its words. The meaning of words is a matter of dictionaries and grammars; the meaning of the document is what the parties using those words against the relevant background would reasonably have been understood to mean.

In the Complainants' view, consideration of the surrounding circumstances is important because it recognizes that the agreements are not made in a vacuum, and the words used in an agreement take their meaning from the context in which the agreement was created. The surrounding circumstances include "knowledge that was or reasonably ought to have been within the knowledge of both parties" at the time the agreement was made. This includes information about "(1) the genesis, aim or purpose of the contract, (2) the nature of the relationship created by the contract, and (3) the nature or custom of the market or industry in which the contract was executed." Ultimately, the surrounding circumstances can include "absolutely anything which would have affected the way in which the language of the document would have been understood" by a reasonable person.¹³

The Supreme Court of Canada's guidance is, in essence, to not to get hung up on the particular words of a contract because words on their own do not have an immutable meaning without the context. The decision maker must read the contract as a whole, in its entirety, giving the words their ordinary and grammatical meaning consistent with the surrounding circumstances that are known to the parties at the time of the formation of the contract.

The Complainants argued that interpreting a contract is not just a matter of, in isolation, picking up the contract and asking "what does it say? Where would DRA costs fit into this?". Rather, the contract is looked at objectively from the surrounding circumstances, and the question is "what is it reasonable to conclude the mutual intention of the parties were?", and importantly in this case, "what is the risk allocation the parties were trying to achieve?"

The Complainants further argued that if any ambiguity remains in the TSAs, the *contra proferentem* maxim of contract interpretation stipulates that when an ambiguity exists with respect to a contractual term, the ambiguity should be construed against the party who drafted the contract. While in theory the rule applies to all contracts, *contra proferentem* is most readily applied to standard form contracts and contracts of adhesion.

The Complainants also argued that the TSA is not an ordinary commercial contract formed by bilateral negotiations between the parties; instead, it is a filed tariff document that is, and continues to be, subject to the regulatory oversight and supervision of the CER. The TSAs are a tariff, which are distinct from ordinary commercial contracts, and therefore cannot and should not be approached or interpreted from a purely commercial contract perspective. It is well established in law that rate tariffs are to be strictly construed based upon their language. In the

¹³ IFP Technologies (Canada) Inc v EnCana Midstream and Marketing, 2017 ABCA 157 at para 83.

related cases of *Canadian Pacific Ltd. v. Canada (Canadian Transport Commission)*¹⁴ and *Gainers Inc. v. Canadian Pacific Ltd.*¹⁵, which concerned the Railway Transport Committee's interpretation of the railway's published tariff, the Federal Court of Appeal and the Alberta Court of Queen's Bench approved of the following passage by the Board of Railway Commissioners in *Robin Hood Mills Ltd. v. Canadian Pacific Railway Co.*,¹⁶ as a correct statement of the law:

... The tariffs are to be construed according to their language, and the intention of the framers and the practice of the carriers do not control.

Newton Gum Co. v. C.B. & Q. Rd. Co., 16 I.C.C. 341; *Pacific Biscuit Co. v. S.P. & S. Ry. Co.*, 20 I.C.C. 546.

It is established by authority that tariffs are to be strictly construed against the railway. (See *Municipality of Nelson v. B.C. Tel. Co.*, 27 C.R.C. 270, at 275; *Aberdeen Commercial v. Gt. North of Scotland Ry. Co.*, [3 Ry. & Can. Traf. Cas. 213].) Further, the intention of a tariff, or a classification, is to be plainly shown in the wording of a tariff or classification, and is not to be arrived at by representations as to what the intentions of the carriers were in framing the provision concerned.¹⁷

In this case, the Complainants submitted that there is no express language in the TSAs that authorizes Keystone to recover expansion costs or expenses through the Variable Toll. Similarly, there is no express language in the TSAs that authorizes Keystone to collect capital costs through the Variable Toll.

The Complainants argued that traditional tolling principles further reinforce a proper interpretation of the TSAs. If Keystone's interpretation is accepted, Keystone would be incented to act in an economically inefficient manner. This would arise because DRA could be flowed through to shippers even if the outcome was highly inefficient compared to pump station additions. Similarly, the flow-through of capital costs would have incentivized Keystone to under build the Keystone System prior to the Fixed Toll capital variance adjustment, and thereafter remedy reliability issues with flowed-through capital costs. The TSAs would not have been approved if they produced these economic inefficiencies, which are unjust and unreasonable. As well, from a cost-causation perspective it is not just and reasonable to have committed shippers pay for the expansion costs when the need for incremental capacity is driven by Keystone's actions and when the new incremental shippers are paying for the capacity through the Fixed Tolls.

The Complainants also raised concerns that Keystone has not been transparent regarding the available capacity on the system, how capacity has been created, and who has been paying to create that capacity. The Complaint was initially based on a simple lack of information, and that shippers did not have the information to determine whether tolls are just and reasonable. In the

¹⁴ *Canadian Pacific Ltd v Canada (Canadian Transport Commission)*, (1987), 79 NR 13, 1987 CarswellNat 942 (FCA) leave to appeal ref'd [1988] SCCA No 31 [*Canadian Pacific*].

¹⁵ *Gainers Inc v Canadian Pacific Ltd*, [1993] 8 WWR 306, 1993 CanLII 7128 (AB QB), aff'd 1994 ABCA 620 [*Gainers*].

¹⁶ *Robin Hood Mills Ltd v Canadian Pacific Railway Co*, [1922] 28 CRC 50 [*Robin Hood*].

¹⁷ *Ibid* at 55; *Canadian Pacific*, *supra* note 14 at paras 9-11; *Gainers*, *supra* note 15 at paras 13 and 20.

Complainants' view, given the lack of transparency, Keystone has not met its burden of proving that the proposed tolls are just and reasonable.

Views of Keystone

Keystone argued that the primary issue in this proceeding is one of contractual interpretation: whether Keystone is permitted to include certain costs within the Variable Toll component of its committed tolls, pursuant to the tolling methodology negotiated between Keystone and committed shippers as set out in each committed shipper's TSA.

In Keystone's view, the Commission should focus on whether the tolls were properly calculated in accordance with the TSAs because:

- the NEB approved the tolling methodology in the TSAs in its OH-1-2007 and OH-1-2008 decisions;
- once a negotiated agreement (like the TSAs) has been approved by the Commission (or its predecessor, the NEB), the terms of the agreement itself become the primary reference to determine whether the Commission's tolling principles have been satisfied;
- the Commission's practice is to review negotiated packages as a whole and decide if the resulting tolls are just and reasonable and not unjustly discriminatory; and
- modifying the terms of a negotiated package years after it has been approved would undermine reliance on industry negotiations and collaboration to provide innovative commercial solutions, create significant uncertainty and disruption for all parties and shippers, and result in more proceedings before the Commission, all of which would be contrary to the overall public interest.

Keystone further argued that, when interpreting the meaning of a negotiated agreement such as the TSAs, the Supreme Court of Canada has established that "the goal of contractual interpretation [is] to ascertain the objective intentions of the parties"¹⁸ and that, "[t]o do so, a decision-maker must read the contract as a whole, giving the words used their ordinary and grammatical meaning, consistent with the surrounding circumstances known to the parties at the time of formation of the contract."¹⁹

The Supreme Court of Canada explained that evidence about the "surrounding circumstances" can be used as an interpretive aid for determining the meaning of the written words chosen by the parties, not to change or overrule the meaning of those words:

While the surrounding circumstances will be considered in interpreting the terms of a contract, they must never be allowed to overwhelm the words of that agreement. The goal of examining such evidence is to deepen a decision-maker's understanding of the mutual and objective intentions of the parties as expressed in the words of the contract. The interpretation of a written contractual provision must always be grounded in the text and read in light of the entire contract. While the surrounding circumstances are relied upon in

¹⁸ *Sattva*, *supra* note 12 at para 55. See also *Sattva* at paras 47 and 49.

¹⁹ *Ibid* at para 47.

the interpretive process, courts cannot use them to deviate from the text such that the court effectively creates a new agreement.²⁰ [Citations omitted]

Information about surrounding circumstances cannot be used to change what the parties actually agreed to in the contract; it is used to help understand what the parties intended if the wording in the contract itself is unclear.

The Supreme Court of Canada clarified that the surrounding circumstances are facts known, or that reasonably ought to have been known, to both parties at or before the date of executing the contract:

The nature of the evidence that can be relied upon under the rubric of “surrounding circumstances” will necessarily vary from case to case. It does, however, have its limits. It should consist only of objective evidence of the background facts at the time of the execution of the contract, that is, knowledge that was or reasonably ought to have been within the knowledge of both parties at or before the date of contracting. Subject to these requirements and the parol evidence rule discussed below, this includes, in the words of Lord Hoffmann, “absolutely anything which would have affected the way in which the language of the document would have been understood by a reasonable man” ...²¹ [Citations omitted]

In Canadian law, contracts should be interpreted as a whole to understand the objective intentions of the negotiating parties, giving the words used in the contract their ordinary and grammatical meaning, and having regard to the surrounding circumstances known to the parties at the time of the contract as a means of determining the parties’ intent. Keystone argued that the Commission has adopted this same approach²², noting that where there is ambiguity in a contract, it considers the factual matrix and the entirety of the contract to determine the parties’ intent.

In response to the Complainants submission regarding the *contra proferentem* maxim, Keystone submitted that there is no justification to interpret this type of contract in the Complainants’ favour, and Courts have agreed that the *contra proferentem* maxim does not apply in these circumstances. Keystone submitted that there is no ambiguity in the contract, and the TSAs were negotiated contracts between highly sophisticated arm’s length parties with extensive legal and commercial experience in negotiating oil and gas transportation agreements.

In response to the Complainants submission that the TSAs are tariff documents which are to be interpreted based on their strict wording, Keystone submitted that the cases that the Complainants rely on involve tariffs that were unilaterally set and published by railway companies. Those types of tariffs are very different than the TSAs, which again are detailed commercial contracts negotiated between highly sophisticated, arm’s length parties. When the Commission and its predecessor have interpreted negotiated tolling methodologies, they have followed contractual interpretation principles and focused on the intentions of the parties, and there is no legal or principled basis for the Commission to take a different approach in this case.

²⁰ *Sattva*, *supra* note 12 at para 57; see also *Sattva* at para 60.

²¹ *Ibid* at para 68; see also *Sattva* at para 60.

²² Keystone referred to the NEB, Letter Decision - Westcoast Final 2003 Tolls, Filing ID [A08051-1](#) (July 2004) at PDF 4.

3.1 Commission analysis and findings

Keystone's tolling methodology, described in detail in the Original TSAs, was approved in the OH-1-2007 and OH-1-2008 Reasons for Decisions. Parties in this proceeding had opposing views on whether the Original TSAs allowed certain costs to be recovered in the Variable Tolls. As discussed below, the Commission's decision on whether Keystone's 2020 and 2021 Variable Tolls are just and reasonable is based on whether those tolls have been calculated in a manner consistent with the approved tolling methodology specified in the Original TSAs. There was insufficient evidence for the Commission to make findings related to subsequent TSAs.

Generally, the Commission is of the view that implementing the terms of contracts mutually agreed to by shippers and pipeline companies, the terms of which include tolling methodologies approved by the regulator, will yield just and reasonable results. This approach provides certainty to industry participants and facilitates the negotiation of mutually beneficial long-term transportation agreements and tolling methodologies. However, the Commission requires that tolls must be just and reasonable at all times²³, and acknowledges that circumstances may evolve to the point where an approved tolling methodology may produce tolls that are not just and reasonable.²⁴

The Commission finds that 2020 and 2021 tolls properly calculated in accordance with the Original TSAs, as outlined in this Decision, will yield just and reasonable results. Committed shippers and Keystone agreed on an allocation of risks defined in the separation of the Fixed Toll and Variable Toll components, and the NEB approved this methodology. The Commission finds that the evidence does not demonstrate that a departure from the Original TSAs is warranted, including in consideration of the traditional tolling principles cited by the Complainants.

Throughout this Decision the Commission interprets the terms of the Original TSAs to determine whether they allow Keystone to recover certain costs in the Variable Tolls, which forms the basis for the Commission's decision on the Complaint. In order to interpret the terms of the Original TSAs, the Commission is guided by modern principles of contractual interpretation that have been developed and applied throughout various court cases, including *Sattva*. The principles that guide the Commission's interpretation of the Original TSAs include but are not limited to the following:

- The overriding concern is to determine the intent of parties and the scope of their understanding, which is accomplished by reading the contract as a whole, giving the words used their ordinary and grammatical meaning, consistent with the surrounding circumstances known to parties at the time of formation of the contract.
- To have regard for the surrounding circumstances in interpreting the contract.
- While the surrounding circumstances are considered in interpreting the terms of a contract, they must not be allowed to overwhelm the words of the agreement.

²³ As previously stated in the Commission Letter regarding the NOVA Gas Transmission Ltd. 2020-2024 Revenue Requirement Settlement, Filing ID [C07938-1](#) (17 August 2020) at PDF 4.

²⁴ For example, inconsistency with tolling principles may indicate that an approved methodology no longer produces just and reasonable tolls.

- Evidence relied on regarding the surrounding circumstances should consist of objective evidence of the background facts at the time of the execution of the contract, that is, knowledge that was or reasonably ought to have been within the knowledge of both parties at or before the date of contracting.

As such, in interpreting the terms of the Original TSAs, the Commission has considered background facts and history (i.e., the surrounding circumstances) to help determine what objectively would have been understood from the words of the Original TSAs at the time they were agreed to.

Regarding the interpretation of the Original TSAs, the Commission was not persuaded, in this case, that tolling principles aid in this regard. Approved negotiated tolling methodologies such as Keystone's may not always produce tolls that are entirely consistent with specific tolling principles. Accordingly, in this case, the Commission did not give weight to tolling principles in the context of determining whether tolls have been calculated consistently with the approved tolling methodology. As well, in the context of interpreting the terms of the Original TSAs, the Commission was not persuaded by the Complainants' assertions that Keystone was not transparent regarding the system's capacity and the use of DRA (discussed more fully in Chapter 4), which is unrelated to the terms of the Original TSAs.

The Commission accepts the arguments of Keystone that the *contra proferentem* rule does not apply. The Original TSAs were negotiated between sophisticated commercial parties and are not contracts of adhesion. As well, the Commission was not persuaded by arguments that the Original TSAs should be strictly construed based on their language. The Original TSAs at issue in this case are distinguishable from the tariff documents at issue in the cases referenced by the Complainants as the Original TSAs involve a negotiated agreement between sophisticated commercial parties.

4 Drag reducing agent expense

Drag reducing agents, or DRAs, are chemicals that can be injected into a pipeline's product stream to reduce one of the major resistances to flow that piped liquids encounter, commonly referred as "drag". The reduction in drag is usually achieved with DRA by reducing the turbulence in liquid.

The use of DRA may enable a pipeline to improve flow rates within existing pressure limitations. The pressure limitations may be due to design, such as the maximum operating pressure, or due to reduced pressure from existing or potential integrity risks for which a lower operating pressure reduces the likelihood of pipeline failure. Thus, DRA in oil pipelines may enable a pressure-limited pipeline to achieve or sustain a flow rate that would otherwise not be achieved without a higher operating pressure. While DRA has been used on liquid pipelines since the late 1970s, in the past it was only effective in lighter crude oils and products. The technology has since developed, and DRA has been used on the Keystone System for heavy crude oil beginning in 2014.

For the estimated 2020 and 2021 Variable Tolls, Keystone estimated OM&A costs which included \$46.6 million and \$19.3 million of DRA expense for the years 2020 and 2021, respectively. Actual DRA expense was \$34.4 million in 2020 and \$9.6 million in 2021. The Complainants took issue with Keystone's inclusion of DRA expense in the Variable Toll, which in their view is inconsistent with the terms of the TSAs and leads to committed tolls being unjust and unreasonable.

This chapter focuses on DRA commodity expense, being the costs of the DRA chemical that is injected into the pipeline. Costs related to the installation of DRA skids, which enable the injection of DRA into the pipeline, are capital costs rather than expenses; capital costs are covered in Chapter 5.

4.1 DRA and the TSAs

Views of the Complainants

Dr. Arthur, on behalf of the Complainants, submitted that:

- Keystone has unreasonably and improperly included costs associated with the use of DRA to expand the capacity of the Keystone System, which is inconsistent with the terms and principles of the committed shipper TSAs.
- It is inappropriate for Keystone to attempt to recover any portion of the costs, including any DRA costs, that it has incurred in order to meet its commitment to provide the base nominal capacity it represented to shippers and regulators by including them among the OM&A costs that are passed through to Committed Shippers via the Variable Toll.
- Under the terms of the TSA, Keystone was obligated to construct a system with a base nominal capacity of "approximately 590,000 barrels per day" and to recover the "Final Project Costs" associated with that system through a one-time adjustment to the Fixed Toll component within two years of the commencement date of service.
- Keystone did not implement a system with base nominal capacity of 591,000 bpd at the time it issued its capital variance notices in 2011 and 2012. Mr. Vanderpool estimated

that the base nominal capacity of the system Keystone constructed by June 2012 was approximately 465,000 bpd at viscosity of 350 centistokes (**cSt**), which is significantly less than the 591,000 bpd of capacity that Keystone represented to regulators and committed shippers that it would construct.

Dr. Arthur submitted that Keystone included DRA expenses incurred after the issuance of the capital variance notices in the Variable Tolls. Those DRA expenses are costs needed to achieve a base nominal capacity of 591,000 bpd. Therefore, Keystone is improperly attempting to pass through to the original committed shippers the costs of expanding capacity in order to provide not only the amount of transportation capacity envisioned by the TSAs and regulatory applications but also to generate incremental revenue through the sale of incremental committed and uncommitted transportation service.

In Dr. Arthur's view, the Fixed Toll component of the committed tolls was represented by Keystone to recover the capital costs associated with constructing a system with a base nominal capacity of 591,000 bpd. Keystone negotiated a specific level for that Fixed Toll and in return committed to construct the pipeline system to the specifications represented to shippers and regulators. In this regard, the Complainants submitted that:

- In the TSAs²⁵, the specific reference to the "Expansion/Extension Facilities" comprising "the associated facilities required to expand the Pipeline System to a nominal transportation capacity of approximately 590,000 bpd of Petroleum" represents a contractual agreement by Keystone to accept the Fixed Toll (as adjusted by the one-time capital variance adjustment) as its sole and exclusive compensation from committed shippers for any costs incurred to expand/extend its system to 590,000 bpd of nominal transportation capacity.
- The TSAs establish that any costs of developing, constructing, and acquiring the expansion/extension facilities incurred after the issuance of the capital variance notice were to be borne solely by Keystone.
- Consequently, if, upon the issuance of the capital variance notices, Keystone constructed a system with nominal capacity materially below 590,000 bpd, Keystone would bear 100 per cent of any remaining costs of developing and constructing its system, including any costs of expanding the capacity of that system, that were incurred after the issuance of the capital variance notice.
- Consequently, where Keystone incurred DRA costs to expand the Keystone System capacity subsequent to the issuance of the capital variance notices, the remedy outlined in the TSAs is that no such costs should be imposed on the original committed shippers who signed those TSAs.

The cost to acquire DRA molecules that are injected into a pipeline is properly treated as an expense, rather than a capital expenditure, for accounting purposes. However, that does not mean that the cost of DRA is properly categorized as an "operating cost" that is properly recoverable in the Variable Toll, since DRA has the unique property of being able to substitute for facilities investments as a way to expand the capacity of a pipeline.

²⁵ Dr. Arthur Attach 7, *supra* note 4 at PDF 48.

Mr. Vanderpool submitted that Keystone is using DRA chemical as a substitute for capital expansion of the pipeline. DRA is injected into a pipeline and reduces the turbulence (i.e., the friction between fluid molecules) of the crude oil, and thus reduces the loss of system pressure due to that turbulence. The net effect is a reduction in the loss of pressure, which allows a pipeline to achieve a higher-flow rate if the pressure loss is held constant. In the case of the Keystone System, DRA allows Keystone to achieve a higher flow-rate and thus a higher nominal capacity. The Complainants argued that consumable inputs like DRA commodity can increase capacity. The continual injection of DRA molecules is the substitute for additional pumping stations that create incremental nominal capacity, so it is the cost of DRA molecules that stands in the place of the capital investment that Keystone would otherwise have to make in additional pumping facilities.

The Complainants argued that DRA molecules and electricity are not the functional equivalent of one another, nor are pumping stations and DRA skids:

- Pumping stations use electricity as fuel. Unlike DRA, electricity is not directly injected into the pipeline.
- DRA skids (which are also powered by electricity) neither consume DRA molecules, nor do they create any hydraulic pressure. Rather, DRA skids are like an IV or a needle: they are simply the mechanical means by which DRA molecules are injected directly into the pipeline.
- Once injected into the pipeline, it is the DRA molecules themselves that affect throughput by reducing friction between petroleum molecules, and between them and the interior surface of the pipe.
- It is the friction reduction created by the injection of DRA molecules that serves as the functional equivalent of the hydraulic pressure created by pumping facilities.

The Complainants argued that it is the DRA molecules themselves, once injected into flowing crude, that reduce friction and improve the flow rate. The more DRA commodity that is continuously injected into an existing pipeline system, the more the maximum capacity of that system can be increased. As well, unlike a pump station, the DRA skids have no ability to affect the flow rate of petroleum in the pipeline or to increase the capacity of the system.

A pipeline can function without DRA. Without DRA molecules being continuously injected to increase system capacity, the capacity of the pipeline will simply revert back to what the maximum capacity of the pipeline is based on the configuration of those physical facilities. By contrast, if you turn off the power of a pipeline, you are just turning the pipeline off.

The TSAs do not specifically identify DRA costs as being includable in the Variable Toll. Keystone did not first test the use of DRA on its system until 2012, and DRA for heavy crude application was not available at the time the Keystone System was originally constructed. Therefore, DRA was not a consideration when Keystone designed and constructed its system, nor when Keystone executed TSAs with the original committed shippers between 2005 and 2009.

Dr. Arthur indicated that if an expansion or extension resulted in increased Keystone power costs, those increased power costs would be recoverable in the Variable Toll. However, such an increase in power costs would be the result of operating the expanded system, not the cause of

the increased capacity. This is distinct from the situation with DRA, which, as Keystone has used it, directly causes an expansion of system capacity.

Views of Keystone

In Keystone's view, all DRA costs incurred by Keystone to operate the pipeline, including any DRA costs to facilitate incremental capacity commitments, are "Operating, Maintenance and Administration Costs" for the purposes of the TSAs and are recoverable as part of the Variable Toll.

Under the approved tolling methodology in the TSAs, the Variable Toll is determined by dividing all OM&A costs and expenses incurred by or on behalf of Keystone by the weighted barrel kilometres of all throughput on the system. The TSAs broadly define OM&A costs and expenses as all:

"operating, maintenance and administration costs and expenses incurred by and on behalf of Carrier in respect of the Pipeline System, including:

- a) operating, maintenance, administrative and general costs and expenses (including pipeline inspection and pipeline repairs) and other overhead costs or expenses directly allocable to the Pipeline System;
- b) property taxes;
- c) capital taxes;
- d) insurance;
- e) power;
- f) regulatory costs;
- g) costs attributable to changes in laws and regulations (including income taxes based on changes in income tax rates or taxing methodology) that apply to Carrier or the Pipeline System; and
- h) all other costs and expenses similar in nature to any of the foregoing."²⁶

Keystone argued that this very broad definition, including "all operating, maintenance and administration costs and expenses" and "all other costs and expenses similar in nature to any of the foregoing", was intended to capture all costs incurred by or on behalf of Keystone to operate and maintain the system. The definition does not contain any exclusions or exceptions. The risks that these costs could fluctuate up or down over time, or that they could include costs for items that were not specifically contemplated at the time of the TSA negotiations, was part of the risk-sharing framework agreed to.

Keystone further argued that DRA commodity is a consumable input. All consumable inputs used on the system to move crude oil through the pipeline, which are operating expenses by nature, are treated as OM&A costs and expenses and are included in the calculation of the

²⁶ See the Keystone Evidence, *supra* note 3 at PDF 104-105. The Canadian Cushing TSA is similar but includes pipeline inspection and repair costs as an example of OM&A Costs and Expenses, Dr. Arthur Attach 7, *supra* note 4 at PDF 67.

Variable Toll consistent with the methodology in the TSAs. Commodity expenses like DRA and electricity facilitate throughput by allowing oil to flow through the physical facility set, but they do not change the physical capacity of the system.

Keystone's position is that DRA commodity is not a substitute for capital costs to expand the system, but an operating input that facilitates throughput on the system. The consumption of DRA molecules is analogous to the electricity consumed in the operation of a pump station: both are consumable inputs used in the operation of a pipeline system. Consumables, such as DRA, do not expand the capacity of a pipeline system:

- It is the physical facilities, such as the pipe, pump stations and DRA skids, that create the capability of the system to achieve a required capacity.
- Once the physical facilities are installed, variations of throughput are achieved through the changing consumption of DRA commodity and electricity depending on the operational circumstances and throughput requirements at the time.
- Thus, the physical facilities provide the *capability* to reach a required throughput while the consumable inputs facilitate the level of throughput within a given range of capability.

The Fixed Toll was designed to recover development, construction and acquisition costs of the pipeline system, and the capital cost sharing mechanism meant that Keystone would be at risk for 50 per cent of the final capital variance, the effect of which meant Keystone would be limited in the amount of development, construction and acquisition costs that could be recovered through the Fixed Toll.

In contrast, the Variable Toll is defined broadly to recover all OM&A costs and expenses related to the pipeline system, which may be "modified, expanded or extended from time to time." Throughout the history of the Keystone System, Keystone has appropriately followed this balance: paying for capital costs and its portion of capital cost variances associated with incremental contracting while recovering through the Variable Toll capital costs and expenses related to operating, maintaining and administering the system, including any expenses resulting from expansions.

In argument Keystone stated that it agreed with the Complainants that the definition of OM&A costs in the TSAs does not include costs to expand pipeline capacity. A pipeline's physical capacity is expanded through the addition or modification of facilities, not through the use of consumable inputs such as DRA commodity. The consistent practice that Keystone employed was to bear those capital expansion costs itself and recover those costs through the fixed tolls from incremental shippers. Existing shippers do not bear the costs of expanding system capacity.

If the primary purpose of DRA skids and pump stations is to increase capacity, such costs are borne by Keystone and recovered through the incremental shippers' fixed tolls. But the electricity used to power the pump stations and the DRA injected at DRA skids are expenses that facilitate the aggregate system throughput. As the system expands over time, electricity costs on the system increase, and the same can occur for DRA.

In consideration of whether certain DRA expenditures are includable in the Variable Toll, Keystone classifies each DRA expenditure based on its functional justification as either for

increased system reliability; or to increase contractual commitments, as summarized in Table 4-1 below:

Table 4-1 – Variable Toll Inclusion

	Capital	Expense
Increase Contractual Commitments	Expansion Shippers and/or Keystone	Eligible for Inclusion in VT
Increase System Reliability	Eligible for Inclusion in VT	Eligible for Inclusion in VT

This distinction of includable expenditures within the Variable Toll applied by Keystone is deliberate, has been consistently applied, and is founded upon the plain language in the TSAs. Keystone defines “system reliability” to be broad and encompassing of many aspects, including informative of a certain quality of system operation in the provision of transportation service. As a prudent operator, Keystone’s operational philosophy is to safely and reliably operate the system, and accordingly, Keystone believes costs required to maintain this philosophy are appropriately included within the definition of “Operating, Maintenance and Administration Costs”. While the TSAs do not expressly use the words “system reliability”, they do permit the inclusion of all OM&A costs, which is inclusive of system reliability.

Keystone submitted that all sites that inject DRA along the Keystone System utilize the EP 2000 DRA product. Keystone provided the vendor performance curve of the EP 2000 DRA product, which is used in the hydraulic model to estimate the reduction of pressure loss between pump stations. Keystone stated that the vendor performance curve allows parties to understand how the specific DRA product used on the Keystone system works, including its effectiveness. Keystone also provided its preliminary DRA test data and results from 2012 at the Rapid City Pump Station which demonstrated the effectiveness of the DRA product.

Keystone also stated that the use of DRA has resulted in shipper benefits, including downward pressure on Variable Tolls, operational flexibility, additional transportation of shipper barrels, and the facilitation of make-up rights (which are described in the TSAs).

DNV, on behalf of Keystone, submitted that DRA can be used to increase the pipeline capacity or reduce the pressure/pumping power required to flow the same capacity without DRA. Although the main use of DRA is to increase capacity or reduce required pressure, it has applications in multiple

facets of pipeline operation and maintenance. DNV submitted that DRA is not restricted for use only in situations requiring a permanent solution. DRA can be used to temporarily to keep the pipeline running, such as during maintenance events.

4.1.1 Commission analysis and findings

Keystone and the Complainants had opposing views on whether DRA commodity is appropriately classified as an OM&A expense, and therefore recoverable in the Variable Toll. The Complainants were of the view that DRA commodity as used by Keystone in 2020 and 2021 is not an operating expense because it directly increases capacity, and therefore is a cost of expanding the system, not operating it. Keystone's perspective was that DRA commodity is an operating expense because it is a consumable input that does not actually increase capacity, which is instead determined by the physical facilities of a pipeline system.

First, the Commission considered the question of whether DRA commodity can be used to increase a pipeline's capacity, which is necessary to interpret how such costs are to be treated in tolls according to the terms of the Original TSAs. The Commission finds that DRA commodity has properties that indicate it can be used to increase a pipeline system's capacity to transport oil, including that:

- DRA commodity is injected directly into the pipeline;
- the DRA molecules reduce frictional pressure losses in the pipeline; and
- the associated friction reduction can enable a greater volume of petroleum to be transported.

The Commission acknowledges Keystone's submissions that physical facilities increase the actual nominal capacity of a pipeline system, whereas consumable inputs do not. In the Commission's view, Keystone's distinction does not fully account for the range of uses and effects of DRA. For example, DRA skids themselves do not provide a clear level of pipeline capacity, since the actual capacity achieved by the skids would be directly dependent on the amount, type and performance of the DRA commodity consumed.²⁷ In this regard, DRA commodity is dissimilar to electricity consumed in operating a pump station, which is a cost of operating the pipeline system. The volume and performance of DRA commodity used correlates to and can increase the pipeline's capability to transport volumes of oil. As a result, in the context of the Original TSAs, the Commission finds that DRA commodity, in certain uses, can be considered as a cost of expanding or increasing the Keystone System's nominal capacity.²⁸

While Keystone's methods of determining the capacity²⁹ of the system may not reflect consumable inputs such as DRA, the Commission finds that, in effect, the continual injection of DRA commodity in the pipeline is central to the action of creating pipeline capacity. The Commission's findings are supported by the expert evidence filed on the record of this

²⁷ For example, Keystone provided the vendor performance curve of its DRA product [Keystone, P66 Husky IR No. 2.1, Filing ID [C13636-1](#) (18 June 2021) at PDF 112-113], and submitted that this performance curve allows parties to understand how the specific DRA product used on the Keystone system works, including its effectiveness [Phillips Motion Chart, Filing ID [C13947-2](#) (7 July 2021) at PDF 1]. Keystone also provided its preliminary DRA test data and results demonstrating the effectiveness of the product [Keystone, P66 Husky IR No. 2.6, Filing ID [C13636-2](#) (18 June 2021) at PDF 54].

²⁸ Nominal capacity being the long-term sustainable capacity that the system is able to achieve.

²⁹ Keystone described how it determines "design capacity", "design nominal capacity" and "actual nominal capacity", none of which reflect consumable inputs, Keystone, Written Argument, Filing ID [C20864-2](#) (9 September 2022) at PDF 9-10.

proceeding: both DNV and Mr. Vanderpool opined that, among other purposes, DRA can be used to increase pipeline capacity.³⁰

To conclude whether DRA commodity expense is ultimately recoverable in the Variable Toll, or instead falls within the Fixed Toll component, the Commission assessed the objective intentions of the parties to the Original TSAs in Section 4.2, the design of the Keystone System and associated uses of DRA in Section 4.3, and the other applications and uses of DRA in Section 4.4.

While Keystone and the Complainants disagreed on whether DRA commodity expense is recoverable as part of the Variable Toll under the terms of the Original TSAs³¹, they agreed on several points, including that:

- the Variable Toll definition in the Original TSAs allows for the recovery of “all operating, maintenance and administration costs and expenses”;
- DRA commodity is appropriately expensed, and not capitalized; and
- costs to expand pipeline capacity are not recoverable as part of the Variable Toll.

While parties agreed that DRA commodity is appropriately expensed for accounting purposes, in the Commission's view, that accounting treatment is not determinative of the proper tolling treatment as set out in the Original TSAs. Under the terms of the Original TSAs, the Variable Toll is designed to recover all OM&A costs and expenses.³² Under the terms of the Canadian Cushing TSAs, the Fixed Toll is designed to recover the development, construction and acquisition costs of the initial Keystone facilities and the expansion facilities required to expand the system to a nominal capacity of approximately 590,000 bpd³³, as subject to a capital variance cost sharing mechanism.³⁴ To determine whether DRA commodity, which can be considered to be a cost of expanding the pipeline system's nominal capacity, is recoverable in the Variable Toll, the Commission is informed by the surrounding circumstances at the time of the Original TSAs were agreed to, to help determine what objectively would have been understood from the words of the Original TSAs at the time. The Commission continues this assessment in Section 4.2.

4.2 Intentions of parties to the Original TSAs in 2009

The Commission considered submissions regarding the objective intentions of parties in agreeing to the Original TSAs. This included evidence regarding the surrounding circumstances known to parties at the time these TSAs were agreed to in 2009. In Section 4.1.1, the

³⁰ DNV submitted that DRA can be used to increase pipeline capacity, Keystone, DNV Reply Evidence, Filing ID [C19713-13](#) (24 June 2022) at PDF 34-35. Mr. Vanderpool submitted that DRA allows Keystone to achieve a higher flow-rate and thus a higher nominal capacity, Phillips Canada, Written Evidence of David A. Vanderpool, Filing ID [C17403-2](#) (22 June 2022) at PDF 27.

³¹ Both the Patoka (Keystone Evidence, *supra* note 3 at PDF 85-107) and Cushing (Dr. Arthur Attach 7, *supra* note 4 at PDF 69-91) TSAs were raised in this proceeding.

³² Dr. Arthur Attach 7, *supra* note 4 at PDF 89-91, Section D – Variable Toll.

³³ *Ibid* at PDF 88, definition of “Final Project Costs”, and PDF 71 definition of “Expansion Facilities”.

³⁴ *Ibid* at PDF 88-89, Section C - Capital Variance.

Commission determined that DRA commodity, in certain uses, can be considered as a cost of expanding or increasing the Keystone System's nominal capacity. The Commission considered background facts and history (i.e., the surrounding circumstances) to help determine how such expansion costs were agreed to be treated for tolling purposes pursuant to the Original TSAs.

Views of the Complainants

The Complainants pointed to historical context and highlighted various representations Keystone made to shippers and the regulator to demonstrate what the parties had in mind in agreeing to the TSAs as it relates to the Fixed Toll and expansion costs.

2005 Open Season

Keystone represented to shippers and to the regulator that the pipeline would have a base nominal capacity of 435,000 bpd and could be quickly and economically expanded to 590,000 bpd of heavy crude through additional pumping capacity.³⁵

Original NEB Application

Keystone made representations to regulators that the Keystone System could be readily expanded (by adding pumping capacity) to support a nominal capacity of 94,000 cubic meters per day, equivalent to 591,000 bpd.³⁶

OH-1-2007 Reasons for Decision

The NEB summarized Keystone's representations in regulatory proceedings that the nominal capacity could be expanded to 591,000 bpd with the addition of pumping facilities.³⁷ Additionally, Condition #1 in Certificate OC-51 legally obligated to design, construct, and install a pipeline consistent with the capacity specifications contained in Keystone's application.³⁸

2007 Open Season

Keystone repeated its representation to shippers that the expanded system would have a nominal capacity of 590,000 bpd to both Wood River/Patoka and Cushing and that this would be achieved through the addition and modification of pumping facilities.³⁹

³⁵ Keystone, 2005 Notice of Open Season, Filing ID [C19713-9](#) (November 2005) at PDF 6 [2005 Notice].

³⁶ Keystone, Application - Section 2 Executive Summary, Filing ID [A0X2G4](#) (12 December 2006) at PDF 8 [Keystone 2006 Application Summary]; Keystone, Application - Section 6 System Design, Filing ID [A0X2G8](#) (12 December 2006) at PDF 1 [Keystone System Design]; and NEB, TransCanada Keystone OH-1-2007 - Hearing Transcript, Vol 6, Filing ID [A0Z2R0](#) (14 June 2007) at para 8282-8285, PDF 18-19.

³⁷ OH-1-2007, *supra* note 5 at PDF 13 and 22.

³⁸ NEB, Keystone Certificate OC-51, Filing ID [A17082-2](#) (30 November 2007) at PDF 2.

³⁹ Phillips Canada and Cenovus, Written Evidence of Dr. Arthur – Attachment 3, Filing ID [C18422-3](#) (4 April 2022) at PDF 8 and 10 [Dr. Arthur Attach 3].

Keystone's Application for the Cushing Expansion

In its application for the Cushing Expansion, Keystone was again clear that the base capacity would be 435,000 bpd, and that the expanded capacity would be 591,000 bpd and would be a pump-based expansion.⁴⁰

NEB Approval of the Cushing Expansion (OH-1-2008)

In Decision OH-1-2008, the NEB understood that the Cushing Expansion would increase the nominal capacity of the pipeline to 591,000 bpd⁴¹, and like before, the Condition #1 to Order AO-1-OC-51 legally obligates Keystone to design, construct, and install an expanded system with the capacity specifications outlined in Keystone's application, other evidence, and submissions in proceeding OH-1-2008.⁴²

2009 Open Season

In its 2009 notice of open season, Keystone stated that "[s]ixty thousand (60,000) bpd of remaining uncontracted capacity is available and offered for contracting in this Open Season."⁴³ By this point, Keystone had already secured 495,000 bpd of committed long-term contract volumes and was required to reserve at least 35,000 bpd for uncommitted shippers (for a total of 530,000 bpd). Thus, 60,000 bpd of "remaining uncontracted capacity" being "available" for contracting was premised on the system having a nominal capacity of at least 590,000 bpd.

NEB Proceeding OH-1-2009: Keystone XL Pipeline

The Complainants argued that Keystone, in its application for the Keystone XL Pipeline, again confirmed that following the Cushing Expansion the pipeline would have a nominal capacity of 591,000 bpd.⁴⁴ The Complainants further argued that the NEB, in the Reasons for Decision in OH-1-2009, again confirmed its understanding of that Pipeline's capacity following the Cushing Expansion would be 591,000 bpd.⁴⁵

The Complainants argued that, as demonstrated by all the documents discussed above, at the time the TSAs were completed, they had every right to believe and expect that:

- (a) The Cushing Expansion would be completed in 2010;
- (b) It would have a total nominal capacity of 94,000 m³/d (591,000 bpd);

⁴⁰ Keystone, Cushing Expansion Application - Section 1, Filing ID [A1C2D3](#) (23 November 2007) at PDF 2 [Cushing Application]; Keystone, Cushing Expansion Application -Section 2 Executive Summary Filing ID [A1C2D4](#) (23 November 2007) at PDF 1-2 [Cushing Application Summary]; Keystone, Cushing Expansion Application - Section 6 System Design, PDF 1-2 ([A1C2D8](#)) [Cushing System Design]; Keystone, Cushing Expansion Written Final Arguments, Filing ID [A1E2V5](#) (14 April 2008) at PDF 8-9 [Cushing Final Argument].

⁴¹ OH-1-2008, *supra* note 6 PDF 18.

⁴² NEB, Order AO-1-OC-51, Filing ID [A1G9V6](#) (19 September 2008) at PDF 2.

⁴³ Keystone, 2009 Notice of Open Season, Filing ID [C19713-10](#) (August 2009) at PDF 5 [2009 Notice].

⁴⁴ Keystone XL Pipeline, Application – Section 6 Engineering, Filing ID [A1I9S2](#) (27 February 2009) at PDF 4 [Keystone XL Engineering].

⁴⁵ NEB, *Reasons for Decision – TransCanada Keystone XL Pipeline OH-1-2009*, Filing ID [A24669-1](#) (March 2010) at PDF 14.

- (c) the expanded pipeline would have the capability to deliver the entire 94,000 m³/d (591,000 bpd) to either of the original destinations of Wood River/Patoka, or to Cushing;
- (d) It would be a “pump-based” expansion;
- (e) The pumps required for the expansion were a capital cost paid by Keystone; and
- (f) Keystone would recover the capital costs via the Fixed Toll

The Complainants described what occurred on the Keystone System in the post-2009 period:

- From at least 2013 onwards, the pipeline did not have the capacity it was expected to have.
- By no later than 2014, Keystone knew that the pipeline could only reliably achieve 530,000 to 535,000 bpd.
- In the 2014, 2015 and beyond timeframe, Keystone turns to DRA as the solution to that problem.
- In 2015, Keystone held another open season, and there were additional contracts signed.

The Complainants asserted that regardless of whether the capacity shortfall was a design issue, or an assumption about soil temperature, or an assumption about viscosity that did not pan out, and regardless of whether the pipeline was designed to achieve 591,000 bpd, it is a known fact that the capacity achieved was closer to 530,000 bpd, not 590,000 bpd. In determining who should be required to pay the costs of DRA used to create the capacity that was not there, the Commission should consider what was in the parties’ contemplation in 2009 when the TSA was concluded and what the just and reasonable result is.

The Complainants submitted that:

- The failed design is a matter of development, construction, and acquisition, and those costs and risks were compensated through the Fixed Toll.
- Keystone bore all further risk for the duration of the term of the initial TSAs for any further capital costs related to the design, construction, and acquisition of its pipeline system.
- The risk of a failed design, under the approved tolling methodology and under the TSAs, is a risk borne by Keystone.
- Keystone found a way around bearing that risk, without installing pumps and without expending the associated capital. Keystone found DRA and came up with an after-the-fact interpretation of the TSA to pass that cost on to the shippers.
- Looking at the TSA, the intention of the parties at the time as to who would bear that cost guides who properly bears the cost of the DRA.

The TSA definition for the Variable Toll provides that it shall include all operating, maintenance, and administration costs and expenses incurred by or on behalf of Carrier and details a list of what that includes or does not include. The Complainants argued that in 2009, there is no

possible way that parties looked at this definition and said that it clearly includes costs to expand the pipeline. DRA commodity was not an operating, maintenance, or administration cost anyone had a conception of in 2009 to take the pipeline from 530,000 bpd to 591,000 bpd or, much less, to 640,000 bpd.

Mr. Vanderpool, on behalf of the Complainants, submitted that Keystone did not consider the use of DRA as part of its original design of the pipeline. While DRA was generally available for pipelines at the time of Keystone's design, the heavy viscous crude shipped on Keystone would require that a new chemical be developed for application in heavy crude. Keystone intended to design the pipeline to achieve its capacity goals without the use of DRA, and DRA was not commercially available for heavy crudes at the time of the Keystone design.

The Complainants argued that there was and could be no common intent between TransCanada and the Complainants regarding the allocation of DRA costs at the time the TSAs were concluded. The TSA is silent regarding the treatment of DRA costs, which makes sense given DRA for heavy crude was not commercially viable at the time.

In the Complainants view, considering the context of the surrounding circumstances in 2009, the intention of the parties regarding the OM&A clause was not that Keystone could avoid capital expenses, stuff them into OM&A costs, not make the capital investment, still collect the fixed tolls, and pass on the costs of that expansion to the shippers. Such an approach does not fit with the words of the TSA today and did not fit within the surrounding circumstances within the contemplation of the parties in 2009. In effect, what Keystone's argument is based upon is shoe-horning what are in substance expansion costs into operating or maintenance costs under the guise of enhancing system reliability. But what Keystone means by enhancing system reliability is creating the capacity necessary to serve all of the commitments that now exist on the system.

Neither a plain language interpretation of the TSA, nor a contextual understanding of that language, would include expansion costs in the Variable Toll. As such, the cost Keystone incurs to create incremental capacity above what the as-built facilities support is compensated through the fixed tolls that those incremental shippers pay. Keystone does not pay for those expansion costs out of pocket as the cost to create capacity is compensated through the fixed tolls charges and received by Keystone. What Keystone cannot do, is then pass those costs on again to all shippers through the Variable Toll.

In the Complainant's view, Keystone would have the Commission ignore the surrounding circumstances and the context of the transaction. However, the surrounding circumstances are a legally relevant consideration as directed by the Supreme Court of Canada.

Views of Keystone

Keystone argued that:

- The wording in the TSAs around OM&A costs is unambiguous, so the Commission does not need to rely on evidence of the surrounding circumstances to ascertain the parties' contractual intent.
- To be complete, Keystone included evidence about the surrounding circumstances on the record to demonstrate that the plain wording of the TSAs is, in fact, consistent with what the parties intended at the time.

- During the TSA negotiations, the surrounding circumstances demonstrate that the parties intended that all costs and expenses incurred by or on behalf of Keystone to operate, maintain, and administer the System be included in the Variable Toll.
- Parties did not intend for there to be any exclusions or exceptions to the OM&A costs that could be included. The Complainants did not file any evidence to suggest that they or their predecessors had different intentions at the time of the TSA negotiations.
- From a contractual interpretation perspective, reading an exclusion or exception into the TSAs when there is no evidence that is what the parties intended, and the evidence demonstrates the opposite, would be an error of law.
- The Complainants did not file compelling evidence of the surrounding circumstances that substantiated their position. Instead, they cherry picked certain words out of certain documents, but when those documents are read as a whole and in the context of the broader surrounding circumstances, they do not demonstrate objective intent of the parties that supports the Complainants' arguments, particularly when many of the Complainants' arguments are contrary to the plain wording of the TSAs themselves.

In Keystone's view, the record before the Commission firmly demonstrates that the types of DRA costs Keystone proposed to include in the 2020 and 2021 estimated Variable Tolls were intended by contracting parties to be OM&A costs and expenses under the TSAs, and Keystone therefore has the contractual right to include those costs in the Variable Toll. There is no contractual or principled basis to exclude costs that fit within the definition of OM&A costs and expenses from the Variable Toll and doing so would risk upsetting the balance that was struck in the negotiations between Keystone and the committed shippers.

Keystone agreed with the Complainants that the definition of OM&A costs in the TSAs does not include costs to expand pipeline capacity. As discussed in Section 4.1, Keystone was of the view that a pipeline's physical capacity is expanded through the addition or modification of facilities, and Keystone bears capital expansion costs itself and recovers those costs through the fixed tolls from incremental shippers.

Based on the plain wording of the TSAs, and the surrounding evidence of the parties' intentions, costs incurred by Keystone to mitigate things like planned maintenance and unplanned outages are clearly operating and maintenance costs that are recoverable through the Variable Toll.

DNV, on behalf of Keystone, submitted that DRA first became available for commercial use in liquid pipelines in the late seventies (marketed as CDR by Conoco, Inc. in 1979). At the time it was only effective in lighter crude oils and products but not in heavy oil. However, with increased demand in this specialized technology and continued investment, DRA that was suitable for use in heavy crude oil became available by 2008.⁴⁶ Keystone argued that at the time the TSAs were negotiated, DRA was commonly used across light oil pipelines in the industry, and DRA for heavy crude pipelines was already being tested. In Keystone's view, there is no evidence that the parties did not intend for this type of technology to be an OM&A cost or expense if commercially proven.

⁴⁶ LiquidPower Specialty Products Inc. (LSPI), "About LSPI - History", online: *Liquid Power* <https://www.liquidpower.com/aboutlspi/history/>.

Keystone noted in argument that the Complainants rely on select documents that were discovered in the parallel Federal Energy Regulatory Commission (**FERC**) proceeding that the Complainants rely on to characterize the purpose of certain DRA programs and the appropriateness of including DRA costs and expenses in the Variable Toll. Keystone stated that:

- these documents have no probative value because the Commission has no way of determining who created them, what purpose they were created for, how they were used, and whether they actually reflected the views of the company.
- regardless, none of these documents speak to how costs and expenses should be addressed under the TSAs, nor do they form part of the TSAs, so they are not relevant to determining the appropriate interpretation of the TSAs.

In response to the Complainants' submissions that Keystone was legally obligated to construct the Keystone System to achieve a nominal capacity of 591,000 bpd, Keystone submitted that the Commission and its predecessor have never interpreted the condition referenced by the Complainants to mean that the pipeline must be constructed in a manner that ensures actual operating realities perfectly match all design assumptions. That would be absurd, since operational circumstances often differ from design assumptions and that reality does not mean that every pipeline company is contravening its approval. As well, the Complainants point to documents outside of the TSAs. If the parties actually intended for Keystone to construct and operate the system to achieve a particular nominal capacity, that would have been stated in the TSAs, which it was not.

4.2.1 Commission analysis and findings

Having found in Section 4.1.1 that DRA commodity can be used to expand the system, the next question for the Commission is whether the DRA commodity expense can be recovered in the Variable Toll. The Commission assessed the objective intentions of parties in 2009⁴⁷ when the Original TSAs were agreed to. The Commission was informed by reading the Original TSAs as a whole, giving the words used in these TSAs their ordinary and grammatical meaning, consistent with the surrounding circumstances known to parties at the time of formation of the contracts.

For the purposes of the Original TSAs, the Commission finds that expenses of DRA commodity used to increase the Keystone System's nominal capacity are not recoverable as part of the Variable Toll, for the reasons that follow. As previously stated in Section 4.1.1, the Commission finds that in certain uses, DRA commodity can be considered as a cost of expanding or increasing the Keystone System's nominal capacity.

At the outset, the ordinary meaning of an "operating" expense appears to be distinct from an "expansion" expense. The Commission agrees with the Complainants that an operating expense would generally be understood to be an expense of operating a system at a given level of capacity, rather than an expense that increases capacity above existing levels.

⁴⁷ See Phillips Canada and Cenovus, Written Final Argument, Filing ID [C20963-2](#) (16 September 2022) at PDF 18.[Phillips Cenovus Final Argument].

In examining the evidence regarding the surrounding circumstances in 2009⁴⁸ when the Canadian Cushing TSAs were agreed to, the Commission finds that parties reasonably understood that:

- the Cushing Expansion would result in approximately 590,000 bpd of total system nominal capacity⁴⁹;
- the Cushing Expansion would be a facility-based pump station expansion⁵⁰; and
- DRA commodity would not be used to provide the total expansion capacity, and operating expenses would be distinct from expansion costs.

The Commission considered the various representations that Keystone made in its open season materials and regulatory submissions regarding system capacity and the pump-based nature of the Cushing Expansion. The Commission also considered the availability of DRA commodity for heavy crude oil pipelines in 2009. DRA commodity was not commercially available for heavy crude oil pipelines at the time of the original design of the Keystone System⁵¹, Keystone did not begin testing DRA on the system until 2012, and DRA was not adopted by Keystone as an operational tool until 2014.⁵²

Parties to the Canadian Cushing TSAs would have reasonably understood in 2009 that the Keystone System would be expanded to approximately 590,000 bpd of nominal capacity. At the time, the reasonable understanding was that the 590,000 bpd of capacity could only be accomplished through the addition of facilities, the costs of which would be recovered as part of the Fixed Toll. Putting this together, the Commission finds that a reasonable understanding was that the Fixed Toll would be the committed shipper's payment for the costs required to increase the Keystone System's nominal capacity to approximately 590,000 bpd.

⁴⁸ *Ibid*, at PDF 18.

⁴⁹ See 2005 Notice, *supra* note 35 at PDF 6; Keystone 2006 Application Summary *supra* note 36 at PDF 8, and Keystone System Design, *supra* note 36 at PDF 1-2 ; OH-1-2007 Vol 6, *supra* note 35 at paras 8282-8285; Dr. Arthur Attach 3, *supra* note 39 at PDF 10; Cushing Application, *supra* note 40 at PDF 2; Cushing Application Summary, *supra* note 39 at PDF 1-2; Cushing System Design *supra* note 40 at PDF 1-2; Cushing Final Argument, *supra* note 40 at PDF 9; 2009 Notice, *supra* note 43 at PDF 5; Keystone XL Engineering, *supra* note 43 at PDF 4; Dr. Arthur Attach 7, *supra* note 4 at PDF 71.

⁵⁰ See 2005 Notice, *supra* note 35 at PDF 6; Keystone 2006 Application Summary, *supra* note 36 at PDF 8, and Keystone System Design, *supra* note 36 at PDF 1-2; Cushing Application, *supra* note 40 at PDF 2 ; Cushing Application Summary, *supra* note 40 at PDF 1-2; Cushing System Design, *supra* note 39 at PDF 1-2 ; Cushing Final Argument, *supra* note 40 at PDF 8-9.

⁵¹ See Keystone, CVR IR No. 1, Filing ID [C13198-2](#) (20 May 2021) at PDF 2.

⁵² See TransCanada Keystone, Timeline Figure, Filing ID [C19713-3](#) (24 June 2022) [Keystone Timeline Figure].

The evidence above, taken as a whole, demonstrates that the parties to the Canadian Cushing TSAs intended that:

- The Fixed Toll would be the payment from committed shippers for the costs of increasing the system's nominal capacity to approximately 590,000 bpd; and
- The Variable Toll would be the payment from committed shippers for the annual OM&A costs and expenses, not for the costs of increasing the system's nominal capacity.

To be clear, the Commission does not find that the Original TSAs obligate Keystone to build a system with a capacity of 590,000 bpd. Rather, obligations arise around what costs are recoverable within the two toll components. In this case, Keystone is required to recover costs of increasing the system's nominal capacity to approximately 590,000 bpd through the Fixed Toll component of the Canadian Cushing TSA. The Original TSAs do not allow for the costs of expanding system capacity, up to 590,000 bpd or beyond, to be recovered in the Variable Toll.

Keystone and the Complainants agreed that there was approximately 530,000 bpd of nominal capacity upon completion of the Cushing Expansion, which was lower than the anticipated nominal capacity of 590,000 bpd. The evidence demonstrates that Keystone then installed DRA skids and began using DRA commodity to address the lower capacity than what was anticipated. Keystone did not dispute these facts.⁵³

As previously discussed, the Commission finds that in certain uses, DRA commodity itself can be considered as a cost of expanding the Keystone System's nominal capacity. The Commission finds that the costs required to provide the approximately 590,000 bpd of nominal capacity, whether through facilities or the injection of DRA commodity, fall within the construct of the Fixed Toll component, not the Variable Toll. The DRA expenses incurred to provide the 590,000 bpd of nominal capacity are considered by the Commission to be necessary as a result of the initial design and construction of the Keystone System and Cushing Expansion, and are not appropriately considered as operating, maintenance or administration costs. The Fixed Toll refers to the development, construction and acquisition costs of the initial Keystone and Cushing Expansion facilities, facilities of which were reasonably understood in 2009 as resulting in approximately 590,000 bpd of nominal capacity.

Further, the Canadian Cushing TSAs involve a risk-sharing arrangement through the division of the Fixed Toll and Variable Toll components based on an understanding in 2009 that the Cushing Expansion would be a pump-based expansion. The pump-based expansion to 590,000 bpd of nominal capacity would inform a reasonable understanding regarding the degree of capital costs and OM&A costs that would result, and also inform a reasonable understanding of how the Fixed Toll and Variable Toll would be calculated. Increasing capacity through expense-intensive⁵⁴ DRA programs and recovering the associated DRA commodity expense from committed shippers in the Variable Toll therefore further upsets a fundamental

⁵³ See CER, Phillips Canada and Cenovus Complaint AO-001-RH-005-2020 – Hearing Transcript Vol 1, Filing ID [C21074-1](#) (26 September 2022) at para 106-107.

⁵⁴ E.g., Keystone submitted that total DRA commodity flowed-through the Variable Toll from 2015 to 2021 totaled \$121.7 million CAD and \$138.2 million USD, whereas the DRA skids installed from 2013 to 2015 totaled \$7.65 million CAD and \$7.86 million USD, TransCanada Keystone, Response to CER IR No. 3, Filing ID [C20254-2](#) (26 July 2022) at PDF 47 [Keystone CER IR No. 3].

objective understanding regarding the risk-sharing arrangement made between Keystone and committed shippers.

As it relates to the Canadian Patoka TSAs that were agreed to in 2009, the costs of expanding the Keystone System's capacity, such as through the Cushing Expansion, are to Keystone's account and recovered through incremental shippers' Fixed Tolls. Accordingly, DRA expenses incurred to expand nominal capacity, including to provide the approximately 590,000 bpd of expanded system nominal capacity that was anticipated from the Cushing Expansion, are similarly not appropriately recovered as part of the Variable Toll pursuant to the Canadian Patoka TSAs.

For these reasons, the Commission finds that expenses of DRA commodity that has been used to increase nominal capacity are not appropriately classified as operating, maintenance or administration costs or expenses for the purposes of the Original TSAs⁵⁵, and not recoverable as part of the Variable Toll.

In Sections 4.3 and 4.4, the questions of how the design of the Keystone System resulted in the use of DRA and other uses and applications of DRA in 2020 and 2021 are addressed.

4.3 Design of the Keystone System

The Commission heard submissions regarding the design of the Keystone System. The Complainants were of the view that Keystone, due to design errors or lack of foresight, failed to build the pipeline with the promised capacity and then used DRA to increase the capacity above the installed level.

Views of the Complainants

Mr. Vanderpool, on behalf of the Complainants, stated that Keystone did not construct its pipeline to achieve 590,000 bpd of 350 cSt heavy crude nominal capacity, as Keystone represented it would in its 2007 Open Season. Instead, Keystone constructed a pipeline system with a lower nominal capacity:

- Mr. Vanderpool's modeling suggested the Keystone System has a nominal capacity of approximate 465,000 bpd of heavy crude at flowing viscosity of 350 cSt; and
- Keystone admitted that, without DRA, the as-built nominal capacity of the system is approximately 535,000 bpd of heavy crude oil.

The Complainants argued that Keystone belatedly acknowledged that a significant capacity shortfall exists on the system. The constructed and operating Keystone System as of 2013 was only achieving approximately 530,000 bpd. Absent the use of DRA, the pipeline facilities are only able to transport approximately 530,000 bpd and Keystone has known this fact since at least 2013.

⁵⁵ Which provide that all "operating, maintenance and administration costs and expenses" are recoverable as part of the Variable Tolls.

Mr. Vanderpool concluded that Keystone's capacity shortfall is the result of design errors:

- The single most important design error on the part of Keystone is the assumption of flowing viscosity.
- Keystone built too few pump stations and the pump stations it built are incorrectly located, which occurred because of flawed assumptions during the design process. Keystone was not conservative in its assumption of flowing viscosity and Keystone constrained itself to using 16 locations on the conversion section for pump stations that were not chosen based on heavy crude hydraulics.
- The SNC-Lavalin engineers and Keystone missed the critical importance of flowing viscosity in the pipeline design and chose to make optimistic and ultimately incorrect assumptions, leading to inadequate pipeline capacity and the need to relieve bottlenecks with DRA in sections to achieve its target nominal capacity.

The capacity of the Keystone System is highly and directly sensitive to the viscosity of heavy oil, and the viscosity of heavy oil is highly dependent on temperature. SNC-Lavalin's thermal modeling did not anticipate reasonable real-world conditions and ultimately was a disservice to its client by under-sizing the pipeline and rendering the pipeline unable to achieve its intended 591,000 bpd of nominal capacity.

There is no evidence that Keystone or its consultants considered any variation in the soil temperatures or soil thermal conductivities from the limited data it gathered or approximated or calculated. Nor did Keystone or its consultants consider any sensitivity analysis or design factors around its use of oil flowing temperatures or oil flowing temperature thermal calculations. Keystone failed to apply common engineering principles of considering assumption sensitivities and failed to apply common engineering design quality assurance processes.

Mr. Vanderpool submitted that TransCanada retained SNC-Lavalin Inc. to carry out the hydraulic design of the pipeline. SNC-Lavalin Inc.'s hydraulic modelling depended significantly on variable viscosity as the heavy oil flowed along the pipeline. The SNC-Lavalin model assumed that oil entered the pipeline at Hardisty with a viscosity of 350 cSt at the "Western Canadian industry-standard reference temperature." SNC-Lavalin then made assumptions that the temperature of the oil would be equal to the ground temperature at Hardisty and that the temperature would increase significantly along the length of the pipeline due to both ground temperatures and heat generated during flow.

Additionally, when Keystone delivers flow into Cushing at full stream, oil in the Steele City to Patoka leg is idle, thus the oil quickly begins to cool and the viscosity increases. This increase in viscosity decreases capacity. This phenomenon was predictable, and known in advance at the time of design, and Keystone apparently relied on limited assumptions and failed to consider reasonably predictable possibilities.

Keystone only needs to use DRA because the pipeline, as built, can't provide 591,000 bpd of nominal capacity. Keystone is using DRA in lieu of capital expenditures to expand the capacity of the pipeline to what it represented to shippers and the regulator. DRA is not necessary for the normal operation of the pipeline.

2019 Edinburg Failure

The 29 October 2019 failure occurred 0.2 miles downstream of the Edinburg Pump Station. This failure was the result of a rupture in the manufacturing long weld seam of the pipe. Keystone reports in the United States Department of Transportation – Pipeline and Hazardous Materials Safety Administration (**PHMSA**) Form 7000.1 that the fatigue occurred prior to installation, such as during transport of pipe. Thus, the pipe was defective at installation. Mr. Vanderpool stated that Keystone may have been able to seek reimbursement from its suppliers for these manufacturing defects. In addition, Keystone incurred significant DRA costs to make-up for capacity reductions resulting from its own voluntary pressure reductions.

PHMSA 0.8 Design Factor

The standard design factor⁵⁶ for steel pipe in the United States, established by regulation, is 0.72. The Keystone special permit is the only special permit PHMSA has ever granted to a liquids pipeline allowing a pipeline to be designed and operated at a 0.80 design factor. Later, when the waiver was withdrawn, as was clearly a risk associated with pursuing the special permit, Keystone was constrained to 1297 pounds per square inch discharge pressure. The PHMSA 0.8 design factor waiver revocation, which was entirely of Keystone's making via its choice to pursue the waiver and construct the pipeline with thin-walled pipe, impaired its throughput capacity. With or without the PHMSA waiver, the as-built pipeline is incapable of achieving a non-DRA nominal capacity of 591,000 bpd.

Views of Keystone

Keystone submitted that the Keystone System was designed based on robust and prudent assumptions and was constructed to operate at a capacity of 591,000 bpd. However, Keystone encountered the following unforeseeable circumstances outside of its control which limited capacity:

- Soil temperature deviations;
- the 0.8 design factor;
- lower pump station discharge pressures; and
- increased market demand and flexibility for volumes to Cushing.

Keystone stated that the SNC-Lavalin Steady State Hydraulic Report⁵⁷ is evidence of a robust and appropriate design. The report demonstrates that the Keystone System was designed and constructed in line with industry best practices and customary processes utilizing reasonable assumptions and the best information available at the time resulting in a fit-for-purpose pipeline capable of delivering the required capacity to meet shipper demand.

⁵⁶ A design factor for a pipeline is a percentage or fraction applied to the specified minimum yield strength of the pipe material that defines the maximum allowable pressure at which the pipeline can safely operate.

⁵⁷ See Keystone, P66 Husky IR No. 2.15(a), Filing ID [C13636-28](#) (18 June 2021) at PDF 11-53.

Keystone acknowledged that the Keystone System was only able to flow 530,000 bpd in the first few years of system operations when there was PHMSA pressure restriction in place and the pump vibration issues, but those issues have both since been resolved. As a result:

- Keystone's actual DRA expenses in 2021, once the pressure restrictions caused by the Edinburg incident were lifted, have decreased significantly, notwithstanding that capacity has consistently been at or above the design nominal capacity.
- Following the de-rate being lifted in February of 2021, the evidence is that the Keystone System successfully achieved an annual average throughput of 602,000 bpd system-wide and that the DRA expense for the entire system (both Canada and the United States) was only \$15 million total, or 2.5 per cent of total OM&A.

DNV, on behalf of Keystone, submitted that Mr. Vanderpool bases a large part of his evidence on an assertion that Keystone's hydraulic design should have used a constant flowing viscosity of 350 cSt. This viscosity is not appropriate for the design of a cross-country diluted bitumen pipeline that in reality has a wide variation of viscosity, almost exclusively much lighter than 350 cSt. DNV submitted that they are familiar with the details of the hydraulic design of dozens of heavy crude pipelines worldwide, including several cross-country Canadian diluted bitumen pipelines similar to Keystone. Every one of these pipeline designs did some form of calculation of the flowing temperatures. A constant flowing viscosity has not been used in any cross-country heavy crude pipeline design study of which DNV is aware of, and certainly not a viscosity as high as 350 cSt. The consequence of the use of a 350 cSt constant flowing viscosity assumption would have been a substantial and unnecessary increase in project cost and schedule.

DNV submitted that it has not found anything that would be classified as flaws, mistakes, or errors in the Keystone System design process or data used. Mr. Vanderpool's primary claim is that Keystone was in "error" because they should have been more conservative in certain areas. This claim relies on after-the-fact critique of the design, using subsequent pipeline behavior for which SNC-Lavalin had no basis to require in their design at the time. More importantly, Mr. Vanderpool does not provide any criteria or guidelines that could have been used at the time to quantify how much more conservative they should have been.

Soil temperature deviations

Despite using the best available data at the time for modeling during the design phase, data collected has showed that in operational reality, soil temperatures are different during operations at a few locations along the Keystone route than originally modeled for design. During the design phase of the pipeline, Keystone utilized the best available soil temperature data to create ground temperature profiles. This is an important factor because soil temperature affects the temperature of the crude oil in the pipeline and thus affects its viscosity: the warmer the oil, the easier it flows in the pipeline.

0.8 design factor

While the application to PHMSA for the waiver was completely within Keystone's control, what was not within Keystone's control was the exogenous industry-wide advisory bulletin issued by PHMSA that effectively and temporarily reduced Keystone's design factor to 0.72 and, subsequently, 0.743. In Keystone's view, it is unreasonable for a pipeline designer to be expected to incorporate a potential change in regulation resulting from exogenous factors such

as industry-wide material and manufacturing defects into its design assumptions. An industry-wide material defect experienced during the lifecycle of a pipeline is wholly independent of a design assumption made in the development of a project.

Keystone submitted that once the interim guidelines were met, operating pressures were again increased to design intent levels that reflected a 0.80 design factor. There were no reductions to available capacity absent the use of DRA for 2020 and 2021 resulting from the design factor impact, since it has been operating with a 0.80 design factor since Q4 2017. It is no longer an operational reality for Keystone and has no further capacity impact on the system.

Lower pump station discharge pressures

The Keystone System was designed based on certain assumptions regarding the operating pressures required to ensure the safe operation within code-required pressure limits under upset conditions. Keystone engaged in extensive diligence regarding surge analysis early in the project through retention of SNC-Lavalin, a qualified and experienced engineering firm. Outputs from this analysis were utilized appropriately in the steady state hydraulics and overpressure system design.

Despite early analysis and frequent updates, as the design details matured and the pipeline route was refined throughout construction, some pump stations had lower discharge pressures imposed than initially modeled, which resulted in flow restrictions. This is an example of a post-design occurrence that could not have been reasonably accounted for during design.

Increased market demand and flexibility for volumes to Cushing

At the time of design, the destinations of flows of crude oil were forecast based on the best information known at the time. However, despite shippers contracting to a specific delivery point, Keystone facilitated the optionality for shippers to divert to alternate delivery points. Beginning in 2013, shipper interest to deliver volumes south to Cushing increased, including regular and significant diversions from shippers who were contracted to Wood River/Patoka delivery points, including the Complainants. This caused the percentage of volumes destined for Cushing to move outside of the original design assumption.

A lower proportion of throughput on the East-West leg to Wood River/Patoka compared to design has resulted in greater cooling of the oil than designed and therefore required DRA to mitigate the nominal capacity impact due to the “stop-cool-restart effect”⁵⁸.

Crude oil markets react to supply and demand fundamentals as well as market disruptions, making it difficult to predict the demand for specific delivery points beforehand, particularly before the construction of Keystone. If Keystone XL had been constructed and put into service, the “swing” mode operation, currently in effect, would no longer occur at Steele City during typical operations. With Keystone XL now terminated, Keystone submitted that it is evaluating options which optimize operating conditions on the system: this could include options to reduce operating costs, maintaining reliability and integrity, and continuing to facilitate shipper flexibility such as delivery point diversions.

⁵⁸ Described in detail in Keystone, Reply Evidence, Filing ID [C19713-2](#) (24 June 2022) at PDF 17-18 [Keystone Reply Evidence].

2019 Edinburg Failure

Keystone disagreed with Mr. Vanderpool's claim that the Edinburg incident was related to original construction issues. Keystone submitted that:

- The PHMSA Form 7000.1 report clearly states that the sub-cause was related to a manufacturing defect and that the fatigue or vibration-related contributing factor was due to “[a]bnormal seam geometry facilitated crack initiation and accelerated growth.” The report does not describe transport fatigue as a cause. The Edinburg incident was caused by a manufacturing defect – a suspected radial offset.
- As common industry practice, Keystone relied on third-party surveillance and the pipe manufacturer to perform its inspection of each pipe segment. It had also run an ILI as standard practice, but the feature was not detected. As a result, the defect was not detectable using reasonable industry standard inspection methods.
- No costs were included in the 2020 and 2021 estimated Variable Tolls that are associated with the 2019 incidents.

Operational Flexibility

Keystone submitted that it has taken steps to provide shippers with commercial operational flexibility, which the use of DRA has, in part, facilitated. Three such examples of commercial operational flexibility are: the accommodation of shipper-specific commodities which have adverse capacity impacts on the system, the ability to accommodate shippers' requests for diversions from Wood River/Patoka to Cushing and the Gulf Coast, and the ability to accommodate shippers' requests for timing changes of their monthly nomination deliveries that further hinder the ability of Keystone to recover from the cooler viscosities before swinging back for delivery to Cushing.

4.3.1 Commission analysis and findings

The Commission considered the evidence on the record regarding the design and construction of the Keystone System to assess how DRA has been used by Keystone, and whether certain uses of DRA provide for nominal capacity that was to be paid for as part of the Fixed Toll. As the Commission found under Section 4.2.1, under the Canadian Cushing TSAs, the costs required to provide the approximately 590,000 bpd of nominal capacity are to be paid for by committed shippers through the Fixed Toll, not the Variable Toll. The Commission finds, more specifically, that the expenses of DRA commodity used to provide nominal capacity as a result of inaccurate design assumptions of the initial Keystone System and Cushing Expansion and construction of the system (e.g., higher flowing viscosities, lower pump station discharge pressures) fall within the Fixed Toll component of the Canadian Cushing TSAs, for the reasons that follow.

Keystone provided evidence that it used industry standards and best practices in the design of the initial Keystone System and Cushing Expansion. However, actual conditions on the system were different from several of the design assumptions, which resulted in lower nominal capacity than anticipated. The nominal capacity without DRA is lower in 2020 and 2021 than anticipated due to factors relating to the initial design assumptions and construction of the system, which Keystone has used DRA to address. The costs required to provide the approximately 590,000 bpd of nominal capacity are to be paid for by committed shippers through the Fixed Toll

under the Canadian Cushing TSAs, not the Variable Toll. The Commission is of the view that determining the proper tolling treatment of DRA commodity expense pursuant to the Original TSAs does not require an assessment of whether the factors relating to the initial design assumptions and construction of the system were reasonably unforeseeable or not.

The Commission finds that there were ongoing impacts to capacity on the Keystone System in 2020 and 2021 that relate to inaccurate design assumptions of the initial Keystone System and Cushing Expansion. At a high level, capacity in 2020 and 2021 was impacted by:

- Flowing viscosities being higher than assumed in the design of the system. Factors contributing to the higher flowing viscosities include lower soil temperatures than assumed⁵⁹, more volumes heading to Cushing than assumed⁶⁰, and different shipper-specific commodities than assumed.⁶¹
- Lower pump station discharge pressures than accounted for in the design of the system.⁶²

Based on the foregoing, the Commission concludes that DRA commodity was used in response to these capacity impacts and constituted costs of expanding the Keystone System's nominal capacity. The Commission finds that DRA commodity that has been used to address the sustained impacts to capacity in 2020 and 2021 - such impacts resulting from real world conditions differing from Keystone's design modeling assumptions - is necessary as a result of the design and construction of the initial Keystone System and Cushing Expansion. Those uses of DRA do not address operational impacts to capacity that would be expected to be more temporary in nature.

Keystone acknowledges that it used DRA commodity in 2020 and 2021 to mitigate higher flowing viscosities resulting from the factors discussed above and to mitigate the lower pump station discharge pressures.⁶³ In Keystone's view, these uses are operational in nature, since the purpose was to mitigate unforeseeable operational circumstances. The Commission disagrees with Keystone's view that those uses are operational in nature. The Commission finds that DRA commodity used to increase capacity due to higher flowing viscosities than assumed in the design of the system (including as it relates to lower soil temperatures, more volumes heading to Cushing, and for shipper-specific commodities), and also DRA commodity used to address the lower pump station discharge pressures, provide for nominal capacity that is necessary as a result of capacity shortfalls resulting from the initial design and construction of the system. Therefore, the expenses of DRA commodity used for those purposes are

⁵⁹ Keystone submitted that soil temperature affects the temperature of the crude oil in the pipeline and thus affects its viscosity. Soil temperatures are different during operations at a few locations along the Keystone route than originally modeled for design (Keystone Reply Evidence, *supra* note 58 at PDF 13).

⁶⁰ A lower proportion of throughput to Wood River/Patoka (and a greater proportion to Cushing) compared to design has resulted in greater cooling of the oil than designed, and a higher viscosity of oil, and therefore required DRA to mitigate the nominal capacity impact, *ibid* at PDF 17.

⁶¹ Certain commodities like winter synbit, which is a seasonal blend of synthetic crude and bitumen, are known to have adverse capacity impacts on the system, *ibid* at PDF 30.

⁶² Some pump stations had lower discharge pressures imposed than initially modeled, *ibid* at PDF 16.

⁶³ Keystone CER IR No. 3, *supra* note 54 at PDF 2-7.

recoverable in the Fixed Toll⁶⁴ pursuant to the Canadian Cushing TSAs (which was subject to a one-time capital variance adjustment, the period for which has passed), and not the Variable Toll.

The Commission continues its assessment in Section 4.4 as it relates to other uses and applications of DRA.

4.4 Other uses of DRA

The Commission heard submissions regarding the various uses and applications of DRA other than for providing for the nominal capacity anticipated from the Cushing Expansion.

Views of the Complainants

Mr. Vanderpool, on behalf of the Complainants, submitted that a pipeline operating company can use DRA primarily for one of two reasons:

- 1) To expand capacity by achieving a higher flow-rate because the friction loss is reduced by the DRA.
- 2) As a substitute for power or consumption of electricity. Mr. Vanderpool submitted that he has seen no evidence or analysis by Keystone of using DRA to reduce electrical power demand or consumption.

The Complainants submitted that, to the extent Keystone were to prudently utilize DRA to optimize its total expenses associated with a fixed pipeline capacity (e.g., minimizing the total of DRA costs and fuel and power expenses), the costs associated with such use could be appropriately included within the Variable Toll.

The Complainants argued that there could be a legitimate role for DRA. DRA is an important technological innovation and its use in maintaining existing capacity and the temporary short-term maintenance of capacity is of value. While using DRA to mitigate pressure restrictions could be a legitimate operational application of DRA in the abstract, Keystone admitted that it requires DRA to meet its throughput obligations even in the absence of pressure restrictions on the system. Notably, Keystone says that it cannot separately account for DRA used for different purposes. All of Keystone's operational justifications for using DRA are ultimately attributable to the flawed hydraulic design of the pipeline and the capacity shortfall of the as-built pipeline facilities.

Dr. Arthur, on behalf of the Complainants, submitted that:

- Keystone has not provided evidence that any pressure reductions would have decreased capacity from a base nominal level of 591,000 bpd to below the 530,000 bpd needed to transport the original committed volumes.

⁶⁴ Which refers to development, construction and acquisition costs.

- There is no evidence that Keystone’s use of DRA during the pressure reductions was done in order to provide sufficient capacity to meet its original Committed Shipper volume level of 530,000 bpd.
- Rather, its use of DRA during the period of pressure reduction was done in order to provide incremental capacity for the incremental committed capacity as well as incremental uncommitted volumes transported during those periods.

Views of Keystone

Keystone submitted that contrary to Mr. Vanderpool’s understanding that DRA is used to either expand capacity or as a substitute for power, DRA can be used for multiple applications, as further discussed below. Keystone argued that based on the plain wording of the TSAs, and the surrounding evidence of the parties’ intentions, costs incurred by Keystone to mitigate things like planned maintenance and unplanned outages are clearly operating and maintenance costs that are recoverable through the Variable Toll. Most of the pipeline company’s focus when operating and maintaining its system is to mitigate those types of circumstances to improve reliability and optimize system operations.

Mitigation of Planned Maintenance and Unplanned Outages

Keystone has used DRA during operations when unplanned failures are experienced, or when planned maintenance is scheduled. These operational instances are examples of times when DRA was applied to mitigate capacity loss and maintain flow rates to the greatest extent possible to meet current capacity commitments and not “expand” capacity above what it was prior to the event occurring.

Mitigation of Higher Viscosities

One of the primary reasons Keystone has used DRA has been to alleviate the hydraulic bottleneck on the pipe segment between Steele City and Patoka. As discussed in Section 4.3, the Keystone System was designed based on an assumption that a certain percentage of volumes would reach two delivery points along the East-West leg (Wood River/Patoka), and in late 2013, Keystone experienced the beginning of a deviation of expected volumes from the design basis (i.e., increased flows to Cushing, Oklahoma). This was not due to design errors but due to market demand and Keystone’s facilitation of shipper optionality.

Pressure Restrictions

Keystone has experienced integrity events and pressure restrictions in the 12 years it has been in operation. For example, as necessary due to the PHMSA pressure restriction issued in 2009 and fully lifted in 2017. Keystone has also taken the necessary and appropriate steps of imposing pressure restrictions following an incident to continue operation of the pipeline system in a safe manner.⁶⁵

Without the application of DRA as an operational tool to mitigate the pressure restrictions imposed after these events, shippers would not have been able to ship their full contracted capacity or any additional volumes such as make-up rights or spot. These incident events are

⁶⁵ See Keystone Timeline Figure, *supra* note 52.

examples of times when DRA was applied not to “expand” capacity or increase flow rates above what they were prior to the event occurring, but to mitigate impacts and maintain capacity while under a pressure restriction to ensure the safe and reliable operation of the system.

For 2020 tolls, Keystone forecasted an increase in the utilization of DRA to operationally mitigate the effects of pressure restrictions. Absent increased DRA injections, the pressure restrictions would have negatively impacted all shippers’ ability to transport crude oil on the Keystone System. Keystone planned a series of additional inline tool runs to look for features similar to those identified with the October 2019 release in Edinburg, North Dakota and to continue investigations related to ongoing routine pipeline integrity work (Conversion Section). Keystone placed large segments of the pipeline under voluntary pressure restrictions to ensure the safety and reliability of the system.

Keystone estimated the duration of each restriction and the cost of the DRA incurred as it relates to the 2020 and 2021 estimated Variable Tolls:

- Conversion Section:
 - 2020 estimate: 12 months, \$7.98 MM CAD.
- Voluntary pressure restrictions related to the October 2019 event:
 - 2020 estimate: 12 months, \$31.9 MM CAD.
 - 2021 estimate: 6 months, \$2.9 MM CAD.

Pressure restrictions were imposed on the Keystone System in February 2019 and remained in place until February 2021. The pressure restrictions imposed on the Canadian portion of the Keystone System were mitigated with DRA, therefore there was no subsequent resulting throughput reduction.

Increase System Reliability and Performance

Throughout time and once many of the temporary restrictions were alleviated, the availability of DRA injection points across the Keystone System continued to add operational benefits. The necessity for DRA shifted from being required to achieve the committed capacity through continuous injection to mitigate pressure restrictions to being available to mitigate potential future events.

The presence and availability of DRA as an operational tool has enabled Keystone to increase system performance capabilities through mitigation of both scheduled maintenance and unscheduled outages, shipper specific commodities that presented bottleneck issues during winter seasons (i.e., winter synbit), temperature management, and the ability to mitigate for future pressure restrictions. As an example, Keystone has now implemented an optimization strategy seeking to reduce power expenses during periods of peak prices through targeted DRA usage.

Theoretical DRA Expense Allocation Methodology

Keystone stated that once DRA is injected into the system it is not feasible to calculate with any reasonable accuracy the quantity of DRA associated with a specific barrel, shipper, even to operational category, given the numerous factors that simultaneously influence throughput on the Keystone System at any given point in time. There are multiple variables that impact DRA

consumption that do not remain constant over time and constantly evolve as the system is operated. The interaction of these variables and the multiple differing uses for DRA create a dynamic environment that does not allow Keystone to easily ascribe a static characterization for the type of demand for each DRA molecule.

Further, the relationship between incremental pipeline throughput facilitated through the use of DRA and the associated incremental DRA is not represented by a linear function and is not independent of other operating inputs such as power. As a result, the DRA required to support higher throughput will vary based on the amount of DRA already being consumed for other operational factors.

Taking into account this background, Keystone provided a method of attributing DRA expense to specific categories of usage.⁶⁶ At a high level, this method defines a baseline requirement of DRA, which identifies the DRA used to mitigate the capacity impacts associated with soil temperatures, lower pump station discharge pressures and flexibility to Cushing. The baseline can then be broken down to identify the estimated DRA associated with each factor. The next step is to identify DRA required to mitigate operational events, which would need to be made in real time to capture any other operational factors. The now identified baseline and incremental DRA concentrations would then be converted into a percentage of the overall DRA consumed. When the total cost of DRA has been determined over a given timeframe, the estimated percentage can be applied to this total to provide a notional indication of the attributable cost for each category. Keystone stated that the above method of attributing DRA expense to specific categories of usage is not empirically accurate, relies on a number of assumptions, and would be very administratively complex to implement each time the Variable Toll is set.

⁶⁶ For the full methodology, see Keystone CER IR No. 3, *supra* note 54 at PDF 2-7.

Recognizing its concerns as discussed above, Keystone provided the resulting allocation of DRA expense to specific categories of use, as requested by the Commission in an IR, per the following table:

Table 4-2 – Theoretical Base Keystone DRA Expense Allocation Methodology

	Lower than designed pump station discharge pressures	Lower than designed soil temperature and discharge pressures	Increased market demand and flexibility provided to shippers (e.g., diversions)	Mitigation of planned maintenance and unplanned outages	Mitigation of Higher Viscosities	Mitigation of bottlenecks due to pressure restrictions imposed	Increasing system reliability and performance (e.g., Winter Synbit and Power Optimization in Alberta)
2020 Total Base Keystone DRA Expense (Mixed Currency \$MM)	\$55.31						
2020 Average Allocation %	6%	11%	15%	2%	4%	55%	6%
2020 Base Keystone DRA Expense Amount (Mixed Currency \$MM)	\$3.36	\$6.18	\$8.27	\$1.25	\$2.10	\$30.64	\$3.53
2021 Total Base Keystone DRA Expense (Mixed Currency \$MM)	\$15.26						
2021 Average Allocation %	16%	29%	38%	5%	2%	9%	1%
2021 Base Keystone DRA Expense Amount (Mixed Currency \$MM)	\$2.37	\$4.36	\$5.84	\$0.81	\$0.35	\$1.39	\$0.16

Implications of not allowing DRA expense recovery

Keystone submitted that the use of DRA provides ongoing benefits to the system and shippers by enabling more shipper barrels to be transported and by providing shippers operational flexibility. Absent an ability to pass-through the DRA expense, Keystone submitted that:

- Keystone would likely revise, limit, or cease the enablement of shipper flexibilities (shipper-specific commodities, diversions, timing changes of deliveries), subject to the terms of the TSAs and tariff.
- Keystone would expect modifications to its operating philosophy such that the mitigation efforts currently using DRA will be more limited, as well as decisions regarding increased system reliability and optimization of power expenses during periods of peak prices would be reconsidered.
- Term Shippers may not be able to utilize their accumulated make-up rights volume to the same degree.
- The culmination will likely result in a decrease in barrels being shipped, likely offsetting the reduction in OM&A costs and resulting in a higher Variable Toll.
- Keystone understands the importance of maintaining customer relationships and will continue to work with its shippers to address and resolve any ongoing or future operational challenges; however, Keystone expects that mitigating the potential negative impacts will take time and may result in other incremental costs. To mitigate negative impacts, Keystone could:
 - Work with shippers to develop new services;
 - Renegotiate the TSAs;
 - Construct additional facilities for reliability purposes which would constitute a different type of incremental cost.

Keystone stated that, in the event it was prevented from including DRA as an operating cost in the Variable Toll, it expects it would significantly reduce the use of DRA, which would have negative impacts on service reliability and shipper flexibility. Keystone also submitted that it plans to target an annual average nominal capacity of 644,000 bpd upon commencement of the full 50,000 bpd of incremental contracts from its 2019 Open Season. Keystone confirmed that it will continue to maintain approximately 6 per cent of the nominal capacity for uncommitted service, subject to operating conditions.

4.4.1 Commission analysis and findings

The Commission finds that DRA commodity used to mitigate the impacts of pressure restrictions, planned maintenance activities and unplanned outages is properly categorized as an operating expense and is recoverable in the Variable Toll, for the reasons that follow.

The capacity impacts resulting from pressure restrictions and maintenance activities (planned and unplanned) are different in nature from the nominal capacity shortfalls resulting from Keystone's design assumptions. Pressure restrictions and maintenance activities are typically temporary in nature, and typically do not relate to long-term and sustained shortfalls of nominal capacity that result from the design and construction of the system. The Commission finds that DRA commodity used in 2020 and 2021 in response to pressure restrictions, maintenance

activities and unplanned outages are appropriately viewed as related to the temporary maintenance of existing capacity. These operational uses of DRA provide for increased system reliability and are not required to provide a sustained and long-term nominal capacity of approximately 590,000 bpd, and therefore the expenses of such are recoverable in the Variable Toll pursuant to the Original TSAs.

The Commission also finds that it is reasonable that Keystone used DRA commodity in response to pressure restrictions in order to maintain and provide for uncommitted capacity. As a common carriage pipeline, the Commission expects Keystone to take reasonable actions to ensure the availability of uncommitted capacity, including during temporary restrictions and maintenance activities.

Given the above, the Commission finds that where DRA commodity has been used to mitigate the capacity impacts of pressure restrictions, maintenance activities, and unplanned outages, those expenses are appropriately classified as operating expenses for the purposes of the Original TSAs and are recoverable in the Variable Toll.

4.5 Commission conclusions regarding DRA

4.5.1 Commission analysis and findings

For the purposes of the Original TSAs considered in this proceeding, the Commission finds that not all DRA commodity expense is recoverable in the Variable Toll, for the reasons discussed in Chapter 4. The Commission's key findings in this chapter are:

- In the context of the Original TSAs, DRA commodity in certain uses can be considered as a cost of expanding or increasing the Keystone System's nominal capacity.
- Under the Canadian Cushing TSAs, the Fixed Toll is the payment from committed shippers for the costs of increasing the system's nominal capacity to approximately 590,000 bpd.
- The Variable Toll is the payment from committed shippers for the annual OM&A costs and expenses, not for the costs of increasing the system's nominal capacity.
- Expenses of DRA commodity used to increase nominal capacity are not recoverable in the Variable Toll.
- DRA commodity used to increase capacity due to higher flowing viscosities than assumed in the design of the system (including as it relates to lower soil temperatures, more volumes heading to Cushing, and for shipper-specific commodities), and also DRA commodity used to address the lower pump station discharge pressures, provide for nominal capacity that is necessary as a result of Keystone's initial design and construction of the system, and therefore are not recoverable in the Variable Toll.
- DRA commodity used to mitigate the impacts of pressure restrictions, planned maintenance activities and unplanned outages are properly categorized as operating expenses and are recoverable in the Variable Toll.

Given these findings, Keystone will need to allocate DRA expense to different categories of use for calculating 2020 and 2021 tolls. Keystone provided a methodology⁶⁷, which in its view is empirically incorrect, relies on a number of assumptions, and would be administratively complex to implement. The Commission does not make findings on the allocation methodology that must be used, noting that the one offered by Keystone in response to the Commission's IR was not well tested by parties in this proceeding. The Commission expects Keystone to discuss the allocation methodology with its shippers. The methodology may consider factors such as the associated accuracy, fairness, and administrative burdens. The methodology should be transparent in how categories of DRA use are determined, as well as transparent in the potential layering of cost categories.⁶⁸ If Keystone is unable to achieve unanimous support from its shippers for the methodology used, it must include the detailed methodology in its refiling of 2020 and 2021 tolls and clearly demonstrate how DRA expense amounts were specifically allocated to different uses.

The Commission considered Keystone's submissions that the use of DRA provides shipper benefits such as downward pressure on Variable Tolls, operational flexibility, additional transportation of shipper barrels, and the facilitation of make-up rights. While there may be common shipper benefits associated with the use of DRA, the Commission considers such benefits to be unrelated to interpreting the terms of the Original TSAs regarding the appropriate tolling treatment of DRA expense.

Keystone stated that in the event it was prevented from including DRA as an operating cost in the Variable Toll, it expects it would significantly reduce the use of DRA. Keystone also confirmed that it will continue to maintain approximately 6 per cent of the nominal capacity for uncommitted service, including upon commencement of the full 50,000 bpd of contracts from its 2019 Open Season. Keystone, as an oil pipeline company regulated by the CER, must comply with the common carriage requirement pursuant to section 239 of the CER Act, consistent with previous regulatory decisions⁶⁹ regarding uncommitted capacity reservation amounts. Keystone must take appropriate steps to ensure the long-term availability of uncommitted capacity on the system. The Commission therefore directs Keystone to report to the CER the uncommitted volumes that have been transported on the system as part of its Guide BB – Financial Surveillance Reports.

⁶⁷ Keystone CER IR No. 3, *supra* note 54 at PDF 2-7.

⁶⁸ The layering of cost categories may be necessary due to the DRA performance curve which has diminishing returns on drag reduction past a certain point.

⁶⁹ OH-1-2008, *supra* note 6 at PDF 28.

5 Capital costs

In addition to the Complainants' objections related to the treatment of the DRA commodity expense covered in Chapter 4, the Complainants separately opposed Keystone's inclusion of any capital costs in the Variable Toll, whether related to the use of DRA or not. In the Complainant's view, such inclusion is inconsistent with the terms of the TSA, violates the CER Act and Commission precedent, and leads to committed tolls being unjust and unreasonable.

This chapter begins, in Section 5.1, by considering whether the Original TSAs allow any capital costs to be included in the Variable Toll. Given that the Commission concludes that the Variable Toll can include some capital costs, Section 5.2 then considers whether the capital costs from two particular projects can be included in the Variable Toll, as the Complainants raised particular concerns with flow-through treatment of these two projects. Further, Section 5.3 considers whether rate of return can be added to any costs recovered in the Variable Toll, another point disputed by the Complainants.

5.1 Treatment of capital costs in the TSAs

For each capital cost, Keystone determined whether it should be excluded or included in Variable Tolls pursuant to the TSAs. For those that Keystone determined should be included in Variable Tolls, Keystone included the costs in its Variable Toll calculations in one of two ways, depending whether the costs qualify as a NRA under the terms of the TSAs.⁷⁰ Specifically, under Keystone's calculations, capital costs that were reflected in Variable Tolls were either: (i) flowed through to the Variable Toll in the same year the costs were incurred, where they did not qualify as an NRA (**Non-NRA Capital**), or (ii) flowed through over multiple years (i.e., amortized), where they did qualify as an NRA (**NRA Capital**).

The Complainants disagreed that any capital costs can be included in Variable Tolls pursuant to the TSAs. The Complainants' expert, Dr. Arthur, submitted that the following amounts should be removed from Keystone's Variable Toll calculations, pertaining to capital costs: \$12.1 million of Non-NRA Capital and \$6.5 million of amortized NRA Capital in 2020 Final Variable Tolls; and \$9.9 million of Non-NRA Capital and \$8.1 million of amortized NRA Capital in 2021 Estimated Tolls. These amounts do not include the rate of return adder for Non-NRA Capital, which is covered in Subsections 5.3.2 and 5.3.3, below.

Views of the Complainants

The Complainants argued that the TSAs contemplate that the Fixed Toll captures all capital costs. The Complainants pointed to the definitions within the TSAs in support of their position regarding where capital costs fall, including the capital variance adjustment for the Fixed Toll equal to 50% of the difference between Keystone's estimated and actual costs to develop, construct and acquire the facilities. The Complainants highlighted that unlike the definition of Fixed Toll, the definition of OM&A costs in Appendix B of the TSAs does not include the word

⁷⁰ The TSA stipulates that, "Where maintenance costs and expenses associated with any single expenditure or expenditures in respect of the same or a common matter or project exceed Cdn\$2,000,000, such amounts will be treated as a non-routine adjustment ("NRA")."

“capital” in describing the costs to include in the Variable Toll, except with reference to “capital taxes”.

With regard to the Variable Toll defining OM&A costs by reference to “costs and expenses”, the Complainants submitted that if that had meant “maintenance capital costs and expenses,” the TSAs could have included the word “capital” in the Variable Toll methodology section just as the TSAs include “capital” in the Fixed Toll methodology section. Further, had the TSAs used the word “costs” as a synonym for “capital” in one section of the TSAs, it would have been expected to also do so in other sections – which it does not do. This suggests the terms are not synonymous. The TSAs’ reference to capital in relation to costs under the Fixed Toll but not under the Variable Toll, is a clear signal.

The Complainants also submitted that apart from a single sentence in Keystone’s open season materials, Keystone’s prior representations to its shippers and regulators were specific and clear, indicating that the Fixed Toll would recover all prudently incurred capital-related costs associated with construction, maintenance, and operation, while the Variable Toll portion would only flow-through prudent non-capital costs. In this regard, the Complainants pointed to excerpts from several documents, including from Keystone’s open seasons and submissions to the NEB and FERC, and NEB reports related to Keystone. Examples of Keystone’s prior representations included:

- Keystone’s 2005 open season materials indicated, “[t]he fixed portion of the toll [...] is designed to recover the capital invested. The variable portion of the toll is a flow through of actual operating costs, adjusted annually.” The 2007 and 2009 open seasons indicated the same, replacing “operating costs” with, “operating, maintenance and administrative costs”.
- Keystone’s applications to the NEB in OH-1-2007 and OH-1-2008 referred to tolls having “a fixed component, which [...] recovers Keystone’s capital-related costs assuming full system utilization, and a variable component that recovers Keystone’s operating, maintenance, and administrative costs.”
- Keystone’s applications in OH-1-2007 and OH-1-2008 also referred to the Variable Toll as allocating “total estimated operating, maintenance and administrative expenses (“OM&A”)”. They then indicate “The Variable Toll will change over time depending on actual OM&A and throughput volumes, and is intended to provide Keystone with a flow-through recovery of actual operating costs for the actual volumes shipped.”
- Keystone’s 2008 and 2011 filings with the FERC referred to the variable component of the committed rate as recovering or reflecting “non-capital costs”.
- The noted “exception” in Keystone’s open season materials indicated, “[f]lowing through operating, administration and maintenance capital and expense costs will also provide cost transparency.”

The Complainants argued that the tolling provisions of the TSAs must be interpreted in light of the tolling methodology they are meant to implement. Keystone’s prior representations about how the tolling structure was intended to operate make it clear that nothing extra was meant by the words “costs” and “expenses” in describing the Variable Toll. Further, the Complainants argued that if Keystone is allowed to flow through capital costs incurred for system reliability, Keystone would effectively be a cost-of-service pipeline. This would lock in a rate of return for Keystone’s initial investment, which means Keystone bears no capital risk at all. This is contrary

to Keystone's repeated prior representations that its tolls were not based on a cost-of-service methodology.

With respect to the one sentence in Keystone's open season materials that explicitly mentions "flowing through [...] maintenance capital", the Complainants argued that it appears to be an editorial oversight that is not consistent with the terms of the TSAs. The Complainants highlighted that Keystone's earlier proposed commercial terms included three sentences that specifically referred to maintenance capital in the Variable Toll. Several months later, a draft open season document had maintenance capital costs removed from two of the three sentences, and then in the final 2005 open season materials, two of the three sentences saw further minor edits while the third was removed. The Complainants argued that this strongly indicates that Keystone initially proposed including maintenance capital costs in the Variable Toll, but negotiations resulted in that proposal not being adopted during subsequent negotiations.

The Complainants also, through evidence or argument, submitted that:

- Keystone could and should have accounted for future capital costs in negotiating a levelized fixed toll with its shippers. For Keystone to flow through ongoing capital costs would be to undermine the concept of the pipeline bearing capital cost risk, as was clearly intended in the fixed-variable toll design represented by Keystone.
- If any ambiguity remains from the use of both "costs" and "expenses" in the TSAs, the *contra proferentem* maxim of contract interpretation stipulates that when an ambiguity exists with respect to a contractual term, the ambiguity should be construed against the party who drafted the contract – that is, against Keystone in this case.
- Keystone repeatedly used the terms "costs" and "expenses" synonymously when discussing the Variable Toll, such as in applications to the NEB in OH-1-2007 and OH-1-2008. This pattern means it cannot be inferred that the word "costs" in addition to the word "expenses" in the Variable Toll section of the TSAs was objectively meant by the parties to up-end the clearly and repeatedly articulated division of capital versus operating costs between the Fixed and Variable Toll.
- In describing the Variable Toll methodology, the TSAs use of the phrase "all [OM&A] costs and expenses" is rationally explained by the fact that the permissible OM&A costs encompass both expense amounts incurred in a specific year as well as NRA costs that are annual amortizations of expense amounts incurred in the current or prior years. Similarly, "costs attributable to changes in laws and regulations" are among the listed OM&A costs and expenses and would be based upon the difference between the total amount incurred in a given year relative to the amount that would have been incurred based on the previously effective laws and regulations; this is a "cost" amount that is neither a current "expenditure" or "expense".
- Had it been so intended, Keystone could have easily made it clear that maintenance capital was to be recovered in the Variable Toll, as was done in a pair of toll settlements on other CER pipelines, introduced in evidence
- Keystone's NRA Capital and Non-NRA Capital "are capital investments by Keystone to develop, construct, and acquire additional or upgraded plant and property for the Pipeline System."

Keystone indicated, in its response to an IR posed to it in the OH-1-2008 proceeding, that the Cushing Fixed Toll is negotiated and "is not a cost-based toll so there are no

identifiable capital costs that are directly tied to the initial Fixed Toll.” The Complainants submitted that, accordingly, the Commission should not accept the suggestion that the Fixed Toll was specifically meant to recover only initial construction costs.

Views of Keystone

Keystone argued that the plain wording of the TSAs, in combination with the supporting circumstances during negotiations evidencing the parties’ intentions and understandings, make it clear that operating and maintenance capital costs are recoverable in the Variable Toll.

According to Keystone, the Fixed Toll was designed to recover the initial construction capital costs invested. The TSAs indicate that the Fixed Toll is tied to a capital variance, where Final Capital Variance is defined as the difference between Final Project Costs and Estimated Project Costs, each of which are defined to only include “development, construction and acquisition costs of the Pipeline System.” Under the TSAs, Final Project Costs were actual costs to be determined within two years of commencement of service, and then shippers would have audit rights. Keystone argued that the maintenance capital costs disputed by the Complainants were not actual costs that could have been so determined and audited, and hence do not fit within the definition of Final Project Costs.

The Variable Toll, on the other hand, is defined and described in the TSAs to recover “Operating, Maintenance and Administration Costs” (**OM&A** costs), which are defined to include “all [OM&A] costs and expenses incurred by or on behalf of Carrier in respect of the Pipeline System.

Keystone submitted that under this construct, the Fixed Toll was also based on long-term throughput assumptions, such that return of and on Keystone’s initial capital investment was and remains dependant on the level of contracted volumes on the system (including after expiry of the initial 10 and 20-year contract terms), and actual uncommitted volumes (and uncommitted toll levels). Returns would also depend on construction cost over-runs, an important risk as these were subject to only partial flow-through in the Fixed Toll.

Keystone indicated that nowhere in the TSAs does it state that maintenance capital costs were to be included in the Fixed Toll component nor does it state anywhere in any of Keystone’s prior representations to shippers or its regulators that maintenance capital costs were forecast and included within the calculation of estimated capital costs.

Keystone and its expert, Mr. Reed, submitted that information from the factual matrix is unnecessary to interpret the TSAs, as the TSAs are clear that the Variable Toll includes maintenance capital. However, in light of the Complainants’ submissions suggesting otherwise, information from the factual matrix can be relevant to confirm the point. Where significant documents over multiple years leading up to the formation of a negotiated agreement are consistent with the terms of that final agreement on a key term, that conclusively demonstrates that the parties were in agreement on that term and that it endured through the negotiation process.

Keystone submitted that during its extensive shipper engagement during the development of the Keystone System, it was made very clear that the Fixed Toll was intended to compensate Keystone for the initial capital costs whereas all operating and maintenance capital and expense would be included in the Variable Toll. Keystone pointed to three explicit instances where, within its proposed commercial terms document shared in negotiations, maintenance capital was

explicitly referenced in this regard. Keystone also highlighted the sentence in each of its 2005, 2007 and 2009 open season documents, that explicitly mentioned flow through of maintenance capital. Keystone indicated that maintenance capital is a significant term in a long-term tolling agreement. Had it been the subject of negotiations and eliminated from the Variable Toll, one would expect there to have been documentation showing communication to that effect between parties, or for there to be clear language in the TSAs highlighting the exclusion of maintenance capital given its inclusion in earlier documentation.

Keystone also pointed to ConocoPhillips' internal analysis from 2007 when it was seeking approval to exercise its right to acquire 50% of the Keystone pipeline project. That document demonstrates that ConocoPhillips understood maintenance capital costs are properly included in the Variable Toll.

Keystone also argued that:

- Whether a particular amount is capitalized or expensed is a function of accounting principles and is irrelevant to whether the amount is incurred to operate or maintain the system.
- Based on the plain wording of the TSAs, any costs incurred by Keystone to operate, maintain or administer the system, whether capitalized for accounting purposes or not, are recoverable in the Variable Toll. The Variable Toll clause in the TSAs makes no distinction between capitalized and non-capitalized costs.
- Several of the costs specifically listed in the TSAs definition of OM&A costs would typically be capitalized – including NRAs and pipeline repair costs.
- Regarding Keystone's prior representations (e.g., in submissions to the NEB) that capital-related costs would be recovered through the Fixed Toll, that is what the TSAs' methodology provides for at a high level. The capital costs to construct the system are solely recovered in the Fixed Toll; this does not mean capitalized OM&A costs are not allowed in the Variable Toll.
- Maintenance capital costs are such a key component of operating and maintenance costs that their exclusion would have been stated expressly in the TSAs, had the parties intended to exclude those costs.

Keystone's expert, Mr. Reed, concluded that:

- The TSAs' definition of what expenditures are recoverable in the Variable Toll is extremely broad and inclusive. The TSAs are clear in their plain language allowing the Variable Toll to recover all maintenance costs and expenses, which include maintenance capital costs.
- The Complainants' suggestion that "costs" within "costs and expenses" is meant to capture amortized NRA amounts, would suggest that "costs and expenses" equates to "deferred expenses and expenses". NRAs are outlined in the TSAs as being in respect of certain "maintenance costs and expenses". Disallowing capital costs in the NRA category would require ignoring both the express inclusion of "extraordinary maintenance costs" in the NRA definition, and how maintenance capital has been treated in past instances.

- Past representations by Keystone support, rather than undermine, the appropriateness of recovering maintenance capital in Variable Tolls. When maintenance capital was expressly referenced, it was clearly to be included in the Variable Toll.
- While a levelized rate could theoretically recover anticipated future costs, post-construction maintenance capital costs are not typically included in a fixed component of tolls under long-term contracts, whether levelized or indexed.

5.1.1 Commission analysis and findings

For the reasons below, the Commission finds that the Original TSAs allow flow through of OM&A capital costs in the Variable Toll and considers the language in these TSAs to be clear in this regard. The plain language within the Original TSAs is also consistent with the surrounding circumstances in evidence before the Commission.

Intentions of parties to the Original TSAs in 2009

As the Commission did in 4.1.1 regarding DRAs, the Commission again considers it important to look at the parties' objective intentions, including the surrounding circumstances. When the Original TSAs were negotiated, all negotiating parties would have been aware that ongoing capital (such as maintenance capital) would be among the future costs incurred by Keystone. Maintenance capital is a well understood cost consideration and, not surprisingly, documents from the time of negotiations referenced this cost type.

The Complainants put significant emphasis on prior Keystone representations, purportedly to demonstrate that no capital-related costs were meant to be included in the Variable Toll. The Commission considered these prior representations, and finds that they do not suggest any particular intent regarding ongoing capital costs:

- In most of Keystone's prior submissions, the language is quite general. In considering these prior representations, the Commission recognizes the fact that pipelines are generally capital intensive to initially build. Accordingly, at the time of a system's or project's development, it is reasonable for references like "invested capital" or "capital-related costs" to be meant only in respect of the initial capital costs (and not the capital costs that would be incurred in subsequent years over the operating life of the project). The opposite could also be true, such that this language does not meaningfully indicate how ongoing capital needs would be treated. Similarly, when speaking in general terms at the development stage, the Commission does not find occasional reference only to operating "expenses" as being particularly meaningful in suggesting that the actual detailed methodology being summarized is not applicable to other operating "costs" (including maintenance capital). Accordingly, the Commission finds that these generalized statements do not help in interpreting the Original TSAs.
- Only Keystone's two submissions to FERC, and a single sentence in each of the Keystone's open seasons, are more explicit about the treatment of OM&A capital costs. The pair of submissions to the FERC refer to the Variable Toll being for "non-capital costs", while the various open seasons each mention the flow-through of "operating, administration and maintenance capital and expense costs". Consequently, these documents somewhat contradict each other and, combined, do not help in interpreting the Original TSAs.

- With respect to the Keystone draft commercial terms document, it is explicit in proposing flow-through of operating and maintenance capital. The Complainants and Keystone submitted different interpretations of what should be made of this. The Complainants argued the lack of similar clarity in the TSAs suggests this term was negotiated away, while Keystone submitted that the Complainants ought to have had documentation from the time of negotiations making it clear if such an important term was negotiated away. With both interpretations being plausible, the Commission ultimately finds this document provides no material insight.

The internal ConocoPhillips document from 2007 provides some indication of how ConocoPhillips understood the TSAs would treat “sustaining capital” costs. The Commission notes that this document was filed by the Complainants in response to an IR from Keystone and relates to a party’s subjective understanding of the agreement. The Commission is of the view that evidence of subjective understanding is, as set out by the Supreme Court in *Sattva*, not to be considered and is therefore irrelevant. The Commission has not taken this document into consideration in its decision making.

The Commission notes the NEB’s OH-1-2007 and OH-1-2008 reports make no clear statements on these issues. Further, the NEB had pro-forma versions of the Original TSAs before it in OH-1-2007 and OH-1-2008, and the NEB’s reports appear consistent with the Original TSAs, for example outlining certain key features of the methodology outlined in the Original TSAs in some detail.⁷¹ Accordingly, the Commission finds that there is nothing in these NEB reports that suggest the NEB understood something regarding the treatment of ongoing capital costs, other than what a reasonable person would conclude from the Original TSAs.

Fixed Toll methodology in the Original TSAs

Part B and Part C of Appendix B to the Original TSAs describe the Fixed Toll methodology. In Part B, per-unit Fixed Tolls are presented in a table, where a note at the bottom of the table indicates the toll is “based on Estimated Project Costs, and to be adjusted for capital variance”. Part B then clarifies that the “Fixed Toll will be adjusted to reflect capital variance, in the manner described in Part C below.” Part B makes no other mentions of “cost(s)” or “capital”.

In Part C, Estimated Project Costs is defined with reference to “development, construction and acquisition costs”, at a particular point in time. Final Project Costs are defined with reference to “actual development, construction and acquisition costs”. It is the difference between Estimated Project Costs and Final Project Costs that equals the Final Capital Variance, upon which the adjustment to the Initial Term Fixed Toll is based (that is, the adjustment to the tolls listed in the tables in the Original TSAs). Keystone must make a “final determination of the Final Project Costs” (that is, of “actual development, construction and acquisition costs”) within two years of the commencement date.

The scope of the “development, construction and acquisition costs” varies between the Original TSAs:

- The Canadian Patoka TSAs refer to the “development, construction and acquisition costs of the Pipeline System”. The Pipeline System is defined in Rules and Regulations

⁷¹ OH-1-2008, *supra* note 6 at PDF 25. See also OH-1-2007, *supra* note 5 at PDF 27 for a similar description.

(attached to the Canadian Patoka TSAs) as, “the Petroleum receipt, delivery, pipeline, pumping, monitoring, control and ancillary facilities owned by Carrier commencing at or near Hardisty, Alberta and terminating at the international boundary at or near Haskett, Manitoba which are connected to the Keystone US Pipeline System, as such facilities may be modified, expanded or extended from time to time.”

- The Canadian Cushing TSAs refer to the “development, construction and acquisition costs of the Keystone Initial Facilities and the Expansion Facilities”, where:
 - Keystone Initial Facilities is defined as: “that portion of the Pipeline System consisting of Petroleum receipt, delivery, pipeline, pumping, monitoring, control and ancillary facilities commencing at or near Hardisty, Alberta, and terminating at the International Boundary at or near Haskett, Manitoba with a nominal transportation capacity of approximately 435,000 barrels per day of Petroleum.”
 - Expansion Facilities is defined as: “that portion of the Pipeline System other than the Keystone Initial Facilities, consisting of the Petroleum receipt, delivery, pipeline, pumping, monitoring, control and ancillary facilities required to expand the Pipeline System to a nominal transportation capacity of approximately 590,000 barrels per day of Petroleum.” (The Rules and Regulations from the Canadian Cushing TSAs were not provided on the record. However, the definition above remains unchanged even in the current version of the Rules and Regulations, on file with the CER.⁷²)

The Commission finds that these aspects of the Part B and Part C of Appendix B of the Original TSAs strongly suggest that the Fixed Toll was not meant to recover ongoing capital costs related to operating and maintaining the system, as the Complainants claim. The only way that “actual development, construction and acquisition costs” could be determined within two years of the applicable commencement date is if “development, construction and acquisition costs” exclude ongoing operating and maintenance capital costs, which would be incurred until the system’s retirement.

The Commission considered whether any other features of the Original TSAs support the Complainants’ suggestion that the levelized Fixed Tolls were meant to reflect any capital expenditures needed throughout the life of the system. In particular, the definition of the “Pipeline System” includes, “as such facilities may be modified, expanded or extended from time to time.” However, the Commission finds that the above consideration of the timing of the final determination of actual costs overrides any potential ambiguity of this feature of the definition of Pipeline System. Further, the Commission also finds that in the plainest terms, the language of “development, construction and acquisition costs” leaves the immediate impression that the costs in question are related to initial costs, and not related to costs for “operating and maintaining”. It would have been somewhat surprising, then, for the detailed definitions (e.g., of Pipeline System) to have meant otherwise. While this is by no means determinative, the Commission considered this as a check against the more detailed examination of the meaning of the Original TSAs.

⁷² Keystone, CER Tariff No. 57, Filing ID [C19728-1](#) (27 June 2022).

Description of Variable Tolls in the Original TSAs

The Commission finds that the Original TSAs broadly define the costs to be included in the Variable Tolls in a manner that indicates that capital costs should be included as OM&A costs and expenses to be flowed through in the Variable Toll. Part D of Appendix B of the Original TSAs, dealing with the Variable Toll methodology, indicates that the Variable Toll will be based upon OM&A costs which “shall include all operating, maintenance and administration costs and expenses” incurred for the Pipeline System. This language is followed by a list of examples of such costs (with the list provided in Section 4.1 of this Decision and repeated here for ease of readability). The Canadian Patoka TSA broadly defines OM&A costs and expenses as all:

“operating, maintenance and administration costs and expenses incurred by and on behalf of Carrier in respect of the Pipeline System, including:

- a) operating, maintenance, administrative and general costs and expenses (including pipeline inspection and pipeline repairs) and other overhead costs or expenses directly allocable to the Pipeline System;
- b) property taxes;
- c) capital taxes;
- d) insurance;
- e) power;
- f) regulatory costs;
- g) costs attributable to changes in laws and regulations (including income taxes based on changes in income tax rates or taxing methodology) that apply to Carrier or the Pipeline System; and
- h) all other costs and expenses similar in nature to any of the foregoing.”

The Canadian Cushing TSA is similar but includes pipeline inspection and repair costs as an example of OM&A Costs and Expenses.

The Commission considered the Complainants’ submission about the potential meaning of the word “costs” within the phrase “costs and expenses” as it is found in the definition of flow-through costs. As described above, the Complainants submitted that a rational explanation for including the word “costs” is to capture the fact that amounts tied to the amortization of NRA expenses are not themselves expenses, nor are incremental amounts tied to changes in laws and regulations. The Commission acknowledges that while this demonstrates that the word “costs” (in “costs and expenses”) need not rationally mean *only* “capital-related costs”, this does not establish or suggest that “capital-related costs” are excluded from the definition.

The Commission also considers that the nature of the specific items in the list of flow-through OM&A costs and expenses support that operating and maintenance capital costs should be flowed through to the Variable Toll:

- One such item includes “operating, maintenance, administrative and general costs and expenses (including pipeline inspection and pipeline repairs)”. If flow-through of pipeline repairs were limited to expenses and not capital, this would result in a flow-through of smaller repairs but not larger repairs. Specifically, under Keystone’s accounting

treatment, flow-through would occur where the repairs are on segments of pipe under 12 metres in length, but not where the repairs are on longer segments. Though parties are not precluded from agreeing to such distinctions, the Commission considers this would be a particularly arbitrary distinction for the purpose of risk allocation between Keystone and shippers, and that it could evolve based on Keystone's internal accounting standards.

- Another category includes "costs attributable to changes in laws and regulations". While again, negotiating parties could allocate the risk of such costs as they see fit, the Commission would not expect that a pipeline company would usually bear the risk of capital costs in this regard. Indeed, two other instances of similar costs being subject to a negotiated agreement were presented by the Complainants on the record, and in this regard, both explicitly allowed flow through of not only expenses but also capital costs.

In sum, the Commission finds that the language within Part D of the Original TSAs suggests that capital costs should be included among the broadly defined OM&A costs and expenses to be flowed through in the Variable Toll.

Conclusion

The Commission finds that under the Original TSAs, capital costs are among the OM&A costs and expenses included in the Variable Toll. The Commission reached this conclusion based on finding:

- The Original TSAs strongly suggest that the Fixed Tolls are not meant to reflect ongoing capital costs and are instead based on initial costs, which would be finalized within two years of the commencement date of the system or project.
- The Original TSAs broadly define the OM&A costs and expenses, and the Variable Toll provisions suggest that capital costs are properly included among these costs.

The Commission also finds that flow through of ongoing OM&A capital costs is consistent with the negotiated risk sharing. Consistent with the Original TSAs, Keystone is exposed to substantial capital recovery risk related to both the actual cost of building the system (with the difference between estimated and actual costs only partly shared in the Fixed Toll) and ongoing revenue uncertainty tied to the system's level of spot shipments (and tolls) each year and its committed contract levels. This is consistent with the risk structure described in the NEB's OH-1-2007 report: "Keystone is accepting risks not undertaken in a traditional cost of service model. Such risks include system underutilization; the competitiveness of the Uncommitted Toll; contract non-renewals; and a level of construction cost overruns."⁷³ The Commission notes that different toll agreements can result in varying risk structures and can include alternate treatments of ongoing capital costs.

5.2 Capital costs for upgraded pressure control valves and pump station improvements

For two specific groups of capital costs, the Complainants opposed their inclusion in the Variable Toll not only because of their general position that no capital-related costs should be in

⁷³ OH-1-2007, *supra* note 5 at PDF 30.

the Variable Toll, but also because of additional factors that are specific to these two groups of costs. These costs, for upgraded PCVs and a pump station improvements project, are considered in this section.

Views of the Complainants

The Complainants' expert, Dr. Arthur, submitted that the PCVs were replaced to increase base nominal capacity and reduce DRA usage for a given level of capacity. Accordingly, these capital costs were expansion capital. In addition, the Pump Station Improvements costs were incurred to accommodate DRA injections required to maintain capacity and offset the effects of pressure restrictions. Dr. Arthur indicated that a capital project to accommodate DRA injections can later be used to increase capacity, rather than to maintain capacity and offset the effects of temporary pressure restrictions. Further, given Keystone indicates it cannot distinguish between DRA injections to create incremental capacity versus maintain a given level of capacity, it is not credible that Keystone can distinguish between DRA skids used solely to maintain some capacity level during a time of pressure reduction versus those used to expand capacity.

As a result, Dr. Arthur submitted that Keystone was improperly including capital related costs in the Variable Tolls of original committed shippers that were associated with expanding system capacity after the issuance of the Capital Variance Notices.

Views of Keystone

Keystone submitted that capital costs related to both its upgraded PCVs and its pump station improvements were appropriately recovered in the Variable Toll. Keystone indicated that it includes capital-related expenditures in the Variable Toll if the purpose is to increase system reliability, but not if the purpose is to increase contractual commitments. Keystone submitted that pipeline inspections, pipeline repairs and all other costs and expenses similar in nature (which are specifically itemized in the TSA's list of costs and expenses included in the Variable Toll) would reasonably include all costs and expenses originally intended to increase system reliability.

Although the TSA does not explicitly say whether capital costs intended to increase contractual commitments can be recovered in the Variable Toll, Keystone indicated that it and its shippers understood that the Fixed Toll would compensate Keystone for its upfront investment in the Pipeline System. Keystone's bearing of the capital costs associated with increasing contractual commitments is consistent with the philosophy that the Fixed Toll would compensate Keystone for its original investment in the Keystone system, as it may be extended or expanded over time.

Pump Station Improvements Project

Keystone treated the capital costs for its Pump Station Improvements Project as an NRA, for flow-through in the Variable Toll. The total cost incurred for this program was \$2.8 million in Canada. Given the project's NRA treatment, Keystone included \$0.4 million in the 2021 Variable Toll for the project, and (because of the project's recent completion) no amount in the 2020 Variable Toll.

Keystone indicated that this project improved the operation and reliability of existing Keystone facilities without providing incremental capacity and contracting. Specifically, the project consisted of a series of capital improvements to help maintain a more reliable nominal capacity in response to major pipeline outages. The project included:

- Installation of DRA skids,
- Line pressure control setting development and roll-out for increased rates, and
- Vibration monitoring and equipment analysis including non-destructive examination.

While capital costs for most DRA-related projects were treated as non-flow (with their primary purpose being to increase contracts), Keystone indicated that without the skids that were part of Pump Station Improvements Project, the pipeline system would have been further limited in its ability to meet required throughput volumes when it was under pressure restrictions. Keystone argued that DRA skids that are installed with the primary purpose of mitigating capacity impacts and increasing reliability are costs to operate or maintain the system, and therefore fit within the broad TSA definition of flow-through OM&A costs and expenses.

In response to a Commission IR, Keystone submitted that it was difficult to confirm whether the project provided incremental capacity after the pressure restrictions were lifted. Keystone stated that while the primary driver of a DRA skid does not change over time, the usage of a DRA skid to support the throughput of all barrels on the system can evolve with changing system circumstances. Like any physical facility, once constructed, it then forms part of the operations of the system and contributes to the throughput of all barrels. Keystone indicated that following the system's pressure restriction being lifted in February 2021, the system achieved an annual average throughput of 602,000 bpd. Given that no new contracts were initiated that year, a significant amount of the increased volumes went to make-up rights.

Keystone also submitted that:

- The Pump Station Improvements NRA was presented to Shippers and, to Keystone's knowledge, no Shipper was opposed to it.
- The project was unrelated to any open season, whereas the non-flow-through DRA-related projects were tied to an open season and related to expanding capacity to accommodate incremental contracting.
- Although the non-flow through DRA-related capital infrastructure was installed for the primary purpose of increasing system capacity to allow for additional contracts, as a secondary benefit these skids have been used to mitigate evolving operational constraints, to the benefit of all Shippers.

Upgraded PCVs

Upon start-up of the Keystone system in 2009, vibration levels were higher than anticipated at some fixed speed pump stations. Keystone indicated that this was an example of a post-design occurrence that could not have been reasonably accounted for during design. Tactical modifications and bracing were implemented to mitigate the vibration; however, this was not sufficient for long term integrity. Accordingly, Keystone implemented a multi-year mitigation plan comprised of:

- Adjustment of the allowable energy dissipation across PCVs, including administrative or control logic to manage the amount of throttle across the valves, energy dissipated and in turn vibration experienced at the fixed speed pump station.
- Replacement of many original PCVs with new PCVs capable of throttling at the necessary higher levels utilizing anti-cavitation trim to safely allow for higher energy dissipation with less vibration.

Prior to the program's completion, capacity was reduced due to limitations to the throttling levels of the control valves at a number of locations, which was mitigated by using DRA. The throttle limitation with the original PCVs was magnified by the reduced design factor to 0.72 in the US at the time. The upgraded PCVs program addressed the integrity issues, and also reduced the amount DRA being used to mitigate this capacity constraint.

The program was executed between 2013 and 2020, with the Canadian portion costing approximately \$13.8 million. The Canadian capital costs were treated as an NRA and included in the Variable Tolls, with \$2.6 million in 2020 tolls and \$1.6 million in 2021 tolls.

5.2.1 Commission analysis and findings

The Commission finds that the capital-related costs associated with the Pump Stations Improvement project are appropriately included within Variable Tolls, while those for the upgraded PCVs program are not.

Even in instances where Keystone is incurring capital costs to improve reliability for the originally contracted volumes, the Commission finds that such costs should be flowed through in the Variable Toll only where they are not still appropriately part of the initial development, construction and acquisition costs. This is consistent with the risk sharing philosophy within the Original TSAs for development, construction, and acquisition costs – ensuring that Keystone does not flow through capital costs that are effectively being incurred as part of building what Keystone was to have built in the first place.

Pump Station Improvements project

The Commission accepts that the Pump Station Improvements project was implemented because of outages and pressure restrictions that arose after the Keystone system was in operation. Further, as discussed in Subsection 4.4.1, the Commission finds that these outages and pressure restrictions are not attributable to the design and construction of the system. Accordingly, the Commission finds that these costs are not part of the initial development, construction and acquisition costs and, at least initially, these costs are appropriately flowed through in the Variable Toll under the Original TSAs.

While the primary purpose of these improvements was not to increase the system's long-term capacity, they have contributed to incremental throughput since the outages and pressure restrictions were resolved. The Commission is of the view that there might be instances where it would be appropriate under the Original TSAs to stop flowing through costs if, after a temporary system challenge is resolved, the capital initially expended to increase reliability then results in incremental system throughputs or capacity. However, the Commission finds that such treatment is not warranted in this case during 2021 (and there were no costs from this project in 2020 tolls). This finding is based on the following:

- after the pressure restrictions were lifted in February 2021, make-up rights represented a significant amount of the incremental throughput for the remainder of the year (and no new contracted volumes began);
- capital costs associated with most DRA skids have not been flowed through at all, yet have provided some reliability benefits in addition to contributing to the ability to increase contractual commitments; and
- the costs involved are modest.

Lastly, in terms of responding to system outages and pressure restrictions, the Commission notes that the Complainants appeared to suggest that Keystone's efforts to maintain capacity above Firm Commitments are discretionary. In this regard, the Commission highlights that it is of the view that the prudence of such efforts should be considered not only with regard to Keystone's committed volumes but also Keystone's obligations respecting uncommitted volumes, consistent with Keystone's common carriage obligations under the CER Act.

Upgraded PCVs

Unlike the pump station improvements, the upgraded PCVs remedied an issue that existed from the time the system began operating. Because the upgraded PCVs were needed to allow the fixed speed pump stations to operate up to the intended maximum allowable discharge pressure, the Commission is of the view that they were fundamentally needed to allow a core part of the system to operate as originally intended. Accordingly, the Commission finds that the capital-related costs properly fit within the initial development, construction and acquisition costs that are within the scope of the Fixed Toll under the Original TSAs. Accordingly, the Commission finds that such costs cannot be flowed through in the Variable Toll.⁷⁴

5.3 Rate of return recovered in the Variable Toll

The Complainants expressed specific points of opposition to the inclusion of any rate of return additions to costs recovered in the Variable Toll. This opposition relates to rate of return added to any capital costs that the Commission allows to be recovered in Variable Tolls, as well as to any expenses that receive NRA treatment. Subsection 5.3.1 summarizes submissions related to Keystone's proposed addition of rate of return to all NRA amounts – that is, amounts recovered in the Variable Toll over multiple years through amortization (whether related to items originally expensed or capitalized). Subsection 5.3.2 summarizes submissions related to Keystone's proposed addition of rate of return to Non-NRA Capital – that is, capital amounts recovered in

⁷⁴ Of note, had the capital costs for upgraded PCVs been incurred within two years of the commencement dates in the TSAs, the costs presumably could have been shared through the Fixed Toll update.

the Variable Toll in the same year the capital costs are incurred. The Commission's analysis and findings on both issues are presented together in Subsection 5.3.3.

5.3.1 Rate of return added to NRA amounts

Views of the Complainants

Dr. Arthur submitted that the TSAs do not contemplate a return on capital for any NRAs. Rather, under the TSAs, the NRA expense amount is to be amortized over a multi-year period, which does not specify any adjustment for the time value of money. Keystone should not be able to recover the present value of an NRA expense even if it is amortized over multiple years. The Complainants also argued that rate of return is a cost of capital, not an OM&A cost or expense.

Views of Keystone

Keystone indicated that the TSA broadly defines OM&A costs, and that costs that qualify for NRA treatment and associated return, fit within that definition.

Keystone applied an 8% annual return to all NRA costs, whether related to capital costs or expenses. Keystone uses 8% as a proxy for its average cost of capital, to compensate Keystone for investing in the system and for the time value of money due to the amortization of NRA costs.

Mr. Reed submitted that because NRAs are recovered over multiple years, a return component is important to recognize the opportunity cost of capital. Mr. Reed was of the view that there was no basis in the terms of the TSAs or in ratemaking principles for denying the recoverability of carrying charges associated with NRAs and doing so would create a substantial disincentive for a pipeline company to make discretionary investments in the pipeline.

5.3.2 Rate of return added to Non-NRA Capital (i.e., non-amortized capital)

Views of the Complainants

The Complainants submitted that because Keystone fully includes Non-NRA Capital in the Variable Toll in the year the costs are incurred (effectively treating the costs as an expense), there should be no associated capital carrying costs. Accordingly, including a return as if there were capital carrying costs is clearly inappropriate and is simply extra profit for Keystone. As noted above, the Complainants also argued that rate of return is a cost of capital, not an OM&A cost or expense.

Views of Keystone

Keystone included recovery of costs related to Non-NRA Capital in the year the capital costs are incurred, subject to the annual true-up mechanism. Keystone proposed recovery in the Variable Toll of a rate of return added to these costs. Keystone calculated this return using its 8% proxy for cost of capital and accruing the return over a full year. This rate of return calculation added \$1.0 MM to the 2020 Final Variable Toll and \$1.3 MM to the 2021 Final Variable Toll.

Keystone indicated that Non-NRA Capital amounts are investments in the system and Keystone must source capital to fund such investments. This capital is underpinned by debt and equity

financing, and the corresponding cost of capital is a reasonable cost incurred to operate and maintain the system, consistent with the TSA definition of OM&A costs.

In response to a Commission IR, Keystone confirmed that for both Non-NRA OM&A expenses and Non-NRA Capital, in aggregate the average timing of costs and revenues would tend to be at the mid-year point. However, Keystone indicated that there is a systemic time-lag between payment of monthly costs and receipt of revenues.

When asked about why Keystone applied a full year's return to Non-NRA Capital, Keystone indicated that in order to be consistent with the return calculated on NRA Capital, it assumed a cost of capital for Non-NRA Capital independent of the corresponding revenue stream. Keystone also confirmed that it does not add a rate of return to Non-NRA OM&A expenses.

When asked about whether Keystone uses cash (working capital) to account for timing differences between Non-NRA costs and associated revenue, Keystone explained that it does not include a return on cash (working capital) in the Variable Toll. However, Keystone submitted that a return on cash (working capital) would be a legitimate cost to include in the Variable Toll, and that if such a return was implemented by Keystone, it would be done for both Non-NRA Capital and other OM&A costs. Keystone estimated that such a return would be \$2.0 MM in 2020 and \$2.2 MM in 2021, which is greater than the disputed return on Non-NRA Capital amounts by \$1.0 MM and \$0.9 MM in the respective years.

Keystone's estimated the above \$2.0 MM and \$2.2 MM based on the following:

- Keystone assumed that costs (both Non-NRA Capital and Non-NRA OM&A expenses) would be incurred mid-month, and the corresponding revenues would be received when they are due on the 25th day of the following month.
- As a result, Keystone used a cash working capital factor corresponding to 40 days, such that the 8% annual carrying cost was applied to a factor of 11% ($11\% = 40 \text{ days} \div 365 \text{ days}$).
- The carrying cost ($= 8\% \times 11\%$) was applied to the total of Non-NRA OM&A expenses and Non-NRA Capital (with the larger expense portion accounting for approximately 94-95% of the total).

5.3.3 Commission analysis and findings

As indicated in Subsection 5.1.1, the Commission finds that the Original TSAs broadly define the costs to be included in the Variable Tolls. Further, cost of capital is well-established as a legitimate cost of providing pipeline service. Given the broad definition, the well-established legitimacy of rate of return additions as a cost of service, and the surrounding circumstances not, in the Commission's view, suggesting otherwise, the Commission finds that rate of return additions are intended to be included in the Variable Toll pursuant to the Original TSAs.

Rate of return added to NRA amounts

In light of the Commission's above finding, and that NRA amounts are subject to deferred (i.e., amortized) recovery in the Variable Toll, the Commission is of the view that the related carrying charges are similarly recoverable. This applies equally to capital-related and expense-related NRA amounts, as this distinction does not change the legitimacy of the carrying costs whilst the company is awaiting recovery of the costs.

Rate of return added to Non-NRA Capital (i.e., non-amortized capital)

The Commission does not accept how Keystone calculated the carrying charges for Non-NRA Costs. Keystone calculated these charges as though Keystone were carrying the underlying costs for a full year, which is not the case. This appears to be a gross overestimate of Keystone's actual carrying charges for Non-NRA Capital, given Keystone indicated that in aggregate the average timing of these costs and the corresponding revenues would tend to be at the mid-year point. While, as discussed further below, the Commission does not accept the validity of the 40-day lag that Keystone used to estimate what would result from a cash (working capital) approach, those estimates nonetheless illustrate the large magnitude of the overestimation.

With respect to Keystone indicating that it assumed a cost of capital for Non-NRA Capital independent of the corresponding revenue stream in order to be consistent with the return calculated on NRA Capital, the Commission finds that *inconsistent* treatment is warranted. Capital costs are flowed through to the Variable Toll in completely different ways, depending on whether they qualify for NRA treatment. NRA Capital is amortized in the Variable Toll over multiple years, requiring multi-year carrying costs. Non-NRA Capital is instead recovered in the same year the costs are incurred.

Consideration of a cash (working capital) approach

The Commission finds that Keystone's submissions related to cash (working capital) do not establish that Keystone's proposed carrying charges for Non-NRA Capital are appropriate.

Despite earlier IRs regarding Keystone's proposed carrying charges for Non-NRA Capital, and Keystone having earlier submitted its evidence in chief and reply evidence, it was in response to the Commission's third and final round of IRs that Keystone introduced significant new evidence on this topic. Specifically, it was then that Keystone:

- Acknowledged that in aggregate the average timing of Non-NRA Capital costs and corresponding revenues would tend to be at the mid-year point.
- Submitted that, for Non-NRA Capital and Non-NRA OM&A expenses, there is a systematic time-lag between payment of monthly costs and receipt of corresponding revenues.
- Indicated that a return on cash (working capital) would be a legitimate cost to include in the Variable Toll, for both Non-NRA Capital and Non-NRA OM&A expenses.
- Provided an estimated return on cash (working capital) for 2020 and 2021, based on a 40-day lag resulting from costs assumed to be mid-month and revenues being due on the 25th of the following month.⁷⁵

Keystone provided insufficient evidentiary support for the Commission to make findings regarding the validity of Keystone's proposed approach for the estimated return on cash (working capital) for 2020 and 2021. In connection with the 40-day time lag, Keystone did not indicate how its assumptions underpinning the 40-day lag compared with actual cost and

⁷⁵ Keystone did not modify its relief request based on this new evidence. Accordingly, the Commission does not have before it a request to allow recovery of carrying charges for cash (working capital).

revenue timing (e.g., how actual revenue timing compares with payment due date, and how closely Keystone's actual cost outlays reasonably approximate the middle of the prior month, considering factors such as vendor payment terms, timing of cost entries, etc.). Further, although Keystone asserted that a return on cash working capital for both Non-NRA Capital and expenses would be a legitimate cost to include in the Variable Toll, Keystone did not indicate why it had not included this cost in its Variable Toll calculations, if it is legitimate to do so. The Commission notes that because of when Keystone introduced this new evidence, these issues were not tested by way of IRs and the Complainants did not have the opportunity to submit evidence on these points.

Conclusion

For the 2020 and 2021 Variable Toll, the Commission approves inclusion of Keystone's proposed carrying charges for NRA amounts and denies inclusion of any amount related to carrying charges for Non-NRA Capital.

6 Other topics

6.1 “Most favoured nation” toll provision

The Complainants submitted that the most favoured nation (**MFN**) provision in the TSAs may have been triggered in 2020, while Keystone maintained that it was not triggered.

The MFN provision (Section 8.4 in the Canadian Patoka TSA, and Section 8.3 in the Canadian Cushing TSA) generally provides that committed shippers shall always have an overall full-path toll (that is, inclusive of the fixed and variable components, and both the Canadian tolls and US rates) that is no more than that paid by uncommitted shippers using spot service.⁷⁶

More specifically, the fixed components of a committed shipper's overall tolls or rates shall be reduced so that its overall full-path toll remains below that for the uncommitted service. Keystone and its U.S. affiliate have sole discretion as to how to allocate any required reduction between the Canadian fixed toll component and the U.S. fixed rate component.

Views of the Complainants

Based on analysis submitted by Dr. Arthur, the Complainants submitted that at least for some destinations in certain months in 2020, Keystone was charging uncommitted shippers full-path rates that were below the “Baseline Committed Price”, as defined in the MFN provision in the TSA. This would be in violation of the TSAs. The Complainants submitted that whether an adjustment is needed to respect the MFN provision will depend on the Commission and FERC decisions regarding Variable Tolls and rates.

Views of Keystone

Keystone submitted that the outcome of the Commission and FERC hearings would not affect the MFN provision, since the applicability of the MFN provision is based on the tolls and rates charged at the time that the uncommitted tolls and rates are determined. On this basis, Keystone submitted analysis showing it had not violated the MFN provision during 2020 or 2021.

Keystone also submitted that Dr. Arthur’s MFN-related calculations erred in the following respects:

- Dr. Arthur uses the finalized Variable Toll and finalized Variable Rate rather than the toll and rate charged at the time the uncommitted toll and rate are determined.
- Dr. Arthur incorrectly calculates the Baseline Committed Price based on 10-year Cushing contracts rather than 20-year Cushing contracts (only 20-year Cushing contracts were in effect during this period).
- Dr. Arthur uses the wrong currency.
- Dr. Arthur’s analysis does not account for whether Keystone actually transported any uncommitted volumes, at the Uncommitted Price, to the applicable Delivery Point for the

⁷⁶ As is common parlance, throughout this section, amounts charged in Canada are referred to as “tolls”, and amounts charged in the U.S. are referred to as “rates”.

same Crude Type. The MFN is not applicable where Keystone does not transport any uncommitted volumes in respect of the applicable timeframe.

In connection with the first point above, Keystone pointed to several excerpts from the TSAs and Tariff. Flowing from these excerpts, Keystone submitted that at the time of the Payment Due Date as defined in the Tariff (which relates to when shippers must pay for service), only the estimated Variable Toll and Rate are available and in the Canadian and U.S. tariffs. Given this, the calculations in the MFN provision can thus only use the estimated Variable Toll and Rate. Keystone also points to the language in the TSAs as only allowing charges and adjustments in respect of the annual process for establishing finalized Variable Tolls after the end of each year, for which the TSAs say how any resulting amounts are to be charged or credited to shippers.

Keystone also highlighted that as a matter of practicality, Keystone sets uncommitted tolls and rates when the corresponding finalized Variable Toll and Rate are unknown.

6.1.1 Commission analysis and findings

For the reasons outlined below, the Commission finds that the MFN provision in the Original TSAs should be applied based upon the as-charged interim Canadian tolls in 2020 and 2021, with no adjustments for either finalized or final tolls.

Canadian tolls and U.S. rates

The MFN provision in the Original TSAs, like the corresponding provision in the U.S. versions of the agreements, is based on committed and uncommitted tolls in Canada, and committed and uncommitted rates in the U.S. Further, the provisions leave Keystone and its U.S. affiliate with sole discretion as to how to allocate any required reduction between the Canadian fixed toll and the U.S. fixed rate.

In these circumstances, the Commission finds it appropriate, with regard to 2020 and 2021, to limit its determinations to whether the MFN provision in the Original TSAs should be applied based upon estimated or finalized Canadian Variable Tolls, and whether the provision should be applied based upon interim or final Canadian tolls. The Commission will not address the question of what U.S. rates should be used in the MFN provision in the Original TSAs, recognizing that a FERC hearing was underway concurrent with this hearing, dealing with similar matters.

Use of estimated or finalized tolls in the MFN provision

The Commission is persuaded that the MFN provision in the Original TSAs is appropriately applied based upon the estimated rather than finalized Variable Toll. In the normal course where Keystone is not charging interim tolls, estimated Variable Tolls for the applicable year are charged all year (based on estimates made shortly before the start of that year), and are then finalized soon after the end of the applicable year based on the year's actuals. Pursuant to the Original TSAs, committed shippers then receive credits or charges on their bills in the following 12 months to reflect any differences between the estimated and finalized Variable Tolls. Since the Original TSAs and Tariff do not contemplate charges or credits pursuant to the MFN provision at the time each year's estimated Variable Tolls are finalized, the Commission finds that, in the normal course, the MFN provision should apply based upon the as-charged estimated Variable Tolls.

In interpreting the MFN provision in this way, the Commission considered the matter of practicality raised by Keystone (namely, that Keystone sets uncommitted tolls and rates when the corresponding finalized Variable Toll and Rate are unknown). This practicality would or should have been recognized by parties at the time of agreeing to the Original TSAs. This practicality consideration provides some support for interpreting the MFN provision based upon estimated rather than finalized Variable Tolls, as this allows for better informed (and less complicated) decisions by Keystone on whether and how to discount uncommitted tolls.

Use of interim or final tolls in the MFN provision

The Commission views the question of whether interim or final 2021 and 2021 committed and uncommitted tolls should be used for the MFN provision as distinct from the above determination about estimated versus finalized Variable Tolls. The Original TSAs and Tariff make no mention of interim tolls, and therefore do not outline how any difference between interim tolls and final tolls will be charged, credited or otherwise handled. By contrast, as indicated above, the Original TSAs are explicit that differences between the estimated and finalized Variable Toll will be applied over the subsequent 12 months. Notwithstanding, the Original TSAs and Tariff explicitly contemplated rulings from applicable regulatory authorities, and the CER Act clearly contemplates interim tolls (as did the NEB Act before it).

None of the parties submitted significant evidence about the question of whether, after a period of interim tolls, the MFN provision in the Original TSAs should be applied retroactively based upon final tolls. Keystone did not clearly explain why it was of the view that in such a case, the MFN provision should be based on the rate charged at the time that the uncommitted toll is determined. Keystone's detailed submissions explaining why the MFN provision should use estimated rather than finalized Variable Tolls were specifically in the context of explaining why Dr. Arthur had erred in looking at finalized rather than estimated Variable Tolls. Keystone did not address how or why those submissions apply to the question of whether interim or final tolls should be used in applying the MFN provision. The Complainants also did not clearly explain why the MFN provision should be interpreted a particular way in this regard.

The Commission understands from the submissions of both Keystone and Dr. Arthur, that discounted uncommitted tolls were not charged in Canada in 2020 and 2021. Consequently, pursuant to Keystone's approved uncommitted methodology, the interim uncommitted tolls charged at the time were at a 20% premium to the applicable committed toll. Discounting during 2020 and 2021 appears to have been limited to the U.S. uncommitted rates. The Commission's various rulings in this Decision will impact the final 2020 and 2021 Variable Tolls, and, in turn, final uncommitted 2020 and 2021 tolls. Accordingly, whether the MFN provision in the Original TSAs is based upon interim or final tolls in 2020 and 2021 should not have a large impact (as the difference between uncommitted and committed tolls will in both cases be only a factor of 20%). If Keystone had instead been charging discounted uncommitted tolls in Canada in 2020 and 2021, this might have given rise to different considerations.

In the circumstances, where there were limited submissions justifying parties' positions and where discounted uncommitted tolls were not charged in Canada, the Commission is of the view that it is most appropriate to apply the MFN provision in the Original TSAs based upon the interim rather than final tolls in 2020 and 2021. This approach most closely aligns with the Commission's conclusion that the MFN provision in the Original TSAs should be based upon estimated rather than finalized tolls. Additionally, as was the case in respect of that conclusion, using interim tolls in 2020 and 2021 for the MFN provision is consistent with allowing Keystone

to make better informed (and less complicated) decisions on whether and how to discount uncommitted tolls.

6.2 Minor cost discrepancy

Views of the Complainants

Dr. Arthur submitted that there were minor discrepancies between the amounts for certain cost categories reported in Keystone's Operating Expense database and the amounts included in its 2020 Variable Toll invoice. The discrepancies led Keystone's invoiced amounts to have \$11,680 more in costs than is shown by its general ledger.

Views of Keystone

In response to a Commission IR, Keystone indicated that the \$11,680 variance in 2020 was due to transactions that were inadvertently omitted from the 2020 general ledger Operating Expense, in account 61112135 – Salaries-Permanent-On Call. Keystone provided the omitted transactions in an updated attachment. Keystone stated that the 2020 costs in the final Variable Toll were correct and submitted that the Commission should not reduce 2020 costs by \$11,680.

6.2.1 Commission analysis and findings

The Commission is satisfied that the minor discrepancies identified by Dr. Arthur resulted from an inadvertent omission by Keystone, and that the related costs Keystone included in the Variable Toll were correct. Accordingly, the Commission finds that no 2020 costs should be removed from the Variable Toll on account of these discrepancies.

7 Toll order and next steps

Order TO-005-2022 gives effect to the Commission's decisions. As outlined in the order, Keystone must recalculate and refile 2020 and 2021 tolls to remove certain costs from the Variable Tolls. For the purposes of the Original TSAs, the costs that must be removed are expenses of DRA used to provide capacity due to higher flowing viscosities than assumed in the design of the of the system, expenses of DRA used to address the lower pump station discharge pressures, capital-related costs associated with the upgraded PCVs, and carrying charges associated with Non-NRA Capital. The order applies to tolls as they pertain to the Original TSAs, and Keystone will need to consider the applicability of this Decision to other TSAs.

In order to remove certain DRA expenses from the Variable Tolls, Keystone will need to allocate DRA expense to different categories of use. If Keystone is unable to achieve unanimous support from its shippers for the DRA expense allocation methodology to be used, it must include the detailed methodology in its toll compliance filing with the CER and demonstrate clearly how DRA expense amounts were specifically allocated to different uses.

Keystone is also directed to report to the CER the uncommitted volumes that have been transported on the Keystone System as part of all Guide BB – Financial Surveillance Reports starting Q1 2023.

The Commission will consider 2022 Variable Tolls subsequent to this Decision as Phase 2 of this proceeding. Although the findings in this Decision relate to 2020 and 2021 Variable Tolls, the Commission recognizes that Keystone and others may wish to consider these findings and how they may relate to Keystone's tolls for subsequent years. Accordingly, the Commission is not establishing Phase 2 process steps at this time. Rather, any potential process for Phase 2 will be set out by the Commission after receiving correspondence from Keystone or other parties regarding the 2022 Variable Tolls.

The Commission denies Keystone's request to allow the estimated 2021 tolls to be set as the go-forward interim tolls for the Keystone System pending the conclusion of Phase 2 of the hearing process. All interested parties must have an opportunity to comment on future interim tolls, including shippers that may not be participants to this hearing.

Appendix I – List of Issues

The Commission identified but did not limit itself to the following issues for discussion in the proceeding:

1. Whether the tolls have been determined in a manner consistent with the approved tolling methodology and TSAs.
2. The appropriateness of the Variable Tolls component including, but not limited to, the appropriateness of the forecasted costs that have been included, and the appropriateness of recovering those costs from committed shippers.
3. Whether the tolls are just and reasonable, and not unjustly discriminatory.